

Annual Report 2019-2020

NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING



NITIE for Nurturing Industry Towards Excellence

**Annual Report
2019-20**

Annual Report
National Institute of Industrial Engineering
(NITIE), Mumbai
(1 April 2019 – 31 March 2020)



National Institute of Industrial Engineering

The logo of NITIE (National Institute of Technology in Industrial Engineering) is centered in the background. It features a gear with a flame inside, a lamp, and a banner with the text 'NITIE' and 'उद्योग प्रगति' (Udyog Pragati) in Hindi. The logo is rendered in a light gray color.

Vision

“To be the thought leader in Industrial Engineering education and research,
and partner in the manufacturing renaissance of the nation”

Mission

“To advance transformative education and industry-inspired research
in Industrial Engineering”



CONTENTS

ABOUT INSTITUTE

| | | |
|-----------|---|------------|
| 1. | Introduction - About NITIE | 1 |
| 2. | Institute Structure | 3-6 |
| a. | Board of Governors / Society | 3-5 |
| b. | Deans & Administrative Officers..... | 6 |
| 3. | Academic Activities | 7-9 |
| a. | Academic Programmes | 7-9 |
| i. | Fellow Programme | 7 |
| ii. | M.Tech Equivalent Programme | 7 |
| a) | PGDIE | |
| b) | PGDMM | |
| c) | PGDPM | |
| iii. | MBA Equivalent Programme | 8 |
| a) | PGDIM | |
| b) | PGDISEM | |
| iv. | Post Graduate Programme for Executives in Visionary Leadership for Manufacturing (PGPEX-VLFM)..... | 9 |
| b. | Areas | 11-48 |
| i. | Industrial Engineering and Manufacturing Systems | 11 |
| ii. | Operations and Supply Chain Management..... | 14 |
| iii. | Engineering Technology and Project Management | 17 |
| iv. | Decision Science and Information Systems | 20 |
| v. | Environmental Engineering & Management..... | 22 |
| vi. | Economics and Strategy..... | 28 |
| vii. | Finance and Accounts | 35 |
| viii. | Marketing..... | 39 |
| ix. | Organisational Behaviour and Human Resource Management..... | 43 |
| c. | Academic Infrastructure and Facilities | 49-57 |
| • | Laboratories..... | 49-53 |
| a) | Ergonomics Laboratory | 49 |
| b) | Digital Manufacturing Laboratory | 50 |
| c) | Industrial Environment Laboratory | 51 |
| d) | Psychology Laboratory..... | 52 |
| e) | NITIE Foundation for Innovation and Entrepreneurship (NIFIE) | 53 |
| • | Library | 54 |
| • | Digital Informatics Centre (DISC)..... | 57 |



| | |
|---|----------------|
| 4. Research Centres | 59-61 |
| • Centre for Environmental Studies | 59 |
| • Centre for Innovation, Incubation and Entrepreneurship | 61 |
| 5. Outreach: Institute - Industry Collaboration | 63-67 |
| a. Management Development Programme (MDP) | 63 |
| b. Unit Based Programme (UBP) | 64 |
| c. Consultancy Services..... | 66 |
| d. MoUs..... | 67 |
| 6. Faculty Activities | 69-81 |
| • Faculty Resources..... | 69 |
| • Areawise Faculty List..... | 70 |
| • Conference / Seminars and Awards | 72 |
| • Research and Publications..... | 76 |
| 7. Student Affairs and Activities | 83-106 |
| 8. Placements..... | 107-109 |
| 9. Physical Facilities and Infrastructure | 111-114 |
| • Estate | 111 |
| • NITIE Dispensary | 113 |
| • Security and Transport | 114 |
| 10. Right to Information Act..... | 115 |
| 11. Visit of Foreign Experts..... | 117-119 |
| 12. NITIE Alumni Association | 121-123 |
| 13. Institute Events | 125-137 |
| • XXV Convocation - NITIE | 125 |
| • Hindi Implementation | 127 |
| • Vigilance Awareness Week | 133 |
| • Yoga Day | 134 |
| • NITIE Cultural and Welfare Activities | 135 |
| 14. ANNUAL ACCOUNTS..... | 139-164 |
| • Annual Accounts..... | 139 |
| • Balance Sheet | 143-160 |
| • Institute - Extracts in Form GFR- 19 | 161 |
| 15. ANNEXURES | 165-169 |
| Information relating to Civilian posts – Academic and Non-Academic posts..... | 169 |



ABOUT NITIE

NITIE was established as an autonomous Institute in 1963 by the Government of India with the assistance of United Nations Development Programme through International Labour Organisation.

NITIE offers two-year Post-Graduate Programme in Industrial Engineering (PGDIE), Industrial Management (PGDIM), Industrial Safety and Environmental Management (PGDISEM), Project Management (PGDPM), and Manufacturing Management (PGDMM). NITIE also offers one-year full time Post-Graduate Program for Executives–Visionary Leadership for Manufacturing (PGPEX-VLFM) jointly along with IIT Delhi. This Programme is specially designed for experienced engineers with 5-12 years of experience in manufacturing domain. NITIE also offers Fellowship Programme which is recognized as equivalent to Ph. D. of an Indian University. NITIE has been conducting several short-term Management Development Programmes of short duration in various areas of Industrial Engineering and Management. The training programmes of NITIE emphasize on learning with a purpose and are accompanied by an abiding concern for man. Besides training, NITIE is also engaged in applied research and offers consultancy in the various facets of Industrial Engineering, Operations Research, Decision Sciences, Safety & Environmental Management, Marketing Management, Organisation Behaviour and Human Resource Management, Project Management and Manufacturing Management.

NITIE faculty members, drawn from various basic disciplines, have diverse experience in business, industry and government, and thus are able to bear academic concepts to the practical problems. By introducing new concepts, techniques and programmes to meet the changing needs arising out of rapid technological development and socio-economic transformation, NITIE endeavors to equip the managers, administrators and specialists in government, public utilities, industry and other service sectors with the necessary skills for efficient performance.

NITIE publishes quarterly a professional journal, UDYOG PRAGATI. This deals with new developments in Industrial Engineering, Industrial Management and allied fields.

NITIE campus is located in one of the most picturesque surroundings of Mumbai flanked by Powai and Vihar Lakes. NITIE is administered through a Board of Governors representing industry, government, labour and professional bodies with **Prof. Sanjay G. Dhande**, Former Member, UGC & Former Director IIT Kanpur as Chairman and **Prof. Manoj Kumar Tiwari** as the Director.

INSTITUTE STRUCTURE



Annual Report 2019-20

**NITIE BOARD OF GOVERNORS/SOCIETY**

1. Number of Board/Society Meetings held with dates:

| Board Meeting No. | Date | Society Meeting No. | Date |
|-------------------|------------|---------------------|------------|
| 153 | 23.08.2019 | - | - |
| 154 | 13.09.2019 | - | - |
| 155 | 16.01.2020 | 76 | 16.01.2020 |

BOARD OF GOVERNORS (w.e.f. 27th March, 2017 to 26th March, 2021)

| | | |
|-----|--|---|
| I | Chairman | Prof. Sanjay G. Dhande Chairman, NITIE BOG Former Member, UGC & Former Director IIT Kanpur 58 Buena Monte, Panchavati, Pashan, PUNE - 411 008. |
| II | Representatives of Central Government 1. Finance | Ms. Darshana M. Dabral Joint Secretary & Financial Advisor Department of Higher Education Ministry of Human Resource Development Government of India Room No. 111 -C Wing, Shastri Bhavan, NEW DELHI - 110 001. |
| | 2. Education | Shri Madhu Ranjan Kumar Joint Secretary (DL & A) Department of Higher Education Ministry of Human Resource Development Government of India Room No.118 - C, Shastri Bhavan, NEW DELHI - 110 001. |
| | 3. Ministry of Commerce & Industry | Dr. Ashish Kumar Senior Development Officer (Engg.) Department of Industrial Policy and Promotion Ministry of Commerce & Industry Government of India Room No. 436 A, Udyog Bhavan, NEW DELHI - 110 011. |
| III | Representative of National Productivity Council | Dr. Amita Prasad, IAS (Upto 01.8.2019) Director General National Productivity Council Utpadakta Bhavan, 5-6, Institutional Area, Lodhi Road, NEW DELHI 110 003. Shri Arun Kumar Jha, IES (w.e.f. 02.8.2019) Director General National Productivity Council Utpadakta Bhavan, 5-6, Institutional Area, Lodhi Road, NEW DELHI 110 003. |



| | | |
|----|---|---|
| IV | Representative of All India Council for Technical Education | Prof. Prem Vrat, (Former Director, IIT Roorkee) Pro-Chancellor, Professor of Eminence & Chief Mentor The NorthCap University, HUDA Sector 23-A, Gurugram-122017 |
| V | Four Representatives of Industry including Public Enterprises nominated by Central Government | 1. Shri V Kalyana Rama Chairman & Managing Director, Container Corporation of India Ltd., Concor Bhawan, C-3, Mathura Road Opp. Apollo Hospital NEW DELHI – 110076. |
| | | 2. Shri Atul Chandrakant Kulkarni Independent Consultant, B-1/52, Gokul Co-Operative Housing Society Ltd, Plot No. 14, Sector 19 A, Nerul, NAVI MUMBAI – 400706. |
| | | 3. Shri Anand Sankeshwar Managing Director & Whole Time Director M/s VRL Logistics Ltd. Giriraj Annexe Hubli, Karnataka-580 029 |
| | | 4. Shri Shashi Kiran Shetty Chairman, Allcargo Logistics Ltd. 6th Floor Awashya House, CST Road, Kalina, Santacruz (East) MUMBAI - 400 098. |
| VI | Two Members Representing Workers' Organisations | 1. Shri Pawan Kumar Bharatiya Mazdoor Sangha, 2426, Tilak Gali Chunamandi, Paharaganja, NEW DELHI – 110002. |
| | | 2. Shri Surendra Kumar Pandey Office Superintendent SECL Bishrampur Colliery, Q.No. 1C-107, Post – Bishrampur Colliery, Dist. Sarguja, CHHATISGARH – 497226. |



| | | |
|------|--|---|
| VII | Two Representatives of other interests such as Engineering professions and technical institutions, etc. | 1. Dr. A.M. Rawani Director, NIT Raipur, 1-B, Gulmohur, Kailash Residency, Bottle House Road, Shankar Nagar, Raipur, CHHATTISGARH - 492001. |
| | | 2. Prof. Nomesh Bolia Associate Professor (IE & OR) Department of Mechanical Engineering Indian Institute of Technology, Delhi, Houz Khas NEW DELHI – 110016. |
| VIII | Two Co-opted Members Representing Industrial Engineering, Productivity Sciences, etc.(co-opted by the Board) | 1. Shri Pramod Chaudhari Founder and Executive Chairman, Praj Industries Limited, "Praj Tower" 274 & 275/2 Bhumkar Chowk - Hinjewadi Road Hinjewadi PUNE - 411057. |
| | | 2. Shri B Prasada Rao Former CMD, BHEL Flat No. X – 8 B, Meghadutam Apartments, Sector – 50, NOIDA – 201 301. |
| IX | One Representative of Govt. of Maharashtra Co-opted by the Board | Shri Saurabh Vijay Secretary, Higher & Technical Education Dept. of Govt of Maharashtra Madam Cama Road, Hutatma Rajguru Chowk Mantralaya, Mumbai. |
| X | Ex-Officio-Member | Prof. (Ms) Karuna Jain (Upto 29.08.2019) Director NITIE Prof. D.K. Srivastava (From 30.08.2019 to 04.11.2019) Director Incharge NITIE Prof. Manoj Kumar Tiwari (From 05.11.2019) Director NITIE |
| XI | Two Members of NITIE Teaching Faculty to be co-opted by the Chairman | 1. Prof. Seema Unnikrishnan NITIE |
| | | 2. Prof. Vijaya Gupta NITIE |
| XII | Ex-Officio-Secretary | Shri Basavaraj Swamy Registrar NITIE |

**NITIE DEANS & ADMINISTRATIVE OFFICERS****Deans:**

1. Prof. Padmanav Acharya – Dean (Academics)
2. Prof. (Ms.) Hema A Date – Dean (Student Affairs)
3. Prof. V B Khanapuri – Dean, Sponsored Research & Industrial Consultancy (SRIC)

Prof. In-Charge:

1. Prof. Rauf Iqbal – PIC (Executive Education)
2. Prof. A.S.Binilkumar – PIC (Research)
3. Prof. (Ms.) K S Ranjani – PIC (Media Relations)
4. Prof. (Ms.) Anju Singh – PIC (Security & Transport)

Administrative Officers:**Registrar**

Shri Basavaraj Swamy

Controller of Examination (on deputation w.e.f. 15.12.2017 to 19.12.2019)

Dr. Utpal Kumar Debnath

Medical Officer

Dr. Smruti R. Patel

Manager, Computer Centre

Shri A N Naidu

Deputy Registrar

1. Shri Liju David Mathew
2. Dr. Ashish Singh Dixit

Assistant Registrar

1. Mrs. Sangita Jadhav
2. Mrs. Nisha Singh (Retd. Lt. Cdr.)
3. Mr. T M Hariram

System Designer

Shri SM. Venkataramaiah Ramagiri

Library & Information Officer

Mrs. Bhagyashree E. Kordey

Executive Engineer

Shri R.M. Gaikwad

Senior Programmer

Shri K. Yeshwantha Rao

ACADEMIC ACTIVITIES

a. Academic programmes

- i. Fellow Programme
- ii. M.Tech Equivalent Programme
 - a) PGDIE
 - b) PGDMM
 - c) PGDPM
- iii. MBA Equivalent Programme
 - d) PGDIM
 - e) PGDISEM
- iv. Post Graduate Programme for Executives in Visionary Leadership for Manufacturing (PGPEX-VLFM)



ACADEMIC PROGRAMMES

i) FELLOW (Doctoral) Programme

Fellow (Doctoral) programme aims to admit individuals with the sound academic background, strong motivation and potential to become excellent researchers at national and international level. The interdisciplinary nature of the programme stimulates opportunities in exploring different facets of research areas.

Currently,

- 14 Literature Review cum Pre-Registration
- 36 Students presented Credit Seminar
- 12 Students presented Pre-Synopsis Seminar
- 08 Students presented Progress Seminar
- 15 Students defended Viva-Voce Examination successfully

Admission notification in respect of Fellow (Doctoral) Programme - 2020 was released in the leading Newspapers/ Journals and Magazines on 8th December, 2019. Admission related activities are in progress.

ii) M. Tech Equivalent Programme:

a) Post Graduate Diploma in Industrial Engineering (PGDIE)

NITIE offers a two-year residential Post Graduate Diploma in Industrial Engineering, equivalent to Master's Degree in Industrial Engineering, recognized by the Government of India, Association of Indian Universities, and All India Council for Technical Education. The PGDIE programme has focus on techno-managerial and cross-functional skills. Admission is restricted to the candidates who qualify through Graduate Aptitude Test in

Engineering (GATE), followed by Group Discussion and Personal Interview. Industry Sponsored candidates fulfilling eligibility criteria are also considered for admission.

The students of 47th batch PGDIE programme (2017-19) completed their programme and have been placed in various organizations.

The students of 48th batch PGDIE programme (2018-20) completed their 7th quarter, and busy with their final project and placed in various organizations.

The students of 49th batch PGDIE programme (2019-21) have completed 3rd Quarter and are busy with their Summer Project.

Admission notification for 50th Batch of PGDIE, 7th Batch of PGDMM & PGDPM (2020-22) was released in leading Newspapers/ Journals, Magazines and on NITIE website on 2nd February 2020. Admission related activities are in progress.

b) Post Graduate Diploma in Manufacturing Management (PGDMM)

NITIE offers a two-year residential Post Graduate Diploma in Manufacturing Management. Admission is restricted to the candidates who qualify through Graduate Aptitude Test in Engineering (GATE), followed by Group Discussion and Personal Interview. Industry Sponsored candidates fulfilling eligibility criteria are also considered for admission.

The students of 4th batch PGDMM programme (2017-19) completed their programme and have been placed in various organizations.

The students of 5th batch PGDMM programme (2018-20) have completed their 7th quarter,



and busy with their final project and placed in various organizations

The students of 6th batch PGDMM programme (2019-21) have completed 3rd Quarter and are busy with their Summer Project.

c) Post Graduate Diploma in Project Management (PGDPM)

NITIE offers a two-year residential Post Graduate Diploma in Project Management. Admission is restricted to the candidates who qualify through Graduate Aptitude Test in Engineering (GATE), followed by Group Discussion and Personal Interview. Industry Sponsored candidates fulfilling eligibility criteria are also considered for admission.

The students of 4th batch PGDPM programme (2017-19) have completed their programme and have been placed in various organizations.

The students of 5th batch PGDPM programme (2018-20) have completed their 7th quarter, and busy with their final project and were placed in various organizations

The students of 6th batch PGDPM programme (2019-21) have completed 3rd Quarter and are busy with their Summer Project.

iii) MBA Equivalent Programme:

a) Post Graduate Diploma in Industrial Management (PGDIM)

NITIE offers a two-year residential Post Graduate Diploma in Industrial Management (PGDIM), recognized by All India council for Technical Education. The PGDIM addresses all the strategic, tactical and operational issues involved in today's business. An understanding of the various perspectives and dimensions of business are at the base of this programme. The programme has focus on Systems, Operations, SCM, Business Policy, Tools and Techniques, Human Resources, Marketing

and Finance areas which help in developing the right knowledge amalgamation. The programme addresses the needs of the Industry by targeting the entire value chain of the business organization.

Admission to PGDIM Programme is restricted to Engineering Graduates who qualify through Common Admission Test (CAT) conducted by the IIMs followed by Group Discussion and Personal Interview.

The students of 24th Batch PGDIM programme (2017-19) completed their programme and were placed in various organizations.

The students of 25th Batch PGDIM programme (2018-20) completed their 7th Module and placed in various organizations

The students of 26th Batch PGDIM (2019-21) have completed 3rd Module and are busy with their Summer Project

b) Post Graduate Diploma in Industrial Safety & Environmental Management (PGDISEM)

NITIE has launched a Post-Graduate Diploma in Industrial Safety and Environmental Management which is of two years duration and is approved by All India Council for Technical Education. The objective of the Programme is to provide knowledge to improve quality of industrial safety, environmental practices and to equip the students with necessary expertise to manage industrial safety and environmental problems effectively paving the way for cleaner and safer production, to inculcate a systematic approach in dealing with Industrial Safety and Environmental Management through scientific management methodologies available for decision-making, and to provide foundation for specialized studies and research in safety and environment.



Admission to PGDISEM Programme is restricted to Engineering Graduates who qualify through Common Admission Test (CAT) conducted by the IIMs followed by Group Discussion and Personal Interview.

The students of 17th Batch PGDISEM (2017-19) have completed their programme and were placed in various organizations.

The students of 18th Batch PGDISEM (2018-20) have completed their 7th Module and were placed in various organizations

The students of 19th Batch PGDISEM (2019-21) have completed their 3rd Module.

Admission notification in respect of PGDIM 27th Batch & PGDISEM 20th Batch were released in leading Newspapers/Journals, Magazines and on NITIE website on 20th October 2019. A total No. of 3572 applications were received and 2231 candidates were short listed for GD & PI based on the CAT Score and overall academic performance. Online admission process was held from 27.03.2020 to 31.03.2020. Total 2010 candidates have attended the online admission process

iv) Post Graduate Programme for Executives in Visionary Leadership for Manufacturing (PGPEX-VLFM)

NITIE launched one-year full-time post graduate programme for Executives in Visionary Leadership for Manufacturing (PGPEX-VLFM) jointly with IIT, Delhi from the year 2017. This programme is specially designed for experienced engineers with 5 – 12 years of experience in manufacturing domain. Professionals who are eager to drive the manufacturing renaissance by putting themselves through a challenging, peer driven and experiential learning experience were encouraged to apply in either of the two categories – individual or sponsored.

The number of students admitted in the various programmes during (2019-21) are presented below:

| Programme | Intake | Students Admitted | Students Left |
|-----------|--------|-------------------|---------------|
| FELLOW | 40 | 24 | 01 |
| PGDIE | 140 | 143 | 10 |
| PGDIM | 308 | 272 | 04 |
| PGDISEM | 42 | 20 | 01 |
| PGDMM | 44 | 43 | 04 |
| PGDPM | 44 | 41 | 01 |
| VLFM | 30 | 26 | - |

ACADEMIC ACTIVITIES

b. Areas

Coordinators

- | | |
|---|---------------------------------|
| i. Industrial Engineering and Manufacturing Systems | Prof. L Ganapathy |
| ii. Operations and Supply Chain Management | Prof.(Ms.) Sushmita N. Aghalaya |
| iii. Engineering Technology and Project Management | Prof. V B Khanapuri |
| iv. Decision Science and Information Systems | Prof. Rakesh Verma |
| v. Environmental Engineering & Management | Prof. Shankar Murthy |
| vi. Economics and Strategy | Prof. (Ms.) Vijaya Gupta |
| vii. Finance and Accounts | Prof. Ajay Panda |
| viii. Marketing | Prof. M.K. Jha |
| ix. Organizational Behavior and Human Resource Management | Prof. S K Nair |



INDUSTRIAL ENGINEERING AND MANUFACTURING SYSTEMS

a) Introduction to the area (including Objectives):

Industrial Engineering refers to the design and improvement in work systems and is firmly entrenched on the philosophy of continuous improvement of these work systems which are integrated form of people, product (or service) and processes. **Manufacturing Systems** refers to the various method of organizing production. Many types of manufacturing systems are in place, including assembly lines, batch production and computer-integrated manufacturing to current day 3-D printing. The area **Industrial Engineering and Manufacturing Systems (IEMS)** in NITIE is a merger between Industrial Engineering and Manufacturing Systems area.

Objective of area:

To drive Industrial Engineering and Manufacturing Systems research to enhance national competitiveness in manufacturing and service sector.

b) List of Area members and their specialization:

| S.No | Faculty | Designation | Specialization |
|------|------------------------------|---------------------|--|
| 1. | Prof. KVSS Narayana Rao | Professor | Industrial Engineering, Capital Markets, Financial Modelling |
| 2. | Prof. L. Ganapathy | Professor | Quantitative Methods, Project Management |
| 3. | Prof. Ashok K. Pundir | Professor | Industrial Engineering, Project Management, Supply Chain management |
| 4. | Prof. Milind Akarte | Professor | Industrial Engineering, Operations & Supply Chain Management, Manufacturing Strategy, MCDM, Additive Manufacturing |
| 5. | Prof. Padmanav Acharya | Professor | Industrial Engineering, System Dynamics, Project Management, Logistics Supply Chain |
| 6. | Prof. S.K. Rauf Iqbal | Associate Professor | Ergonomics and Human Factors Engineering, Work System Design |
| 7. | Prof. Vivek Khanzode | Associate Professor | Industrial Engineering, Operations Management, Lean Manufacturing |
| 8. | Prof. Balkrishna E. Narkhede | Associate Professor | Industrial Engineering, Supply Chain Management, Manufacturing Strategy, Project Management |
| 9. | Prof. Priyanka Verma | Assistant Professor | Industrial Engineering, Supply Chain Modelling, Facilities Planning, Operations, Quantitative Techniques |
| 10. | Prof. Jinil Persis | Assistant Professor | Operations Research, Simulations and modeling analysis, Evolutionary multi-objective optimization techniques |



c) Fellow Students in IEMS Area:

| Sr | Name of Fellow Student | Supervisor/s | Topic of Research |
|----|------------------------------|---|---|
| 1 | Sourabh Kulkarni | Prof Priyanka Verma/ Prof R Mukundan | The dynamics of Manufacturing Strategy |
| 2 | Anjali Shisodia | Prof Priyanka Verma/ Prof Karuna Jain | Designing resilient project network based on project characteristics and risks |
| 3 | Ashutosh Mishra | Prof Priyanka Verma | Core Retrieval Framework for value creation towards sustainable economy |
| 4 | Vishwas Dileep Dohale | Prof Milind Akarte/ Prof Priyanka Verma | Quantifying the congruence between the Process Choice Criteria and Production System employed in manufacturing firm |
| 5 | Shashank Kumar | Prof. Balkrishna Narkhede/ Prof. Karuna Jain | Warehouse Management |
| 6 | Vikash Sharma | Prof. Balkrishna Narkhede Prof. Ravindra Gokhale | Manufacturing Strategy |
| 7 | Kirti Nayal | Prof. Balkrishna Narkhede Prof. Rakesh Raut | Food Supply Chain Management |
| 8 | Anand Sashikumar | Prof. P. Acharya | Lean Performance Assessment in Bias Tyre Manufacturing: A Case based study in India |
| 9 | Ramakrishna Barsakade | Prof. L. Ganapathy Prof. P.Acharya | Modelling and Analysis of Lean implementation in Select Healthcare Systems in India |
| 10 | Prakash Vaidya | Prof. P. Acharya Prof. K.Madulety | Reverse Logistics |
| 11 | Harshad Chandrakant Sonar | Prof. Milind Akarte Prof. Vivek Khanzode | Evaluating the impact of additive manufacturing on firm competitiveness. |
| 12 | Debasis Halder | Prof. Rauf Iqbal Prof. Vivek Khanzode | Development of Dynamic Anthropometry Database of Indian Population for Designing Industrial Work Systems |
| 13 | Ramesh Kumar | Prof. L Ganapathy Prof. Ravindra Gokhale | Production-distribution planning in supply chain |
| 14 | Bhawana Rathore | Prof. Ashok Kumar Pundir Prof. Rauf Iqbal | Ergonomics evaluation in glass artware industry |
| 15 | Shreyanshu Parhi | Prof. Milind Akarte Prof. Kanchan Joshi | Investigating the impact of Industry 4.0 on manufacturing performance |



| Sr | Name of Fellow Student | Supervisor/s | Topic of Research |
|----|-----------------------------------|---|---|
| 16 | Nikhil Suryakant Ghag | Prof. Karuna Jain Prof. V. B. Khanapuri | Work System Design for Complex Automated System |
| 17 | Virendra Kumar Verma | Prof. Milind Akarte Prof. Gaurav Kabra | Impact of Additive Manufacturing on Supply Chain performance |
| 18 | Pratik Maheshwari | Prof. Ashok Kumar Pundir Dr. Sachin Kamble | Inventory management of non instantaneous deteriorating items |
| 19 | Priya Prakash Ambilkar | Prof. L Ganapathy Prof. Ashok Kumar Pundir | A study on selection of reverse logistics partner for product returns in closed loop supply chain |
| 20 | Rajan Kumar Gangadhari | Prof. Vivek Khanzode Prof. Shankar Murthy | Risk Management of Oil and Gas supply chain network using big data |
| 21 | Janak Suthar | Prof. D. Jinil Persis Prof. Ruchita Gupta | Smart factory |
| 22 | Mihir Kulkarni | Prof. D Jinil Persis Prof. Mukundan R | Modelling of Smart Manufacturing Factories |
| 23 | Venkata Jagadeeswar Rao Tattikota | Prof. L Ganapathy Prof. V . Khanapuri | Application of Project management techniques in a defence R&D organisation |
| 24 | Chandrashekhar Vishnu Chaudhari | Prof. Vivek Khanzode Prof. Raut Iqbal | Application of TOC for supplier buyer relationship in consumer goods environment |
| 25 | Amit Jaywantrao somwanshi | Prof. Vivek khanzode Prof. Debabrata Das | Supply chain management |
| 26 | Bhide Amol | Prof. Milind Akarte | Remanufacturing for sustainability |
| 27 | Gandhare B S | Prof. Milind Akarte | Evaluation Of Maintenance Performance In Select Agro-Based Industries |



OPERATIONS AND SUPPLY CHAIN MANAGEMENT

a) Introduction to the area (including Objectives):

Operations and Supply chain Management (OSCM Area) is positioned as a strategic, multidisciplinary Area at NITIE, dedicated to carrying out specialised theoretical and applied research on Operations and Supply Chain Management with participation of a multidisciplinary faculty and industry practitioners.

- To educate and train students & practising executives and develop future industry leaders in areas of Operations and Supply Chain Management
- To conduct research that contributes significantly to the theory and practice of Operations and Supply Chain Management
- To act as a forum to initiate interaction and dialogue on supply chain related issues, challenges and solutions between industry and academia

b) List of Area members and their specialisation: (in alphabetical order)

| Sr. No. | Faculty | Focus Area | Spectrum of Work |
|---------|----------------------------------|---|--|
| 1. | Prof. Gaurav Kabra | Supply Chain Management | Supply Chain Modelling and Analytics |
| 2. | Prof. Rakesh Raut | Operations Management / Supply Chain Management | Collaborative Network Organization, Agriculture Supply Chain, Cold Supply Chain, 3PL |
| 3. | Prof. Ravindra Gokhale | Operations Management / Supply Chain Management | Manufacturing Planning and Control, Supply Chain Modelling, Urban Transportation Systems, Logistics Management |
| 4. | Prof. Sachin Kamble (on lien) | Operations Management / Supply Chain Management | Agriculture Supply Chain, Cold Supply Chain, Retail Supply Chain |
| 5. | Prof. Sanjay Sharma | Operations Management / Supply Chain Management | Inventory Management |
| 6. | Prof. Sushmita Narayana | Operations Management / Supply Chain Management | Healthcare Operations Management, Sustainable Supply Chain Management |

c) Growth of Area and activities undertaken during the year:

1. Academic

The Core Faculty of the Area are active in the following domains of Operations and Supply Chain Management: Sustainable Supply Chain Management, Agriculture and Food Supply Chain, TQM and Six Sigma, Supply Chain Modelling, Supply Chain Analytics, Inventory Management, Logistics Management.

Teaching – Courses currently offered in the area

Operations Management, Supply Chain Management, Materials Management, Logistics Management, Quality Management, Advanced Supply Chain Management



| Sr. No | Fellow | Faculty | Topic | Research Level - Firm / Industry / Sector | Research Area/ keywords |
|--------|--------------------|--|--|---|--------------------------------|
| 1. | Praveen Dongre | Prof. Ravindra Gokhale | A Study of Supply Chain Performance Measures in Organizations | Sector | Supply Chain Performance, MSME |
| 2. | Prasad Patil | Prof Ravindra Gokhale / Prof. Koteswara Rao Naik | TQM -SCM | Industry | Quality SCM |
| 3. | Rohit Sharma | Prof. Sachin Kamble | “Impact of Modern Technologies for Enhancing Sustainable Agricultural Supply Chain Performance” Thesis submitted | Industry | Course work completed |
| 4. | Pankaj Kalwaghe | Prof. Rakesh Raut | Smart Cities | Industry | Course work completed |
| 5. | Lavanya Meherishi | Prof. Sushmita Narayana / Prof K S Ranjani | Packaging in Supply Chains | Industry | Course work completed |
| 6. | Sarthak Dhingra | Prof Rakesh Raut / Prof Koteswara Rao Naik | Course work completed | Industry | Course work completed |
| 7. | Aditi Sushant Saha | Prof Rakesh Raut | Course work ongoing | - | Course work ongoing |
| 8. | Ajayagopal K V | Prof Ravindra Gokhale / Prof Rakesh Verma | Course work ongoing | - | Course work ongoing |
| 9. | Ashish Omar | Prof Priyanka Verma | Course work ongoing | - | Course work ongoing |
| 10. | Dheeraj Kumar | Prof Sushmita Narayana | Course work ongoing | - | Course work ongoing |
| 11. | Harish Kumar Arya | Prof Sushmita Narayana / Prof Debabrata Das | Course work ongoing (FPIP) | - | Course work ongoing |
| 12. | Rahul Chavhan | Prof Debabrata Das | Course work ongoing | - | Course work ongoing |
| 13. | Satvik | Prof Koteswara Rao Naik | Course work ongoing | - | Course work ongoing |



Area course path - Specific to Fellow Students:

Operations Management → Supply Chain Management → Stream Specific Courses namely, Topics in Supply Chain Management, Advanced Operations Management → Any other courses offered by specific Faculty Guides

2. Research

| Profile | Details | Remarks |
|----------|---------|---------------------|
| Faculty | 06 | Area Core |
| | | Other group members |
| Fellows* | 13 | Current |

(*This includes only the Fellow Students completed/current with the Core Faculty after the restructuring of the Area)

Area Publications – Conferences and Journals

| Sr.No | Contributions | Numbers |
|-------|------------------------------------|---|
| 1. | International/National Conferences | 02 |
| 2. | Journals | 15 |
| 3. | Case studies | *Cases published in journals are considered in Journals |

3. Outreach (including building Institutional linkages)

Management Development Programme [MDP]

Current Focus of these courses – MDPs proposed in Academic Year 2020-21

- Supply Chain Analytics
- Achieving Excellence in Logistics Management
- AI/ML in Operations & Supply Chain Management
- Sustainable Supply Chain Management in Circular Economy
- Statistical Process Control
- Analytics in Service Industry
- Artificial Intelligence for Managerial Decision Making



ENGINEERING TECHNOLOGY AND PROJECT MANAGEMENT

a) Introduction to the area (including Objectives):

In today's environment, technology is a vital element that can give an organization its required competitive edge. Project Management plays a major role to align business strategy with technology management. ETPM area is the amalgamation of two vital areas Project Management and Engineering Technology with the following goals:

1. To provide a platform to identify, create and implement strategies that enables technologies to reach its potential.
2. To build capability for resolving business problems in an integrated way of engineering, technology and business functions.

The primary objective of ETPM area is to develop competency to handle, manage projects and technology for competitive advantage.

b) List of Area members and their specialization: (in alphabetical order)

| Sr. No. | Faculty | Focus Area | Spectrum of Work |
|---------|----------------------------|--|--|
| 1. | Prof. Kanchan Joshi | Operations Research / Project Management | Project Management, Scheduling, Resource Planning, Optimization, Metaheuristics Algorithms, OR models for Social Entrepreneurs |
| 2. | Prof. Karuna Jain | Project Management / Technology Management/SCM | Strategic Technology & Innovation Management, Intellectual Property Management, R&D Management, Project Management, SCM |
| 3. | Prof. Koteswararao Naik B. | Technology Management/IPR | Creativity, IP Management, Technology Management and Entrepreneurship |
| 4. | Prof. Ruchita Gupta | Technology Management/ Project Risk Management | Diffusion and Adoption, Technology Transfer and Commercialisation, Technology Forecasting, Technology Entrepreneurship |
| 5. | Prof. Vivekanand Khanapuri | Project Management / Maintenance Management | Project stakeholder management, Project monitoring and control, Project selection. Maintenance Management, BPR & IT |

**c) Growth of Area and activities undertaken during the year:****1. Academic**

The core faculty of the area are active in the following domains of Operations and Supply Chain Management: Sustainable Supply Chain Management, Agriculture and Food Supply Chain, TQM and Six Sigma, Supply Chain Modelling, Supply Chain Analytics, Inventory Management, Logistics Management.

Teaching – Courses currently offered in the area:

Project Management, Technology and Innovation Management, Quantitative Models for Project Management, Project Risk Management, Strategic NPD, Managing Creativity & Innovation, Large Engineering Projects, R&D Project Management, IP Management, Business Research Methods

Area course path specific to Fellow Students:

Project Management/ Technology and Innovation Management → Stream Specific Courses namely, Advanced Project Management/Technology Management, Perspectives on Engineering Technology and Project Management → Any other courses offered by specific Faculty Guides

2. Research

| Profile | Details | Remarks |
|----------|---------|---------------------|
| Faculty | 06 | Area Core |
| | | Other group members |
| | | |
| Fellows* | 01 / 12 | Completed / Current |

(*This includes only the Fellow Students completed/current with the Core Faculty after restructuring of the Area)

Ongoing Research – Fellow and Independent

| Sr. No | Fellow | Faculty | Topic | Research Level - Firm / Industry / Sector | Research Area / keywords |
|--------|----------------------------|---|--|---|--------------------------------|
| 1 | Sushma Priyadarshini Yella | Prof. Karuna Jain | Corporate Finance regulated firms valuation | Industry | Green SCM |
| 2 | Rose Anthony | Prof. Karuna Jain / Prof. V. Khanapuri | Improving Project Management Practices in Agriculture | Sector | Sustainability, Paper Industry |
| 3 | Snehal Tawate | Prof. Karuna Jain / Prof. Ruchita Gupta | Technology commercialization in biotechnology firms in India | Sector | Technology commercialization |



| Sr. No | Fellow | Faculty | Topic | Research Level - Firm / Industry / Sector | Research Area / keywords |
|--------|------------------|---|--|---|---------------------------|
| 4 | Anjali Shishodia | Prof. Karuna Jain/ Prof. Priyanka Verma | Designing resilient project network based on project characteristics and risks | Industry | Quality SCM |
| 5 | Ajitkumar | Prof. Karuna Jain/ Prof. R. Mukundan | A study on Technology strategic Planning & Decision | Industry | Strategic decision making |
| 6 | Mahak Sharma | Prof. Ruchita Gupta/ Prof. P Acharya | Adoption of Cloud Computing Services in ICT firms in India | Industry | Cloud Computing in ICT |
| 7 | Saurabh Kulkarni | Prof. R. Mukundan/ Prof. Priyanka Verma | Dynamics of Manufacturing Strategy | Sector | Manufacturing Strategy |
| 8 | Mr. Vilas Kharat | Prof. Koteswararao Naik B. | Project Portfolio Management | Industry | Portfolio Management |
| 9 | Madhumita | Prof. V. B. Khanapuri | Project Monitoring & Control | Industry | Monitoring & Control |
| 10. | Shashank kumar | Prof. Karuna Jain/ Prof. B. E. Narkhede | Warehouse Management | Industry | Warehouse Management |
| 11. | Kavita Bangale | Prof. Kanchan Joshi/ Prof. Ruchita Gupta | Mega Project Complexity | Industry | Project Management |
| 12. | Shreyanshu Parhi | Prof. Milind Akarte/ Prof Kanchan Joshi | Industry 4.0 | Industry | Industry 4.0 |
| 13. | Pramod Pandey | Prof. V. B. Khanapuri/ Prof. Kanchan Joshi | Undergoing Coursework | Industry | Undergoing Coursework |
| 14. | Rahul Mishra | Prof. Koteswararao Naik B. | Undergoing Coursework | Industry | Undergoing Coursework |
| 15. | Shikha Sargam | Prof. Mukundan | Undergoing Coursework | Industry | Undergoing Coursework |
| 16. | Pratima Bhagat | Prof. Ruchita Gupta/ Prof. Karuna Jain | Undergoing Coursework | Industry | Undergoing Coursework |



DECISION SCIENCES AND INFORMATION SYSTEMS

a) Introduction to the Area

Today's business environment requires companies to collect up-to-date business information from their customers, competitors, and business partners and, more importantly, analyze this information by using advanced tools and technologies. Firms that do not possess these capabilities will fall behind in the highly competitive and quickly changing business environment. As a result, more and more employers are recruiting business professionals who possess quantitative / analytical and technical skills.

The area aims to prepare students to conceptualize, design, analyze, develop, and deliver leading-edge information systems that support business processes and data driven decision-making.

DSIS achieves these objectives by extending and integrating knowledge from the disciplines of Industrial Engineering, Information Systems, Enterprise Systems, Quantitative techniques, Operations Research, Statistics, Artificial intelligence and Business Analytics.

b) List of Area Members and their Specialization

| S.No | Faculty | Focus Area |
|------|-------------------------|---|
| 1. | Prof. R Ramaswamy | Software Engineering, Computer Networks. |
| 2. | Prof. Hema A Date | Business Intelligence, Knowledge Management, Business Analytics, E-Commerce, ERP, DSS, ES, Software Engineering, IT Consulting, Industrial Engineering. |
| 3. | Prof. Purnima S. Sangle | Digital Transformation, Business Analytics, Data Mining, Business Value of IT, Enterprise Systems, ERP, CRM Technology Adoption, Multichannel CRM, IoT. |
| 4. | Prof. Rakesh Verma | Operations Research and its Application to Healthcare, Manufacturing, MCDM, Fuzzy Logic and Its Application To Engineering and Business, Multi-Objective Optimization, Decision Making under Risk and Uncertainty, Machine Learning, SCM |
| 5. | Prof. S. C. Panandikar | Application of Statistics in Marketing Research, Finance and Econometrics. |
| 6. | Prof. Debabrata Das | Quantitative Techniques for Decision Making, Quantitative Models for Supply Chain Management, System Dynamics Modelling, Multi-Criterion Decision Analysis, Multi-Objective Optimization, Decision Making under Risk and Uncertainty, Closed-Loop Supply Chain Management, Reverse Logistics. |

**c) Growth of Area and Activities undertaken during the year****1. Academic**

Various courses are being taught by Area faculty members mainly focusing on Data Driven Decision Making, Data Analytics, Decision Support Systems, Enterprise Resource Planning, OR Modeling, Decision Making Under Uncertainty, E-Commerce, Multi-channel CRM, Business Statistic, IT in Manufacturing, Knowledge Management, IT Consultancy Management, Business Analytics Using Data Mining, Statistics for Management, Operations Research, Multi-Objective Optimization, Quality Management, Machine Learning etc.

2. Research

Singh, S., Verma, R., and Koul, S. (2019) A New Approach to Decision Prioritization – Case for Healthcare Decision-Makers, Int’ l Journal of Operations and Quantitative Management, 25 (4): 275-297. (SCOPUS, ELSEVIER).

R. Verma, S. Koul and G. Singh, “Intelligent Decision-Making: Using Control Tower at a Logistics Company,” 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 550-554, DOI: 10.1109/GUCON48875.2020.9231108.

Verma, Rakesh and Koul, Saroj and Prasad, Babli, Expert System – A Case of Indian Railway’s Track Maintenance and Renewal Operations (28 March 2020). Proceedings of the International Conference on Innovative Computing & Communications (ICICC) 2020, Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3563091> (ELSEVIER).







Saroj Koul; CSN Venkata Datta; Rakesh Verma Car Rentals’ Knowledge and Customer Choice, 2020 IEEE Int’l Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), Vellore, India, 2020, pp. 1-5, DOI: 10.1109/ic-TITE47903.2020.331

ENVIRONMENTAL ENGINEERING & MANAGEMENT

a) Introduction to Area and Objectives:

The Environmental Engineering and Management (EEM) area is an interdisciplinary and cross functional area. The area interfaces with engineering and management aspects in the Environment and Safety domain with the broader objective to excel in the field of Environmental Management, Safety, CSR and Sustainability. The area focuses on developing strategies and methods for sustainable growth of industry while improving their environmental performance and minimizing their ecological footprint and impacts. The area has dedicated faculty members with strong academic and research background in the field of Environment, Sustainability, Health and Safety. The faculty interacts with industry, academic and research institutes to provide insights in several areas. The area is very active and organizes several academic and outreach activities every year.

b) Faculty members and their specialisations:

| S.No | Faculty | Focus Area |
|------|---|---|
| 1. | Prof. Seema Unnikrishnan  | Environmental law and Policy, Disaster Management, Climate Change and Business Environmentally Conscious Manufacturing and Life Cycle Analysis Safety and Environmental legislation Air quality Management |
| 2. | Prof. Shankar Murthy  | Environmental Engineering, Process Safety, Industrial Wastewater Management, Behaviour Based Safety (BBS) |
| 3. | Prof. Shirish Sangle  | Organization and Natural Environment, Sustainability, CSR |
| 4. | Prof. Anju Singh  | Business sustainability, Environmental management, Corporate Social Responsibility |
| 5. | Prof. Hema Diwan  | Industrial pollution control, EIA, Sustainability management |
| 6. | Prof. Vidyadhar V. Gedam  | Chemical Hazard and Safety, Sustainable Development, Mineral Waste Management, Water Quality Assessment |



c) Growth of Area and Activities undertaken during the year

1. Academic – Courses offered

Sustainable development for business, Sustainable manufacturing, Environment and Safety Legislation, Noise and E-waste management, Fire and Safety Managements, Disaster management, Energy management, EIA and EIA for developmental projects, Business strategy for sustainability, Shop floor waste management, Business strategies for climate change, Clean Development Mechanism and climate change, Process Safety Management, SHE audits system, Environmental Modeling, Sustainability Laboratory, Business strategies for climate change, Strategic CSR, Sustainable operation and management

2. Research

List of publications: Prof. Seema Unnikrishnan

Potdar, A., Unnikrishnan, S., and Singh, A. (2019) "A framework for climate change management in organisations: a case for India", *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 15, No. 3, pp. 303-334."

Shrivastava S, Unnikrishnan S., (2019) Review of Life Cycle Assessment and Environmental Impacts from The Oil & Gas Sector. *Oil Gas Res* 5: 164. doi:10.4172/2472-0518.1000164

Shrivastava S, Unnikrishnan S. , (2020) Life cycle assessment of oil storage unit in India. *Int. J. Oil, Gas and Coal Technology*, Vol. X, No. Y, xxxx

Conferences:

1. Shrivastava S, Unnikrishnan S., (2020). Life Cycle sustainability Assessment of crude oil refineries in India. International Conference on

"Energy and Environmental Technologies for Sustainable Development. (14-16 Feb 2020, MNIT, prayagraj).

2. Shrivastava S, Unnikrishnan S., (2019). Review of Life Cycle Assessment and Environmental impacts from the Oil & Gas Sector. IAMOT conference. (7-11 April, 2019, NITIE Mumbai)

List of publications: Prof. Shirish Sangle

AK Vishwakarma, AK Nema, S Sangle (2019). What determines environmental pro-activeness in the Indian cement sector? An empirical study, *Journal of Cleaner Production* 234, 961-971

SS Panda, S Sangle, (2019). An exploratory study to investigate the relationship between social license to operate and sustainable development strategies *Sustainable Development* 27 (6), 1085-1095.

SS Panda and Shirish Sangle, (2020). Stakeholder engagement as dynamic capability, *Business Strategy and Development*, 3(2), 204-212

List of publications: Prof. Shankar Murthy

1. Fuzzy multi-criteria decision analysis for environmentally conscious solid waste treatment and disposal technology selection; Manoj Govind Kharat, **Shankar Murthy**, Sheetal Jaisingh Kamble Rakesh D. Raut, Sachin S.Kamble, Mukesh Govind Kharat, *Technology in Society*, Volume 57, May 2019, Pages 20-29.

2. Development of simplified WQIs for assessment of spatial and temporal variations of surface water quality in upper Damodar river basin, eastern India; Ravindra Kumar Verma, **Shankar Murthy**, Rajani Kant Tiwary, Sangeeta Verma, Received: 25 July 2017 / Accepted: 3 January 2019 / Published online: 22 January 2019, *Applied Water Science* (2019) 9:21 <https://doi.org/10.1007/s13201-019-0893-0>

**List of publications: Prof. Vidyadhar Gedam**

1. Bhagat, S., Gedam, V.V. & Pathak, P. (2020). Adsorption/desorption, Kinetics and Equilibrium Studies for the Uptake of Cu (II) and Zn(II) onto Banana Peel. International Journal of Chemical Reactor Engineering, Volume 18: Issue 3. doi:10.1515/ijcre-2019-0109 (SCIE, Scopus index, IF-1.15, Publisher-DE GRUYTER)
2. Ajay H. Dwivedi, Vidyadhar V. Gedam, M. Suresh Kumar (2020), Sustainable hydrogen production from fruit and vegetable waste (FVW) using mixed anaerobic cultures via dark fermentation: kinetic aspects. International Journal of Energy and Environmental Engineering, DOI: <https://doi.org/10.1007/s40095-020-00340-6> (ESCI, Scopus indexed, IF-1.87, Publisher-Springer Berlin Heidelberg)

WORKSHOPS/QIP ATTENDED

- QIP Programme attended “Sustainable Engineering: FEW Nexus,” organized by IIT Bombay, December 9-13, 2019.

EXTERNALLY FUNDED RESEARCH PROJECTS:**Prof. Anju Singh****Projects Initiated:**

1. The project SARASWATI 2.0 has also been initiated and aims to identify the best available as well as affordable decentralized wastewater treatment technologies with the goal of resource/energy recovery and reuse. The project is between Indian partners Indian Institute of Technology Kharagpur (Lead Coordinator) Indian Institute of Technology Roorkee; Indian Institute of Technology Madras; Indian Institute of Technology Bhubaneswar; National Institute of Industrial Engineering (NITIE) Mumbai; Malaviya national Institute of technology, Jaipur (MNIT) Jaipur; TERI School of Advanced Studies (TERI SAS), New Delhi).European Project

Partners: BOKU University (Lead Coordinator), TU Delft, CENTA Sevilla, UT, UA, SPI, CEMDS, SFCU, BGU. (PI : Prof. Anju Singh).

2. The Project from Sweden on “Research and development on environmental product regulations and policies” has been initiated. The main objectives of this Project is to Study sector specific product related environmental regulations in India and do a comparative analysis with other countries within the sector. It will cover a sectoral analysis using various research tools and preparedness analysis of the companies in the sector. The total amount for three years is 23 lakhs (PI : Prof. Anju Singh).

Projects Completed:

1. Bombay Chamber of Commerce and Industry sponsored research project on Enhancing Water Responsibility of Indian Companies was completed (PI : Prof. Anju Singh).
2. Bombay Chamber of Commerce and Industry sponsored research project on Calculation and benchmarking of carbon emissions using Carbon Disclosure Project (CDP) database (PI : Prof. Anju Singh).

Ph.D. awarded

1. Mahesh Dalvi - Sustainability and CSR – A business model approach with key sustainability drivers
2. Sheetal Kamble - Development of Life Cycle based Fuzzy-MCDM decision support framework for sustainable wastewater treatment and management

List of publications: Prof. Anju Singh

1. Singh, A., Unnikrishnan, S., Naik, M., Sayanekar, S., 2019, CDM implementation towards reduction of fugitive greenhouse gas emissions, Environment, Development and Sustainability, April 2019, Volume 21, Issue 2, pp 569–586 | 2019



2. Sheetal Kamble, Anju Singh, Absar Kazmi, Markus Starkl, Environmental and economic performance evaluation of municipal wastewater treatment plants in India: a life cycle approach *Water. Sci Technol* (2019) *Water Sci Technol* (2019) 79 (6): 1102-1112.
3. Sangeeta Verma, Pushpendra Kumar Singh, Surendra Kumar Mishra, Vijay Pratap Singh, and Anju Singh, 2019, Concept of Activation Soil Moisture Accounting in SCS-CN Methodology for Runoff estimation: A Runoff Elsevier Publication Accepted, *Journal of Hydrology*, June 2020, *Journal of Hydrology*, DOI: 10.1016/j.jhydrol.2020.125114
4. Singh, A., Unnikrishnan, S., Naik, M., Sayanekar, S., 2019, Performance evaluation of a decentralized wastewater treatment system in India, Springer publication, *Environmental Science and Pollution Research International*, 22 May 2019, 26(21):21172-21188, DOI: 10.1007/s11356-019-05444-z PMID: 31119547
5. Kamble, S.J. Singh, A., Kazmi, A., Starkl, M., 2019, Environmental and economic performance evaluation of municipal wastewater treatment plants in India: a life cycle approach, *Water. Sci. Technol*, *Water Sci Technol* (2019) 79 (6): 1102–1112, <https://doi.org/10.2166/wst.2019.110>
6. Kamble, S. J., and Singh, A, 2019, Recent Advances in Life Cycle Assessment and Municipal Wastewater Treatment: A Review and Agenda for Future Research, *Journal of Environmental Sciences*
7. Dalvi, M., Singh, A., and Gosavi, M, 2019, Business sustainability-an automobile industry perspective, *EPR international journal of economic and business review -peer reviewed journal*, Volume : 7 ISSUE : 2
8. Potdar, A., Unnikrishnan, S., and Singh, A, 2019, A framework for climate change management in organisations: a case for India, *World Review of Entrepreneurship, Management and Sustainable Development*
9. Dalvi, M., Singh, A., Rambabu, P., and Murthy, N.N., 2019, Business Sustainability - A Study of Most Sustainable Corporations *Environmental Management and Sustainable Development, Environmental Management and Sustainable Development*, ISSN 2164-7682 2019, Vol. 8, No. 2
10. Potdar A., Unnikrishnan S. and Singh A, 2019, A Framework for Climate Change Management in Organizations: A case for India, *World Review of Entrepreneurship, Management and Sustainable Development*, 2019 Vol.15 No.3, DOI: 10.1504/WREMSD.2019.099405.
11. **Book Chapter:** Geospatial Analysis to understand the linkage between Urban Sprawl and Temperature of a Region – Micro and Meso Scale Study of Mumbai City, Chapter 15, *Sustainable Climate Action and Water Management*, Springer (ISBN: 978-981-15-8237-0) Hemant Bherwani, Suman Kumar, Narendra Kumar, Anju Singh, Rakesh Kumar.

INTERNATIONAL CONFERENCE PUBLICATIONS

1. Hemant Bherwani, Anju Singh and Rakesh Kumar. “Methodologies for Assessment of Urban Micro-Climate”, *International Workshop on Climate Change and Extreme Events*, IIT Mandi, April 2019, Page 81.
2. Best Paper Presentation Award: ACS Publications
Hemant Bherwani, Suman Kumar, Amol F. Niwalkar, Anju Singh and Rakesh Kumar. “Assessment of Increase in Urban Heat Island Intensity of Mumbai City Using Geospatial Methods”, *IVth International Conference on Sustainable Energy and Environmental Challenges*, 29th November 2019.

3. Himani Sonwane, Hemant Bherwani, Anju Singh and Rakesh Kumar. “Effect of Parking Space and Public Transport Mismanagement on Urban Air Quality” 10th International Congress of Environmental Research, December 2019, Page 140.

INTERNATIONAL TRAINING/WORKSHOPS

1. Invited to and attended one-week Leadership in Circular Economy, sponsored by CEAA, Adelaide, Australia.
2. Invited to and attended one-week Thematic visit and workshop to Summit Brest, France, sponsored by French Embassy.

AWARDS

Prof. Indira Parikh 50 women education leaders in the world 2019



Sponsored and invited visit to Leadership in Circular Economy in Adelaide Australia in October 2019 by The Circular Economy Alliance Australia (CEAA)

List of Publications: Prof. Hema Diwan

Chitra Pandey, Diwan Hema (2020), Assessing fertilizer use behavior for environmental management and sustainability: a quantitative study in agriculturally intensive regions of Uttar Pradesh, India". Environment, Development and Sustainability (In Press).

Conferences: Paper presentation

Chitra Pandey, Hema Diwan. Modeling farmer fertilizer use for Soil & Water Quality Management: INRM Approach. XIV World Aqua Congress. 2020.

- Unit Based Program (UBP) on "Sustainability leadership development program" for Chief Engineers of IHCL, Mumbai in 2019, 2020.



(UBP) on "Sustainability leadership development program"

Prof. Hema Diwan conducted MDP on Sustainability Portfolio & Sustainability Analytics, 2020

Accreditation of IOSH PGDISEM Programme:

In 2013, the PGDISEM Programme of NITIE became the first programme in the country to get Accreditation from the International Organization for Safety and health – IOSH, UK. This has been again renewed in 2017 for another 5 years. In 2019, The PGDISEM programme got the equivalence from the Board of Certified Safety Professionals USA. The program qualified as a TSP qualified Equivalent Programme, helping the graduates to become Certified Safety Professionals.

The EEM Area has conducted more than 100 training Programmes as Unit Based Programmes for the oil sector PSUS like IOC, BPCL, HPCL in Risk Analysis and Disaster Management.




The area members have also been conducting Sustainability leadership Programs for various organizations like India Hotels Ltd. and Accenture.

ECONOMICS AND STRATEGY

a) Introduction to the Area

Economics and Strategy is one of the key academic areas which provides key inputs to industrial engineering. The area combines two broad disciplines, viz. Applied Economics and Strategic Management. Economics and Strategy is uniquely placed to provide the foundation to the courses to all PG Programmes like Operations and Supply Chain, Industrial Engineering, Marketing, etc. and sets the tone for a multidisciplinary approach education. It provides a basket of courses which combines the tools of decision making through economic, strategic on the one hand, and theoretical and analytical principles, integrates decision making with macroeconomic, regulatory and environmental policies. It focuses on the geographical scope of decision making with both domestic and international perspectives. The goal of the area is to align with and contribute to the vision and mission of the institute and contribute to nation building through teaching, research, industry connect and policy making of government bodies. In addition to offering Institute core courses like Managerial Economics, and Strategic Management, common to all programmes, the area has a large number of programme-specific as well as Institute open electives. The faculty members undertake theoretical and empirical research on a large number of inter-disciplinary areas like Industry Analysis, Economic Environment of Business, Labour Markets, Natural Resource Management, Climate Change and Vulnerability, Carbon Markets, Strategic Leadership, Globalization and Economic Competitiveness, International Business Strategy, Environmental Valuation, Discrete Choice Experiments, Banking Sector, Competition Policy, Behavioural Corporate Finance, Corporate Governance, International Trade and Mergers and Acquisitions.

b) List of Area Members and their Specialization (as per alphabatecal order)

| Name of Faculty | | Area of Research |
|--|---|---|
| Prof. Binilkumar Amarayil Sreeraman (Assistant Professor) |  | Economic of Renewable Energy and Distributed Energy Systems, Multi-modal mobility choice studies, Moral hazard of drivers and road safety, Regional Innovation Systems and Competitiveness of Industrial Clusters, Economics of Climate Smart Agriculture, Environmental and Natural Resource Economics, Non-market Valuation of Natural resources, Environmental Policy. |
| Prof. Mainak Mazumdar (Assistant Professor) |  | Applied Econometrics, Development Economics, Industrial Economics, Economics of efficiency and productivity |
| Prof. Poonam Singh (Assistant Professor) |  | Competition Policy, Corporate Governance |



| Name of Faculty | | Area of Research |
|--|---|---|
| Prof. Som Sekhar Bhattacharya (Associate Professor) |  | Strategic Management, International Business Strategy, Mergers and Acquisitions, Strategy and Organization, Strategic Corporate Social Responsibility |
| Prof. Utpal Chattopadhyay (Associate Professor) |  | Economic Environment of Business, Globalization & Global Competitiveness, International Trade |
| Prof. Vijaya Gupta (Professor) |  | Socioeconomic impacts of climate change, adaptation strategies in agriculture due to climate change, vulnerability assessment due to climate change, environmental policy, growth and environment, environmental valuation, industrial productivity, social entrepreneurship, developmental issues. |

c) Growth of Area and Activities undertaken during the year

1. Academic – Courses offered

The area has offered core courses as well as multiple elective courses in the area of Economics and strategy

PG and Fellow programmes

Core Courses

- Managerial Economics
- Strategic Management

Electives

- Macroeconomic Environment and Policy
- Business Analysis and Econometric Applications
- Economics of Regulation
- Economics of Strategy
- Environmental Economics
- Global Trade and Institutions
- Industrial Organization
- International Business Strategy

- Mergers and Acquisitions
- Strategy and Organization
- Strategy Planning and Organisation
- Public Systems and Policy
- Resource Economics
- Industrial Resource Economics
- Indian Economy
- Behavioural Economics
- Economic Application of Game Theory
- Digital Economics
- Economics of Retail and Distribution
- Network Economics
- Development Economics
- Economics of Agri Business
- Rural Economy
- Public Finance
- Carbon Market Analysis
- Economics of Climate Change
- Corporate Governance
- Economics of innovation



- Money and Banking
- Growth and Structural Change
- Urban Economics
- Agglomeration Economics
- Advanced Econometrics
- Econometrics for Programme Evaluation
- Environmental Valuation
- Market Design
- Customer Analytics

Management Development Programmes

- Business Decision Making
- Managerial Skills for Technical Personnel
- Strategy and Leadership Development for Managers
- Corporate Performance Measurement
- Economic Tools for Managers
- Productivity, Efficiency and Business Forecasting
- Competition Policy
- Economic Indicators for Managerial Decision Making
- Network Market for Business Decision Making

Research /Publications/Conference/Research Projects/Workshops

Prof Som Shekhar Bhattacharya

Journal publications

1. Bhattacharya S S and Atre S , (2020) Additive Manufacturing Technology; realities and strategic perspectives from India”, International Journal of Asian Business and Information Management (IJABIM), Vol. 11, Issue 1 , pp-1-20.
2. Bhattacharya S S , (2020) Humanistic orientation in firm-stakeholder technology-based interaction and its impact on stakeholder satisfaction, Emerging Economy Studies, Vol 6, (No 1),pp-86-105.
3. Bhattacharya S S. (2020) Development of a typology regarding Collaborative Inter-Firm Corporate Social Responsibility (CIF-CSR) initiatives; Explication through conceptual archetypes., FIIB Business Review, Vol 9, No-1,pp-55-66.
4. Bhattacharya S S (2020) Doctoral Research Work in Strategic Management: Perspectives for Executives & Part-time Candidates, IJIR, Vol 55 ,No 4, pp-710-720.
5. Bhattacharya S S , Jha S and Sharma D , (2020) Development of a scale on individual perspectives on Corporate Social Responsibility constructs: Based on micro-foundation theory, Vision, Vol 24, No-1, pp-47-59.
6. Bhattacharya S S (2020) Explicating the characteristics of ‘Yogic perspectives’ and ‘Vedic philosophy’ for individual growth: Evolving from manager to a business leader. IJIR, Vol 56, No 2, pp-374-383.
7. Yalla, S. P., Jain, K., & Bhattacharya, S. S. (2020). Impact of monetary policy announcements on bank index in India. Afro-Asian Journal of Finance and Accounting, 10 (1), 112-130.
8. Bhattacharya, S. S., & Naser, S. (2020). Comparative analysis of mergers and acquisitions in Indian and international pharmaceutical industry with unique case-lets. International Journal of Business and Globalisation, 25(1), 112-136.
9. Jha, S., & Bhattacharya, S. S. (2020). Moderated Mediation Analysis of Leader Technology Orientation: A Study of Operations and Manufacturing Leaders of India. Journal of Operations and Strategic Planning, 3(1), 58-80.
10. Bhattacharya S S(2020) International Business Strategy: Development of an integrated framework and typology, Review of



- International Business and Strategy, Vol. 30 No. 3, pp. 345-373. <https://doi.org/10.1108/RIBS-10-2019-0138>
11. Bhattacharya SS, (2019) "Development of International Corporate Social Responsibility framework and typology" *Social Responsibility Journal*, Vol. 16 No. 5, pp. 719-744. <https://doi.org/10.1108/SRJ-04-2018-0094>
 12. Bhattacharya S S and Verma S, (2019) ."The intellectual core and structure of International Business Strategies (IBS): a co-citation analysis, *Review of International Business and Strategy*, , Vol. 29 No. 3, pp. 180-206.
 13. Bhattacharya S S, (2019), Study of industry level 'Bargaining Power': Quest for 'Value Capture' versus 'Value Creation', *Journal of Services Research*. Volume 19 Number 2 (Oct. 2019 – March 2020),pp-43-60.
 14. Verma S, Chaurasia S and Bhattacharya S S,(2019) "The effect of government regulations on continuance intention of in-store proximity mobile payment services", *International Journal of Bank Marketing*, Vol. 38 No. 1, pp. 34-62.
 15. Verma S and Bhattacharya S S, (2019) The intellectual core of Mergers and Acquisitions- a co-citation analysis, *International Journal of Business Innovation and Research*, Vol. 20 No. 3, pp. 305-336.
 16. Bhattacharya S S , Raghuwanshi V, Mohan K, Prasad A, Murari K and Sarkar A (2019)" An empirical investigation of the internationalization of Indian engineering, procurement and construction firms." , *Indian Journal of Industrial Relations*, Vol 55, No 3, pp-506-558.
 17. Bhattacharya S S , (2019) Comparative cross cultural study of Indian managers' perspectives on doing international business in Bedouin and Guanxi culture, *International Journal of Asian Business and Information Management (IJABIM)*. Vol. 10, Issue 3 , pp-1-21.
 18. Bhattacharya S S and Nair S, (2019) 'Explicating future of work; perspectives from India' *Journal of Management Development*. Vol 38, No 3, pp- 175-194.
 19. Nayak, B., Bhattacharya, S. S., & Krishnamoorthy, B. (2019). Integrating wearable technology products and big data analytics in business strategy. *Journal of Systems and Information Technology*, , Vol. 21 No. 2, pp. 255-275.
 20. Bhattacharya, S. S., & Malik, A. (2019). Development of an integrated canvas on turnaround strategy. *International Journal of Organizational Analysis*, Vol. 28 No. 2, pp. 523-554.
 21. Nayak, B., Bhattacharya, S. S., & Krishnamoorthy, B. (2019). Application of digital technologies in health insurance for social good of bottom of pyramid customers in India. *International Journal of Sociology and Social Policy*, Vol. 39 No. 9/10, pp. 752-772.
 22. Bhattacharya S S and Fernandes C , (2019) Carasid: Interventions that make businesses sustainable" , *Vision*, Vol 23, No-2, pp-208-214.
 23. Bhattacharya S S (2019) Development of an integrated perspective on strategy implementation, *IJIR*, October, Vol 55, No 2,pp-306-320.
 24. Nair A and Bhattacharya S S , (2019) Comparative analysis of sustainability motive relative to transactional, value for money and innovation motives in the context of mobile applications, *Foresight*, Vol 21,No-2, pp-177-199.
 25. Nair A and Bhattacharya S S , (2019) Mandatory corporate social responsibility in India and its effect on corporate financial



- performance: Perspectives from institutional theory and resource-based view.”, *Business Strategy and Development*, Vol 2 , No-1, pp-106-116.
26. Nayak B and Bhattacharya S S (2019), Integrating Digital Wisdom and Human Capital for Health Insurance Firms; Digitally Automated Processes or Human Resources, *Journal for Quality and Participation*, Vol 41, No 4, pp-20-23.
27. Bhattacharya S S , (2019) “Development of an integrated model on strategic alliance.” , *Indian Journal of Industrial Relations*, Vol 54, No-3, pp-441-457.
28. Bhattacharya S S, (2019) LokSuidha, converting non-customers to customers; the saga of organizational growth through technology, *Emerging Economies Cases Journal*, 1(1-2), pp-33-42.
29. Bhattacharya SS, (2019) “Exploratory study of international CSR initiatives of Indian firms.”, *Business Strategy and Development*. Vol-2, No-1, pp-51-62.
4. Bhattacharya S S, Laik, B and Jaiswal R, “Study of technology based innovations in supply chain management function of Indian firms: Strategic imperatives”, *Managerial Practices and Disruptive Innovation in Asia*, IGI Global.
5. Jumle V and Bhattacharya S S , Study of motives of Indian strategic alliances: marketing or innovation seeking, “Innovation management and business practices in Asia”. *Innovative Management and Business Practices in Asia*, IGI Global.
6. Bhattacharya S S, Laik B , Sharma D and Bose T, A comparative historical analysis of the evolution of Venture Capital industry in the economic regions of United States of America, Europe, China with that of India, *Innovative Management and Business Practices in Asia*, IGI Global.
7. Bhattacharya S S and Neenu N (2020) Active social listening and its impact on firm strategies: Study of Indian Context, *Global Challenges and Strategic Disruptors in Asian Businesses and Economies*, IGI publications.

Book chapters

1. Bhattacharya S S , Mergers & Acquisition by Indian firms; managerial perspectives on challenges and solutions, in “Dynamic Perspectives on Globalization and Sustainable Business in Asia”, IGI Global.
2. Bhattacharya S S , “Expats in India: Perspectives on difficulties of doing business in India and its implications of having born global firms from India” in “Dynamic Perspectives on Globalization and Sustainable Business in Asia”, IGI Global.
3. Bhattacharya and Apurva , S “ Supply Chain Startups in India: A cross-case comparative Analysis”, in *Handbook of Research on Corporate Restructuring and Globalization*, IGI Global.

Conferences proceedings

1. Bhattacharya S S (2019) “ Development of a typology on Firm-Civil Society Organization collaborations in the context of Corporate Social Responsibility (CSR) engagement, The 12TH EIASM workshop on the challenges of managing the third sector ‘to be held on June 12-13, 2019 at NTNU Business School Trondheim, Norway.
2. Bhattacharya S S and Debnath S (2019) ‘Olympic Gold Quest (OGQ); The saga of a Civil Society Organization (CSO) transforming Indian sports.’, The 12TH EIASM workshop on the challenges of managing the third sector ‘to be held on June 12-13, 2019 at NTNU Business School Trondheim, Norway.

**Prof Vijaya Gupta****Journal publication**

- Barun Kumar Thakur and Vijaya Gupta, (2019), **Valuing health damages due to groundwater arsenic contamination in Bihar**, India, *Economics and Human Biology*, Elsevier, 35, 123-132.

Book Chapter

- Barun Kumar Thakur and Vijaya Gupta (2019), **Arsenic-contaminated drinking water and the associated health effects in the Shahpur blocks of Bihar: A case study from five villages**, in (Ed.) Ali Fares and Sushant K Singh, *Arsenic water resources contamination*, a part of book series *Advances in water security*, Springer International.

Reviewer and editorial responsibility

- Expert Reviewer for the First Order Draft (FOD) of the Working Group II (WGII) Contribution to the IPCC Sixth Assessment Report (AR6), 2019
- Energy Policy
- Natural Resources Forum, a United Nations Sustainable Development Journal
- Associate Editor and reviewer - Journal of Entrepreneurship and Innovation in Emerging Economies

Prof Poonam Singh**Journal publication**

- KS Ranjani, Poonam Singh. Reciprocity, performance, and training expenditure in microfinance institutions: evidence from South Asia, *Enterprise Development and Microfinance*, 2019, 30(2):97-116

Policy paper:

- Poonam Singh. Takeover and Corporate Governance in India, NSE Centre for

Excellence in Corporate Governance Quarterly Briefing, February 2020

- PG Babu, Vikas Kumar, Poonam Singh. Employment and Covid-19: Trends and Issues in Tamil Nadu, Occasional Policy Paper 11 (Covid-19 Series), 2020.

Popular Press:

- Vikas Kumar and Poonam Singh. The problem of excessive purchasing power in politics, *Mint*, 14 August 2019

Research Project

- Poonam Singh and KS Ranjani, Impact of Skill Development Programme on Borrower and Institutional Development in Microfinance, ICSSR IMPRESS. 2019. Amount of grant 5 lakhs.

Prof Utpal Chattopadhyay**Book Publication**

- Utpal Chattopadhyay, 2020, **Inclusive Growth - An Indian Perspective** with Paramasivan Sivasooriyan Vellala, Mani K Madala as co-authors, Bookwell Publications, New Delhi, 2020, 244 pages.

Conference/ Seminar papers

- Chattopadhyay, Utpal, Make, Break or Exit: Tata Motor's JLR Dilemma over Brexit, presented in International Conference on Management Cases (ICMC 2019), organised by Birla Institute of Management Technology (BIMTECH), Greater Noida, December 05-06, 2019.
- Chattopadhyay, Utpal, Mukundan, R. and Arun, A., Technology Transfers through International Joint Ventures- Case of Indian Automotive Industry, presented in 28th International Conference of the International Association for Management of Technology IAMOT 2019, organised by NITIE and IAMOT, Mumbai, April 7-11, 2019.

**Awards/ Achievements**

- Received Faculty Excellence and Student Development Award from NITIE Alumni Association (NAA) during Sansmaran 19 held on 2nd November 2019.

Prof Binilkumar AS**Conference presentations**

- Binilkumar Amarayil Sreeraman and Gyanendra Singh Konthoujam 2019 Preferences of Stakeholders over Sustainable Conservation of a Wetland Ecosystem: A Case of Loktak Lake in Manipur India presented at 2nd Annual Sustainability and Development Conference (Organised by Elsevier), held on 11-14, October 2019, at University of Michigan, Ann Arbor, Michigan (USA).
- Binilkumar Amarayil Sreeraman and Karuna Jain 2019 Regional Innovation Systems and Competitiveness of MSME Clusters: A case of Sangli Raisin Making Cluster in Maharashtra, INDIA presented at 28th International Conference of the International Association for Management of Technology held on 7-10 April 2019 at Mumbai, India.

Research Projects Undertaken

- Prof. Binilkumar Amarayil Sreeraman has initiated a research project on "Preference Over Multi-Modal Mobility Options of Urban Dwellers: A Case of Aizawl City in Mizoram" in collaboration with Prof. Gyanendra Singh of NIT Mizoram, funded by Indian Council of Social Science Research under IMPRESS Scheme.

Outreach

- Prof. Binilkumar Amarayil Sreeraman is co-supervising a PhD student in NIT Mizoram in the area of Natural Resource Economics.

- Prof. Binilkumar Amarayil Sreeraman is a reviewer of Sage, Elsevier and Springer Journals in the area of Environmental Economics
- Prof. Binilkumar Amarayil Sreeraman has been acted as a reviewer for the latest edition of Domestic Salvatore, Managerial Economics Text Book for Oxford University Press India.

Awards

- Prof Binilkumar A S received Faculty Excellence and Student Development Award from NITIE Alumni Association (NAA) during Sansmaran 19 held on 2nd November 2019.

Prof Mainak Mazumdar**Conferences paper:**

- Mainak Mazumdar, 2019, "Is Agriculture Still Important for Sustainability and Convergence of overall Economic Growth? The striking case of India" participated in the Sustainability and Development Conference. The conference was hosted by The University of Michigan and took place October 11-14, 2019.

Conference and Workshop organized:

- As a Centre Coordinator of The Centre for Global Competitiveness organized training on the Udyammimitra portal of SIDBI, provided to MSMEs and students attended the workshop on 02nd March 2019.
- In IAMOT, organized two sub-themes in Technology Management in SMEs and Innovation System for MSMEs.
- The Centre organized a workshop on Fintech Reinvesting MSME's in India, in MSME Entrepreneurship Conclave 2019, on 18th Oct. 2019, under the umbrella of AVARTAN.



FINANCE AND ACCOUNTS

a) Introduction to the area:

Accounting and Finance area brings rich insights into students' perspectives enabling them to have a wholesome financial understanding of business. Besides being an important business function, the area adds value to training and consulting initiatives of NITIE. This area is an important stakeholder in the Excellence Centre for SME competitiveness and Entrepreneurship. Given the vision of the Institution to be a knowledge partner to industries Finance and Accounting area is poised to play a vital role because of the applied research focus of the area.

b) List of area members and their specialisation:

Currently, the area has four faculties, each of them pursuing diverse research interests in their respective areas of interest. Following are their details.

| S.No | Faculty | Focus Area | Spectrum of Work |
|------|---|---|----------------------------------|
| 1. | Prof. Ajaya Kumar Panda (Assistant Professor) | International Finance, Applied Corporate finance, Financial Economics and Applied Econometrics | Teaching, Training, and Research |
| 2. | Prof. K. S. Ranjani (Assistant Professor) | Accounting Financial Inclusion Project Finance | Teaching, Training, and Research |
| 3. | Prof. Venkateswarlu (Professor)- On lien at present. | Risk Management Corporate Finance Quantitative Finance Regulatory Risk, Cost of Capital and Valuation Project Finance | Teaching, Training & Research |
| 4. | Prof. Vipul Kumar Singh (Assistant Professor) | Financial Engineering, Applications of Derivatives in Project Management, Financial Markets | Teaching, Training, and Research |

c) Growth of the area and activities undertaken during the year:

- Academic:** In addition to the core courses, the area also offers numbers of electives to the students. Being small in size, it always remains challenging for the area to offer new electives year-on-year. However, in AY 2019-20 area has offered many electives, that are heavily subscribed by the students.



| Faculty | Electives Offered |
|-------------------------|---|
| Prof. K.S. Ranjani | 1. Strategic Cost Management |
| Prof Vipul Singh | 2. Financial Derivatives 3. Financial Time Series Modeling |
| Prof. Ajaya Kumar Panda | 4. Investment Analysis and Portfolio Management 5. International Finance, Forex Management and Analytical Finance. |

Following is the list of core and electives courses currently on the roll of the area

Institute Core

Financial Accounting

Course Objective: To orient students to accounting, make them aware of the basic concepts in accounting, enabling them to understand the accounting process and understanding financial statements.

Program Core

Financial Management

Course Objective: Financial Management involves the study of different models of corporate financing and governance, followed by several domestic and global firms. This course aims to:

1. Offer the basics of financial management and its environment to the participants.
2. Familiarize participants with the significant areas of corporate finance- investment, financing and distribution of income.

Electives

Investment Analysis and Portfolio Management

This course focuses on the investment decision-making from the perspective of the portfolio manager. Topics covered include the process of creating, maintaining, and evaluating the performance of professional investment portfolios. The course is designed for upper-level finance

majors to provide them with advanced skills in equity and fixed-income portfolio construction and management, asset allocation, as well as cover advanced topics such as professional asset management, and alternative investments.

International Finance and Forex Management

Course Objective: The course attempts to present a comprehensive view of the theories and the practical implications of various issues of the exchange rate and its management. It also deals with the models of exchange rate determination, International parity, and foreign exchange risk management aspects. The subject aims at preparing students to commence a fulfilling and effective carrier in forex management and International finance professions.

Derivatives

Course Objectives: The course primarily aims to acquaint participants/students with the basics of different types of financial derivatives instruments and focuses on various standardised derivative instruments traded globally. This course covers the fundamentals of financial derivatives instruments and their application for the pricing of different financial derivatives instruments. The specific objectives are as follows:

- To introduce the concepts of derivative and pricing mechanism.



- To illustrate the application of financial derivatives.
- To integrate the understanding of roles of the forward, futures and options contracts.
- To investigate the interlinking of derivative products and risk management.

Financial Risk Management

Course Objectives: This course deals with how risks are quantified and managed by financial institutions. Among the topics covered are the nature of financial institutions and their regulation, market risk, credit risk, operational risk, liquidity risk, and the credit crisis of 2007.

Financial Time Series Modeling

Course Objectives:

- To introduce the concept of regression and to apply OLS (ordinary least square) method in Finance using Eviews or MS EXCEL.
- To able to identify the reasons as to why OLS (ordinary least square) method of regression will not always suffice for analysis of time-series data.
- To study dynamic structures and relationships between financial variables. To carry out step by step process to identify the properties of a time series data by using E-Views or MS EXCEL.
- To be able to forecast to predict asset returns like treasury yield, corporate bond yield spread, etc.
- To introduce the concepts of ARCH, GARCH, VAR, ECM modeling.

2. Research:

Accounting and Finance area has published quality research papers indexed in Scopus and Web of Science. In future, the area would like to collaborate within and outside the area and produce Research

that would be multi-disciplinary. Below is the list of research papers published by the area faculties in 2019-20.

1. Panda. A.K, Nanda S and Panda, P (2020), Working Capital Management, Macroeconomic Impacts, and Firm Profitability; Evidence from Indian SMEs, (Accepted), Business Perspectives and Research (**Sage**) SCOPUS
2. Panda. A.K. and Nanda S. (2020), Receptiveness of effective tax rate to firm characteristics; An empirical analysis on Indian listed firms, (Accepted), Journal of Asia Business Studies-(Emerald), SCOPUS.
3. Ranjani K.S., Singh Poonam (2019). Reciprocity, Performance and Training Spends: Evidence from South Asia. Enterprise Development and Microfinance. (Accepted)
4. Singh, V. K., Kumar, P., and Nishant, S. (2019). Feedback Spillover Dynamics of Crude Oil and Global Assets Indicators: A System-wide Network Perspective. Energy Economics, 80(May), 321-335. <https://doi.org/10.1016/j.eneco.2019.01.005> (A* Category)
5. Nanda S. and Panda. A.K. (2019), A Quantile Regression Approach to Trail Financial Performance of Manufacturing Firms, Vol. 20, No: 3, pp: 290-310. Journal of Applied Accounting Research, SCOPUS, ABDC-C
6. Panda. A.K, Nanda S., and Paital R. R., (2019), An Empirical analysis of Stock Market Interdependence and volatility spillover in the Stock markets of Africa and Middle East Region, African Journal of Economic and Management, Vol. 10, No: 3, pp: 314-335; SCOPUS, ABDC-C
7. Panda. A.K, Nanda S., Singh V.K and Satish K., (2019) Evidence of leverage effects and volatility spillover among exchange rates of selected emerging and growth leading



economies, Journal of Financial Economic Policy, Vol. 11 Issue: 2, pp.174-192, <https://doi.org/10.1108/JFEP-03-2018-0042>.

SCOPUS, ABDC-B

8. Panda. A.K. and Nanda S., (2019) The Nexus between Exchange Rate and Long Term Investment in Indian Manufacturing Industry, Management Research Review, Vol. 42 Issue: 2, pp.174-198, <https://doi.org/10.1108/MRR-01-2018-0024>, SCOPUS, ABDC-C.

Management Development Program

Title: Financial Time Series Modeling using Python

Duration: 5 classes, 3 hours per class: 15 hours

Date: 10th Oct., 11th Oct., 16th, 17th and 18th Oct 2020

Participants: Faculty, Research scholars, Professionals from finance, economics and related functional areas

Delivery: Web based Sessions

Course Coordinator and Faculty Resource:

Dr. Ajaya Kumar Panda



MARKETING

a) Introduction to the area:

Marketing is central to any business. The quintessential goal of any organization is customer acquisition and retention. Marketing provides insights for managing the marketing mix viz product, price, place and promotion; besides undertaking STP (segmentation, targeting and positioning) to achieve customer satisfaction. A well designed marketing leads to delighted and loyal customer. Marketing Faculty at NITIE having rich experience in teaching and research help students learn the latest concepts, practices and tools in marketing. Training and consultancy activities of marketing area help organizations achieve their goal of being 'customer oriented' and 'market focused'.

b) List of Area members and their specialization (as per alphabatecial order):

| Sr. No. | Faculty | Focus Area | Spectrum of Work |
|---------|---|---|---|
| 1. | Prof. Manoj Kumar Jha | Marketing Management | Business to business Marketing, Marketing of Hi-Tech Products, Marketing Strategy |
| 2. | Prof. Neeraj Pandey | Pricing, Digital Marketing, B2B Marketing | Pricing of Products & Services, Digital Marketing, Consumer Insights, Healthcare Marketing |
| 3. | Prof. Neha Srivastava | Marketing Management, Consumer Behaviour, Brand Management. | Consumer behaviour models, Brand trust, Consumer information processing, consumer-based equity. |
| 4. | Prof. Ranjan Chaudhuri | Marketing Management, Retail Management | Retail Management, Global Marketing, Sales and Distribution Management |
| 5. | Prof. Rekha D. Chikhalkar (On Sabbatical) | Marketing Management | Marketing Research, Marketing Management |
| 6. | Prof. Sanjeev Verma | Marketing Research, Marketing Analytics, Experiential Marketing | Customer Engagement, Customer Experience, Customer Centricity |

c) Growth of Area and activities undertaken during the year:

1. Academic

The Marketing Faculty at NITIE have expertise in Advertising, B2B Marketing, Brand Management, Consumer Behaviour, Digital Marketing, Healthcare Marketing, International Marketing, Marketing Analytics, Marketing Research, Pricing, Retail Management, Rural Marketing, Sales and Distribution Management, Services Marketing and Strategic Marketing.

Teaching – Courses currently offered in the area:

Marketing Management, Advertising, B2B Marketing, Consumer Behaviour, Digital Marketing, Global Marketing, Healthcare Marketing, Marketing Analytics, Marketing Research, Pricing, Retail Management, Rural Marketing, Sales and Distribution Management, Services Marketing

**2. Research**

| Profile | Details | Remarks |
|---------|---------|---------------------|
| Faculty | 06 | Area Core |
| Fellows | 05 / 08 | Completed / Current |

Research – Fellow (Awarded & Ongoing)

| Sr. No | Fellow | Faculty | Topic | Research Level - Firm / Industry / Sector | Research Area / keywords |
|--------|---------------------------------------|---|--|---|--------------------------|
| 1. | Trisha Parekh | Prof. M.K.Jha | Brand Associations in Driving Customer Engagement- A Case of IPL | Industry | Customer Engagement |
| 2. | Avinash Tripathi (Awarded) | Prof. Neeraj Pandey | Impact of Price framing on Willingness to Buy (WTB) of green products | Industry | Pricing |
| 3. | Mugdha Y. Keskar (Thesis Submitted) | Prof. Neeraj Pandey | Development of Customer Satisfaction Index for measuring customer satisfaction of internet banking customers in India | Industry | Customer Satisfaction |
| 4. | Preeti Nayal | Prof. Neeraj Pandey | Enhancing digital coupon redemption in the movie industry | Industry | Pricing |
| 5. | Manoj Kharat | Prof. R D Chikhalkar, Prof. Manoj K Jha | Brand Management | Industry | Brand Management |
| 6. | Vinita Singh (Awarded) | Prof. Ranjan Chaudhuri, Prof. Sanjeev Verma | Psychological Antecedents and Measurement of Online Apparel Buyer Intention-An Empirical Study of Tertiary Level Indian Students | Industry | Online Buyer Behaviour |
| 7. | Siddharth Tripathi (Thesis Submitted) | Prof. Sanjeev Verma | Determinants of Engagement on Social Media: A Study of NGO's in Indian Education Sector | Industry | Customer Engagement |



| Sr. No | Fellow | Faculty | Topic | Research Level - Firm / Industry / Sector | Research Area / keywords |
|--------|-------------------------|---|--|---|--------------------------|
| 8. | Harish Suri | Prof. Sanjeev Verma | Determinants of Experience Components that Co-create Value for Customer: A Study in Indian Healthcare Industry | Industry | Customer Experience |
| 9. | Ashesh Das | Prof. Sanjeev Verma, Prof. Mainak Mazumdar | Customer Centricity in Indian SME's | Industry | Customer Centricity |
| 10. | Brajesh Bolia (Awarded) | Prof. M.K. Jha Prof. Sumi Jha | A Study of cognitive dissonance | Industry | Cognitive Dissonance |
| 11. | Gitesh Chavan (Awarded) | Prof. Ranjan Chaudhuri | Performance Evaluation of Industrial Purchasing Function in EPCs | Industry | B2B Marketing |
| 12. | Ritu Sinha (Awarded) | Prof. Ranjan Chaudhuri | An Empirical Study on Impact of Green Practices of Retailers on Shoppers' Green Patronage Intention | Industry | Green Buying Behaviour |
| 13. | Kalyan Pappu Ram | Prof. Neeraj Pandey | Social Coupons | Industry | Pricing |

Prof. Sanjeev Verma

Publications

1. Singh, V., Chaudhuri, R., & **Verma, S.** (2019). Psychological antecedents of apparel-buying intention for young Indian online shoppers. *Journal of Modelling in Management*.
2. Bhattacharya, A., Srivastava, M., & **Verma, S.** (2019). Customer experience in online shopping: a structural modeling approach. *Journal of Global Marketing*, 32(1), 3-16.
3. Prasad, R. K., & **Verma, S.** (2019). Industry-Institute Perceptual Map (PM) and Management Students' Satisfaction Index (MSSI): A Road Map for Academic Excellence. *Prabandhan: Indian Journal of Management*, 12(11), 21-31.
4. Prasad, R. K., & **Verma, S.** (2020). An Investigation on Brand Boycott: Understanding Negative Psychology of Consumers in the Era of Digital Marketing. *Academy of Marketing Studies Journal*, 24(1).

**Prof. Neeraj Pandey**

1. Pandey, N., Tripathi, A., Jain, D., & Roy, S. (2020). Does price tolerance depend upon the type of product in e-retailing? Role of customer satisfaction, trust, loyalty, and perceived value. *Journal of Strategic Marketing*, 28(6), 522-541.
2. Tripathi, A., & Pandey, N. (2019). Voluntary pricing mechanisms for green product purchase: altruistic versus self-enhancing consideration. *The International Review of Retail, Distribution and Consumer Research*, 29(2), 198-217.
3. Pandey, N. (2019). Case Analysis II Carasid: Interventions that Make Businesses Sustainable. *Vision*, 23(2), 217-218.
4. Singh, G., & Pandey, N. (2019). Revisiting green packaging from a cost perspective. *Benchmarking: An International Journal*, 26 (3), 1080 -1104.
5. Tripathi, A., & Pandey, N. (2019). Promotional framing of green products: Mediating role of sale proneness. *Journal of Promotion Management*, 25(7), 983-1008.
6. Pandey, N., Patwardhan, A. A., & Rao, S. (2019). Four decades of new product development research: an integrative review. *International Journal of Product Development*, 23(1), 1-14.
7. Pandey, N., & Gudipudi, B. (2019). Understanding 'what is privacy' for millennials on Facebook in India. *Journal of Data Protection & Privacy*, 2(3), 224-233.
8. Pandey, N., & Raina, A. (2019). Five decades of research in healthcare pricing: future directions for academia and policymakers. *International Journal of Management Practice*, 12(3), 301-320.



ORGANIZATIONAL BEHAVIOUR AND HUMAN RESOURCE MANAGEMENT

I. Area Objective

Our objective is to develop engineering, managerial and leadership capabilities of students and executives through specific focus on behavioral and HR functional aspects of organization.

II. List of Area members and their specialization

| Sr. No | Faculty | Focus Area | Spectrum of Work |
|--------|-------------------------------|---|--|
| 1. | Prof. D. K. Srivastava (DKS) | HR& OB, Principles of Management | Organizational Structure & Performance, Training & Development. |
| 2. | Prof. S. K. Nair (SKN) | OB & HR, Psychology | Job Redesign & Work Motivation, Psychological Assessment, Personnel Selection, Leadership, Positive Psychology. |
| 3. | Prof. T. Prasad (TP) | Principles of organization and Management, Entrepreneurship | Entrepreneurship, Developing entrepreneurial personality |
| 4. | Prof. Nikhil K. Mehta (NKM) | Communication, Ethics | Pedagogical Developments, Human Communication, Transactional Analysis, Bhagavad Gita, Indian Culture, Queer Studies. |
| 5. | Prof. Sumi Jha (SJA) | OB and HR, Analytics | Leadership, HR analytics, Competency management, Organizational health and employee empowerment. |
| 6. | Prof. Upasna A Agrawal (UAA) | OB and HR, Communication, Career development | Leadership, Gender, Entrepreneurship, Diversity and Inclusion, Discretionary behaviors |
| 7. | Prof. Sumant K. Bishwas (SKB) | Organizational behaviour and Strategic leadership | Human Resource Management, Strategic leadership, HR Analytics |

III. Growth of Area and activities undertaken during the year Academic Workload of Faculty Members

| SN | Faculty | Allocations | | |
|----|----------------------|-------------|----------|-------|
| | | Core | Elective | Total |
| 1 | Prof. D K Srivastava | 14 | 6 | 20 |
| 2 | Prof. S.K. Nair | 12.5 | 3 | 15.5 |
| 3 | Prof. T. Prasad | 7.5 | 9 | 16.5 |
| 4 | Prof. N.K. Mehta | 18 | 7 | 25 |
| 5 | Prof. S. Jha | 14.5 | 6 | 20.5 |
| 6 | Prof. U A Agarwal | 14.5 | 6 | 20.5 |
| 7 | Prof. S.K Biswas | 9 | 3 | 12 |

**IV. Courses Offered by the Area Faculty in the Postgraduate Programme****1. Institute Core Subjects:**

- Business Communication
- Legal and Ethical Aspects of Business (50 % shared along with Economics and Strategic Area)
- Organizational Behaviour

2. Programme Core Subjects

- Human Resource Management

3. Non-Area Programme Core Subjects

- Business Research Method
- Strategic Management

4. Electives

- Entrepreneurship development
- HR analytics
- Leadership Development
- Qualitative Research
- Competency Assessment
- Organizational Development
- Managing Negotiations
- Principles of Management
- Positive Psychology
- Soft Skills Development
- Strategic HRM
- Diversity and Inclusion

V. Courses Offered by the Area in the Fellow Programme

- Research Methodology II
- Organizational Structure Theories and Design (stream specific core)
- Strategic HRM (stream specific core)
- Personality Theories (stream specific elective)

VI. Research 2019-2020**Present Fellow Students**

| DKS | SKN | TP | NKM | SJA | UAA | SKB |
|-----|-----|-----|-----|-----|-----|-----|
| 1 | 1 | 1.5 | 2.5 | 2 | 1 | 0.5 |

**VII. Fellow Students award/Summer Internships/Three- or Six-Month Projects**

| SN | Academic activity | No. of Students | | | | | | | |
|--------|--|-----------------|-----|----|-----|-----|-----|-----|-------|
| | | DKS | SKN | TP | NKM | SJA | UAA | SKB | Total |
| 1 | Fellowship awarded | 1 | 1 | - | - | 3 | 1 | NIL | 06 |
| 2 | Summer Internship | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 56 |
| 3. | Three months PGDIM / PGDISM projects Field Project | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 35 |
| 4 | Six-month PGDIE PGDMM / PGDM projects | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 17 |
| Totals | | 17 | 17 | 16 | 15 | 18 | 16 | 15 | 114 |

VIII. Publications of Faculty Members

| Faculty | Conferences | Journals | Case/ Case Studies | Newsletters / others | Book | Book Chapters | Total |
|------------|-------------|----------|--------------------|----------------------|------|---------------|-------|
| DKS | 02 | 01 | 00 | 00 | 00 | 00 | 03 |
| SKN | 00 | 03 | 00 | 00 | 00 | 00 | 03 |
| TP | 00 | 01 | 00 | 00 | 00 | 00 | 01 |
| NKM | 02 | 02 | 01 | 00 | 00 | 00 | 05 |
| SJA | 00 | 06 | 01 | 00 | 00 | 00 | 07 |
| UAA | 02 | 12 | 00 | 00 | 00 | 00 | 14 |
| SKB | 01 | 00 | 00 | 00 | 00 | 01 | 02 |
| Total | 10 | 25 | 02 | 00 | 00 | 01 | 38 |

IX. Publications

- Jain, S. & **Nair, S. K.** (2019). "Exploring Job and Family Satisfaction: Scale Validation and Role of Demographic Variables". Asia Pacific Journal of Management Research & Innovation (Sage).
- Jain, S. & **Nair, S. K.** (2020). Exploring the Moderating Role of Core Self-Evaluation in the Relationship between Demands and Work-Family Enrichment, Journal of Indian Business Research (Emerald).
- Nair, B. P., **Prasad, T., & Nair, S. K.** (2020). "Study Examining Impact of Authentic Leadership on Team Members' Work Engagement", IOSR Journal of Business & Management, 22(7)
- Agarwal, U. A., & Rai, A. (2019). Exploring bullying among Indian managers: a grounded theory approach. *Journal of Asia Business Studies*.
- Rai, A., & **Agarwal, U. A.** (2019). Examining the Relationship Between Personality Traits and Exposure to Workplace Bullying. *Global Business Review*, 20(4), 1069-1087.
- Rai, A., & **Agarwal, U. A.** (2020). Examining the impact of justice perceptions on workplace bullying: a moderated mediational model of PCV and PDO. *Personnel Review*.



- **Agarwal, U. A.** (2019). Examining links between abusive supervision, PsyCap, LMX and outcomes. *Management Decision*.
- **Agarwal, U. A.**, Dixit, V., & Jain, K. (2019). Exploring the Role of Organisational Practices in Influencing Horizontal Leadership in Projects: A Study of Indian Organizations. *Project management in the emerging world of disruption*, 216.
- Bansal, N., & **Agarwal, U. A.** (2019). Direct and indirect effects of work-family enrichment: role of gender role ideology. *International Journal of Productivity and Performance Management*.
- Pandey, N., **Jha, S.**, & Singh, G. (2020). Promotion of green products on Facebook: insights from millennials. *International Journal of Management Practice*, 13(3), 275-294.
- Bhattacharya, S. S., **Jha, S.**, & Sharma, D. (2020). Development of a scale on individual perspectives on corporate social responsibility constructs: based on microfoundation theory. *Vision*, 24(1), 47-59.
- **Jha, S.**, & Sangle, P. S. (2019). PrideVel: Preparing and expanding talent pool for emerging technologies. *South Asian Journal of Business and Management Cases*, 8(1), 80-87.
- **Mehta, N.K.** (2020). Synergistic use of Bourdieu's Theory of Practice, Queer Theories and Employment relation theories for sustainable transgender inclusion at workplace. *Business and Research Perspective* 1(20),
- **Jha, S.**, & Bhattacharya, S. S. (2020). Moderated mediation analysis of leader technology orientation: A study of operations and manufacturing leaders of India. *Journal of Operations and Strategic Planning*, 3(1), 58-80.
- Mhatre, S. and **Mehta, Nikhil K.** (2019). Spiritual Mentoring, Faith Friendly Organisations for inclusion of Workplace Spirituality. INDAM conference: Sixth Biennial Conference of the Indian Academy of Management held at IIM Tiruchirappalli, January 2-4, 2020
- Bolia, B., **Jha, S.**, & Jha, M. K. (2020). Understanding Cognitive Dissonance of Indian Customers for Financial Products: A Multi-Dimensional Scale Development Approach. *Indian Journal of Finance and Banking*, 4(1), 20-32.
- **Mehta, N. K.**, & **Jha, S.** (2020). Facilitation of team communication skill among engineers: an empirical study. *Higher Education, Skills and Work-Based Learning*.
- **Jha, S.**, & Jain, K. (2020). Organization Development Intervention: A Case of an Educational Institution. *Global Business Review*, 21(3), 725-742.
- **Jha, S.**, & Khanna, P. (2020). Study of enhancing employee engagement at workplace by adopting internet of things. *International Journal of Business and Systems Research*, 14(3), 341-361.
- Mhatre, S. and **Mehta, Nikhil K.** (2019). Spiritual Mentoring, Faith Friendly Organizations for Employee Engagement. IBS conference: The 2nd International HR Conference-Employee Engagement-DNA for Organisational Transformance held on 18th April 2019 by IBS, Mumbai
- **Jha, S.** (2019). Returning women: Enabling and Disabling factors for reentry, INDAM conference: Sixth Biennial Conference of the Indian Academy of Management held at IIM Tiruchirappalli, January 2-4, 2020

**X. Area Involvement in Institute Administration**

| SN | Name of the Faculty Member | Institute Administration |
|----|----------------------------|---|
| 1 | Prof. D. K. Srivastava | Director-Incharge, NITIE; Chairperson, NAA; Chairperson: Health Care Management Committee, PRMS, Advertisement Committee |
| 2 | Prof. S. K. Nair | Area Coordinator-OB and HRM, Professor-In-Charge Psychology Lab |
| 3 | Prof. T. Prasad | Faculty Coordinator: Swachh Bharat Abhiyaan, Subscriber-NIFIE |
| 4 | Prof. N. K. Mehta | Prof. In-charge Communication Centre, Member-Hindi Rajbhasha Karyanvayan Samitee, VLFM Committee member –Admission, Chairperson Staff club, Coordinator- Ek Bharat Shrestha Bharat. |
| 5 | Prof. S. Jha | Programme Coordinator -PGDIM, Coordinator, Secretary NITIE Alumni Association |
| 6 | Prof. U. A. Agarwal | VLFM Committee Member, Member Communication Centre, PIC-CDEL |

XI. Outreach**Management Development Programme**

| SN | Course Title | Duration | Starting Date | Course Leader(s) | Total No. of Participants |
|----|---|----------|---------------|------------------------|---------------------------|
| 1 | Managerial Skills for Technical Personnel | 3-Day | 14.10.2019 | Prof. D. K. Srivastava | 07 |
| 2 | Managerial Skills for Technical Personnel | 3-Day | 17.02.2020 | Prof. T. Prasad | 09 |

Unit Based Programme

| SN | Course Title | Name of the Organisation | Duration | Starting Date | Course Leader(s) | Total No. of Participants |
|----|---|---|----------|---------------|--|---------------------------|
| 1. | Managerial Skills for Technical Personnel | M/s. Indian Rare Earths Limited, Mumbai | 5-day | 03-02-2020 | Prof. T.Prasad, Prof. Nikhil K. Mehta Prof. B. E. Narkhede Prof. Poonam Singh | 25 |

**Consultancy**

| SN | Faculty | Topic | Organisation | Consulting/PCS |
|----|---|----------------|--|----------------|
| 1. | Prof. D.K. Srivastava / Prof. R. Raut/ Prof. P. Acharya | Manpower Study | M/s. Coromandel International Limited, Ankaleshwar Plant, Bharuch, Gujarat | Consulting |
| 2. | Prof. D.K. Srivastava / Prof. R. Raut/Prof. P. Acharya | Manpower Study | M/s. Coromandel International Limited, Ankaleshwar Plant, Bharuch, Gujarat | Consulting |
| 3. | Prof. V. Khanapuri, Prof. B. Narkhede, Prof. Ruchita Gupta, Prof. Rakesh Verma, and Prof. S. Jha | Manpower Study | M/s Prism Cement Ltd. | Consulting |

Faculty Achievements

- Prof. D.K. Srivastava served as Director In-charge, NITIE From August 30, 2019-Nov 04, 2019.
- Prof. D.K. Srivastava was invited as Keynote speaker in International Supply Chain and Logistics Conference Mumbai Sept 19-20
- Prof. D. K. Srivastava delivered expert lecture in industry-institute conclave organized by NIT, Raipur 09-09 Nov 2019.
- Prof. N.K. Mehta received Best Professor-Motivation certificate during Teachers Day celebration-2019 from NITIE students.
- Prof. Sumi Jha received AIMS International women Management teacher award 2019.

ACADEMIC ACTIVITIES

c. Academic Infrastructure

- Laboratories
 - (a) Ergonomics Laboratory
 - (b) Digital Manufacturing Laboratory
 - (c) Industrial Environment Laboratory
 - (d) Psychology Laboratory
 - (e) NITIE Foundation for Innovation and Entrepreneurship (NIFIE)
- Library
- Digital Informatics Centre (DISC)



ERGONOMICS LABORATORY

Name of Prof. In charge: Prof. Rauf Iqbal

Ergonomics lab has: 01 faculty member, 03 Fellow students, 02 Research Assistant,

Lab Outcomes: Research findings, Doctoral thesis, Published papers, Training courses, Industrial consultancy.

Centre R&D Activities:

Teaching:

Subjects taught to PGP students:

1. Industrial Ergonomics
2. Ergonomics of Manufacturing
3. Work systems design
4. Facilities Planning
5. Industrial Engineering and productivity management

Research:

Publication: 04 (International) in the-

1. Springer -01
2. Work-01
3. Journal of Medical and Biological Engineering - 02

Project:

Title: "Redesigning the palanquin system for Mata Vaishno Devi Shrine".

Status of the project: Final deliverables – new Palanquin and porters Jacket has been inaugurated by the Hon'ble Governor of J&K, Shri Satyapal Malik on 19th April 2019 at Jammu. Inauguration function of deliverables of Palanquin project was organized by the Shri Mata Vaishno Devi Shrine Board at Matrika Auditorium, Shri Mata Vaishno Devi Campus, Karkryal, Karta on 19th April 2019. The Chief guest of the function was Hon'ble Governor of the Jammu and Kashmir and Hon'ble Chairman of the Shri Mata Vaishno Devi Shrine Board Shri Satya Pal Malik. Various high-profile dignitaries like, Dr. Devi Shetty Shri Simrandeep Singh IAS, CEO Shrine Board, Shri Vivek Verma, IAS, Addl CEO Shrine Board along with other dignitaries were present in the function.

Prof. Ashok K Pundir and Prof. Rauf Iqbal attended the inaugural function from NITIE Mumbai being nominated by the Director.



DIGITAL MANUFACTURING LABORATORY

The Digital Manufacturing Laboratory (DML), formerly known as the AMCE (Advanced Manufacturing Centre of Excellence), was established at NITIE through a DST project under FIST (Funds for Improvement of Science and Technology) during 2006-07. As of today, the DML includes facilities as below:

Software

One user license of AnyLogic Simulation software.

Witness 2006 Simulation software.

CNC-Train, FMS-CIM, and M-Robot software

Hardware

Reverse Engineering - EIN Scan Pro handheld 3D Scanner.

Ultimaker 3 extended Rapid Prototyping System (3D Printer).

FMS/CIM setup including XL Mill, XL Turn, Aristo Robots, Automated Storage/Retrieval (AS/RS) systems, Automated Guided Vehicle (AGV), Automatic Assembly Station.

DML lab has a team of four professors, namely Prof. Milind Akarte, Prof. Vivek Khanzode, Prof. Balkrishna Narkhede, and Prof. Kanchan Joshi. Some of the important activities carried out by the DML during April 2019 – March 2020 are as below:

Installation of Post-Air filter for the air compressor line connection to the FMS has been completed.

The process of hiring a research assistant for the DML has been completed, and one research assistant has joined the Lab on March 02, 2020 to support various administrative and technical activities.

As per the Annual Maintenance Contract (AMC) process, the FMS setup has been made operational to demonstrate the same to the PGP students.

The Flexible Manufacturing System (FMS) setup, 3D Printing, and reverse engineering technology have been demonstrated to PGDMM students with FMS as an elective subject, Fellow and VLFM students of the Institute.

Under DML, it was proposed to conduct a Half-Day workshop on Additive Manufacturing with a theme “Opportunities and Challenges for Adopting Additive Manufacturing in Indian Industry” on March 14, 2020. The workshop was planned to create awareness among the students and faculty with the inputs from eminent industry and academic experts. However, in the last phase, the workshop was postponed due to COVID19 outbreak. For the above workshop, Memento for experts is created inhouse by using 3D printing.

The following activities were proposed for the next year

- Increase technology awareness among NITIE students and encourage them to use the facilities for case studies/projects works.
- Offer Summer/winter internship to external UG /PG students.
- Enhance the existing facilities or create the new project proposals for the latest technologies like IoT, Smart Manufacturing, digital manufacturing, etc. so that NITIE students can be provided with the insights on these emerging technologies.
- Propose new courses/electives like “Additive Manufacturing: Operations perspective” and “Smart Manufacturing” in association with DML for PG students of the Institute.

INDUSTRIAL ENVIRONMENT LABORATORY

The Industrial Environmental laboratory was established in 1990 with the objective and focus of research in the area of industrial pollution control. With growing impacts of industrial process on the environment, impact assessment of these operations on air, water and soil environment become inevitable. To meet the above requirements, the researchers in the industrial environment laboratory conducts monitoring of water, air quality and noise quality. It is also equipped to analyze environmental samples and for demonstration of environmental instrumentation to students and researchers. Prof. Vidyadhar V. Gedam coordinates the laboratory with one technical staff actively seeking and submitting research proposals for external research grants.

R&D Activities: Experimentation and analysis under research project (i.e. SARASWATI and other projects)

Physical facility available in the laboratory:

- Incubator
- Oven
- Water bath
- Muffle furnace
- Weighing balance
- Autoclave
- COD digester
- Noise dose meter
- Audio and sound level meter

Laboratory outcomes

- The instruments and physical facility was used during the year 2019-2020 to teach the students of the Post Graduate Diploma Programme in Industrial Safety and Environmental Management (ISEM) for

subjects like Solid Waste, Water and Wastewater, Hazardous Waste, Air and Noise Management, Noise and e-Waste Management.

- The research activities of the centre of Environmental Sciences and the supporting consolidation, replication and upscaling of sustainable wastewater treatment & reuse technology for India (SARASWATI) research project are being carried out with the help of this laboratory.
- The fellow and research scholars in Environmental Engineering and Management (EEM) area are also using the lab facility for their research. Noise & Hearing Measurement equipment in the Industrial Environment laboratory is used by the students of Post Graduate Diploma in Industrial Safety & Environmental Management (ISEM) to have “Hands on” experience for various courses in the Environment Health and Safety (EHS) area. The same is also used for demonstration to the MDP and UBP participants in the EHS area.



Industrial Environment Lab



PSYCHOLOGY LABORATORY

The Psychology Laboratory was established in 1998 under the MHRD's Modernization and Removal of Obsolescence Scheme, 1997. The objective of the laboratory was to create a repository (archive) of psychometric tests that can be used for psychological assessments of the students. The creation of repository was envisaged to help students in achieving the holistic development their managerial competencies including their overall personality, interpersonal skills, leadership skills, group behaviour, and stress management.

The Psychology Lab is managed professionally by a regular faculty at the Professor level (having Ph.D. degree in Psychology and practical experience in psychological testing including personality testing and aptitude testing). The incumbent Professor-in-Charge of the Psychology Lab is Dr. Shreekumar K. Nair, Professor in the OB & HRM area and has Masters' and Ph.D. degree in Psychology. He has acquired extensive experience in aptitude and personality testing while working in the Institute of Banking Personnel Selection (IBPS), Mumbai for more than five years. He has also been involved in preparing written tests for the selection of fellow students and for the recruitment of various levels of officers and staff in NITIE.

Centre / Lab R&D Activities: Project activities – Institute Sponsored & Industry Sponsored

(1) Physical Facilities available in the centre:

- (a) Psychometric/psychological tests for assessment of intelligence, personality, and other psychological dimensions – 71 nos.

- (b) Apparatus/Materials for conducting experimental research in human cognition, learning and perception as well as for demonstrating certain psychological phenomena – 42 nos.

(2) Centre Outcomes:

- (a) Helping the Faculty as well as Fellow students working in the area of OB and HRM to use the psychometric tests and questionnaires for their research.
- (b) Using the tests for PGP, MDP & UBP class-room teaching by the OB and HR faculty.
- (c) Using the psychometric tests in the classroom as a part of the self-awareness and skill-building exercise. These tests are used to help the students in having a systematic understanding of their soft skills, attitudes and overall personality. The PGP courses for which the psychometric tests in the Psychology Lab have used include core courses such as Organizational Behaviour, Human Resource Management, and Business Communication as well as elective courses such as Positive Psychology in Organization, Cognitive Psychology, Theories & Assessment of Personality, Soft Skills Development, and Leadership Development.

**NITIE FOUNDATION FOR INNOVATION AND
ENTREPRENEURSHIP (NIFIE)**

The following developments took place during 2019-2020:

- Company NIFIE got incorporated with ROC, Ministry of Corporate Affairs, Govt. of India.
- The NIFIE Board has been formed with the following list of subscriber and Subscriber cum Directors.

| S.No. | Name of the Subscriber | Designation |
|-------|--------------------------------------|-----------------------------|
| 1. | Dr. Manoj Kumar Tiwari | Subscriber & First Director |
| 2. | Dr. Koteswara Rao Naik Bhukya | Subscriber & First Director |
| 3. | Dr. Ajaya Kumar Panda | Subscriber & First Director |
| 4. | Dr. Prasad Teegalapalli | Subscriber |
| 5. | Dr. Hema Achal Date | Subscriber |
| 6. | Dr. Vivekanand Basaveshwar Khanapuri | Subscriber |
| 7. | Dr. Utpal Chattopadhyay | Subscriber |



LIBRARY

About:

Since 1965, the National Institute of Industrial Engineering (NITIE) Library is a learning and knowledge resource centre for the academic community. Keeping in view the increasing collection and to improve the service of the library, the library moved to the new premises at “Academic cum Library Building” in 2016. The new library comprised of three floors and has more space and facilities. The entire area of the new library is centrally air-conditioned with proper lights, adequate seating capacity, secured Wi-Fi connection and other fundamental amenities. Provision of these services has made the library a happening comfortable place for the users.

The NITIE Library is enriched with the intellectually stimulating collections of Technical Books, Reference books, Journals (including print & online), Electronic databases, Educational Software, etc. in the fields of Industrial Engineering and its allied subjects. Since the Institute is with a residential campus, the library plays a vital role in providing information to staff, officers, and to the students.

2. Collection:

The objective of NITIE library is to facilitate acquisition, organisation, and dissemination of knowledge resources and providing value-added services. The total collection of the library (as on March 31, 2020) is presented as follows in Table. The Library collection is as under:

| Collection | Nos. |
|---------------------|-------|
| Technical Books | 57297 |
| Light Reading Books | 8023 |
| Hindi Books | 2920 |
| Marathi Books | 855 |

| Collection | Nos. |
|---|---|
| Complimentary + Free Books | 1440 |
| Technical Journals | 103 (58 Online; 12 print + Online; 33 Print) |
| Semi-Technical, Light Reading Journals & Magazines | 45 |
| Bound Volumes | 11955 |
| Newspaper <ul style="list-style-type: none"> • English • Hindi | 21 |
| Regional Language Newspapers <ul style="list-style-type: none"> • Marathi, • Gujarati, • Tamil, • Telugu, • Malayalam, and • Bengali. | 7 |
| Total | 82490 |

3. Other Subscriptions:

Apart from the aforementioned subscriptions, NITIE library also subscribes to some important **databases** and **educational software**:

1. CMIE
 - 1.1 ProwessIQ
 - 1.2 Industry Outlook
 - 1.3 Economic Outlook
 - 1.4 States of India
2. CEIC Database



3. EBSCO: Business Source Complete
4. EBSCO Discovery Services
5. Emerald Management Extra 310
6. Emerald Cases
7. EMIS database
8. EPWRF ime Series
9. Euromonitor Database
10. E-view Software
11. Grammarly Software: Writing Tool
12. HBS Cases
13. IEEE – ASPP/POP
14. IMD World Database
15. Indiatat Database
16. INFORMS Collections
17. Proquest – ABI/INFO
18. RemoteXs Facility– for accessing the subscribed databases outside the campus through secured login credentials
19. Science Direct
 - 19.1 Business Management & Accounting
 - 19.2 Decision Science
 - 19.3 Environment Science
20. SCOPUS Database
21. Subscription to other individual journals/ magazines of the reputed publishers
22. Taylor & Francis – 3 Subject Collections
 - 22.1 Science & Technology
 - 22.2 Business Management & Economics
 - 22.3 Planning & Urban Environment
23. Turn-it-in: Anti Plagiarism Software

NITIE Library is also one of the members of “eShodhSindhu Consortium for Higher Education

Electronic Resources,” an initiative of the Ministry of Human Resource Development (MHRD) under Centrally Funded Technical Institutes (CFTI) category. Through **e-ShodhSindhu** NITIE Library get the following **e-resources**:

1. ASCE Journals Online
2. ASME Journals Online
3. Economic & Political Weekly
4. Institute for Studies in Industrial Development (ISID) Database
5. JGate plus (JCCC) – electronic gateway to global e-journal literature
6. JSTOR
7. Oxford University Press
8. Springer Links 1700 Collection + Nature Journal
9. Web of Science Lease Access
10. URKUND Plagiarism Detection Software
11. World e-book library
12. South Asia Archive (SAA)

Library provides access to the all online resources including Library catalogue, i.e. “OPAC” (Online Public Access Catalogue) 24 X 7 within the campus.

4. **Library Management Software and Security System:**

The library has upgraded its library management software into “LIBSYS.10 – Web-centric Version”. For library security, the entire collection is Barcode enabled with the 3M security system.

5. **Library Services:**

Following are the Library services:

1. Book Lending
2. Reference Service
3. Reprography Service



4. Inter-library loan Service
 5. Overdue alert Service
 6. CD-Mirroring
 7. Case Studies
 8. Textbook procurement & distribution to PGP students
 9. The library creates the Institute ID card using LIBSYS Software and distribute to PGP students.
 10. Remote Access Facility
 11. User Awareness Programs - The Library takes active participation in the institute's Orientation program for the benefit of new students at the beginning of the academic year. Also, regularly organising Webinar, Training session of various Library databases and services.
 12. Institute I-Cards to Students – The Library prepares Institute I-cards for all the students
6. **Library Interns:**
- Three library interns were appointed for smooth functioning of the library. As on date, out of three, two has left. Process of hiring new library interns is in progress.
7. **New Book Racks:**
- This year, new book racks has been purchased and installed successfully in the designated place.
8. **Reprographic Facilities:**
- Library has procured a new photocopy machine to enhance reprographic facilities.
9. **New PC's for setting up Digital Library:**
- The library received 20 new PC's for setting up Digital Library. In this connection, one room has been identified and 14 PCs installed for the use of the library users and others are installed on a different location of the library.
10. **Library Committee Meetings:**
- During the year 04 + 2 (special) Library Committee Meetings were organised to take many decisions related to the development of library, procurement of books, subscription renewal of existing E-resources, etc.
11. **Library Team:**
- The Library is managed by a team of 4 professional, 4 Semi-Professional, 2 Administrative staff and 1 Library Intern (on contract). They collectively handle important library activities like Collection Development, Collection Maintenance, Circulation, Reference, and other Information Service.
12. **Library Timing:**
- The library timings at NITIE are as follows:
- Monday to Friday - 9.00 am to 10.00 pm
 - Saturday & Sunday - 11.00 am to 7.00 pm
 - Library Holiday - Only on Institute's Holidays.



DIGITAL INFORMATICS CENTRE (DISC)

The Institute is equipped with the state of art computer hardware and software facilities to meet its varied requirement of teaching training research, consultancy, and developments. More than 400 personal computers with a wide range of processor, hard disks, monitors, keyboards, mouse, and printers were maintained. The networking system supports internet web surfing and E-mail services. Post Graduate students of Industrial Engineering, Industrial Management, Industrial Safety and Environmental Management, Project Management, Manufacturing Management, PGPEX-VLFM and Fellow Programs are being highly benefited in their assignments and projects handling. The latest versions of software like SPSS 26.0, AMOS 26.0, Matlab, Bloomberg, Anylogic, CPLEX – Academic version, Relecura, Typeset have been made available for various users at the Institute along with the Microsoft University Alliance Programme and SAP University Alliance Programme. The utility software like Seqrite Antivirus, Adobe creative suite, Adobe DC Pro available for users for the academic and official use. All the software are running on windows and Redhat Linux 5 operating system.

The Institute has signed an agreement with Microsoft for their Microsoft Campus 3 subscription enrolment. All users at Institute shall use licensed Microsoft products.

Faculty Members and Officers at various departments have been provided with 4GB/8GB Pen Drives and USB based external portable HDD of 500GB/1TB. All Faculty Members have been provided with Laptops also. Various printers like LaserJet Printers and multifunction Printers have been procured and installed at Faculty Member rooms and departments for their printing needs.

Wi-Fi connection has been provided in all the Hostels, Academic cum Library Building (ALB) to enable students to have the facility of the internet in their rooms and around the Hostel.

The Institute has procured around 65 laptops with sufficient amount of RAM and Hard disk to support the various applications and assist Faculty Members in classrooms/conducting UBP Programmes etc. The online classes, webinars and event are conducted on cloud based video conferencing solution like Webex, Zoom and Microsoft Teams platform. Institute has purchased 1250 licenses of CISCO Webex and subscription-based license of Zoom.

The Institute has procured CISCO/HP Switches with a view to improve the existing networking infrastructure and provide optimal usage of the internet services to various users. Currently the Institute is utilising the services of 1 Gbps from National Knowledge Network (NKN) and 155 MBPS from M/s Powergrid Corporation of India for providing bandwidth to the Institute. The Institute is also equipped with a Firewall of M/s Checkpoint.

The DISC has assisted all the users, PGP students, Fellowship Scholars, Faculty Members and the supporting service departments in their development works. The DISC facilitates uploading of various information on the NITIE website and admission to the various Programmes through in house developed Admission Portal. The Programme Section, Academic Section, Accounts Section, Administration Section, Placement Section and Library have been largely benefited from the DISC's support. Maintenance of all Computer Equipment, Operating Systems and Application Software, are primarily supported by DISC.

RESEARCH CENTRES

1. Centre for Environmental Studies Prof. Seema Unnikrishnan
2. Centre for Innovation, Incubation
and Entrepreneurship Prof. Koteswara Rao Naik





CENTRE FOR ENVIRONMENTAL STUDIES

This centre was set up in 2009 with the aim to enhance research avenues in Environmental Studies. The centre coordinator was Prof. Shankar Murthy till May 2019. Prof. Seema Unnikrishnan took over in June 2019 as the coordinator of CES.

Staff in Centre : Nil

Research Work:

Work carried out under the centre of Environmental Studies during this period are reported as follows:

- Life cycle assessment study of three refineries and Storage Units using the GaBi and Sima Pro Softwares
- A lifecycle assessment study of LEDB22 CFL and incandescent Bulbs
- LCA of waste water plants
- LCA of power plants using Gabi and Sima Pro
- Research Using the CDP Database
- CDP data assessment

Following studies in the sector were carried out:

| SN | Study | Sector |
|----|---|-------------|
| 1 | Study of the cashew business in India and developing a business model | Agriculture |
| 2 | Circular economy in agriculture: adaptability and governing factors in Indian context | Agriculture |
| 3 | Technologies and Supply chain. | Winery |

Site Visit:

In the pursuance of centre work and project “Study the production Process and the agricultural supply chain” a site visit to the Sula Winery was carried out. As a part of centre work and their final project

work, Mr. Mahesh Chunade and Mr. Sagar Tathoude visited Sula Winery. **The aim was to perform a critical study of non-thermal food processing methods and tackling perishability.**

Externally Funded Projects :

1. The Project from Sweden on “Research and development on environmental product regulations and policies” has been initiated. The main objectives of this Project was to study sector-specific product-related environmental regulations in India and perform a comparative analysis with other countries within the sector. It will cover a sectoral analysis using various research tools and preparedness analysis of the companies in the sector. The total amount for three years is 23 lakhs (PI : Prof. Anju Singh).
2. The project SARASWATI 2.0 has been initiated and to identify the best available as well as affordable decentralised wastewater treatment technologies with the goal of resource/energy recovery and reuse. The project partners are as follows:

a. Indian partners

- i. Indian Institute of Technology Kharagpur **(Lead Coordinator)**
- ii. Indian Institute of Technology Roorkee;
- iii. Indian Institute of Technology Madras;
- iv. Indian Institute of Technology Bhubaneswar;
- v. National Institute of Industrial Engineering (NITIE) Mumbai;
- vi. Malaviya national Institute of technology, Jaipur (MNIT) Jaipur;
- vii. TERI School of Advanced Studies (TERI SAS), New Delhi).

**b. European Project Partners:**

- i. BOKU University (**Lead Coordinator**),
- ii. TU Delft, CENTA Sevilla,
- iii. UT,
- iv. UA,
- v. SPI,
- vi. CEMDS,
- vii. SFCU,
- viii. BGU.

The principal investigator from NITIE was Prof. Anju Singh.

3. Bombay Chamber of Commerce and Industry (BCCI) sponsored a project on Carbon disclosure Project database was completed and a tool was developed to benchmark industry in their respective sectors using scope 1,2, 3 and total emissions (PI : Prof. Anju Singh, Prof. Sushmita Aghalaya).
4. Bombay Chamber of Commerce and Industry (BCCI) sponsored a project on Water disclosure Project database was completed and assessed for trends. Also case studies were collected on water initiatives by companies across India. In the agriculture sector crops and their water requirements were benchmarked globally (Principal Investigators : Prof. Anju Singh and Prof. Seema Unnikrishnan).

Centre Outcomes and Intellectual Property created:

Journal papers

- Anju Singh, Rohit Panchal, Mayuri Naik, Circular economy potential of e-waste collectors, dismantlers, and recyclers of Maharashtra: a case study, *Environmental Science and Pollution Research* (2020) 27:22081–22099.
- Anju Singh, Seema Unnikrishnan, Mayuri Naik, Sayee Sayanekar “CDM implementation towards reduction of fugitive greenhouse gas

emissions. *Environment, Development and Sustainability*, April 2019, Volume 21, Issue 2, pp 569–586 | 2019

- Sheetal Kamble, Anju Singh, Absar Kazmi, Markus Starkl, Environmental and economic performance evaluation of municipal wastewater treatment plants in India: a life cycle approach *Water. Sci Technol* (2019) 79 (6): 1102-1112. <https://doi.org/10.2166/wst.2019.110>
- Kamble, S. J., Singh, A., Recent Advances in Life Cycle Assessment and Municipal Wastewater Treatment: A Review and Agenda for Future Research, *Journal of Environmental Sciences*. (In press).
- Potdar, A., Unnikrishnan, S., and Singh, A. (2019) “A framework for climate change management in organisations: a case for India”, *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 15, No. 3, pp. 303-334.”
- Shrivastava S, Unnikrishnan S., (2019) Review of Life Cycle Assessment and Environmental Impacts from The Oil & Gas Sector. *Oil Gas Res* 5: 164. doi:10.4172/2472-0518.1000164
- Shrivastava S, Unnikrishnan S. , (2020) Life cycle assessment of oil storage unit in India. *Int. J. Oil, Gas and Coal Technology*, Vol. X, No. Y, xxxx

Conferences :

1. Shrivastava S, Unnikrishnan S., (2020). Life Cycle sustainability Assessment of crude oil refineries in India. International Conference on “Energy and Environmental Technologies for Sustainable Development. (14-16 Feb 2020, MNIT, Prayagraj).
2. Shrivastava S, Unnikrishnan S., (2019). Review of Life Cycle Assessment and Environmental impacts from the Oil & Gas Sector. IAMOT Conference. (7-11 April, 2019, NITIE Mumbai)



CENTRE FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP (CIIE)

1. This centre was created by merging Center for Mind to Market, NIDHI-TBI Incubation Center and Center for Entrepreneurship Development on December 27, 2019. The proposed budget for the centre is Rs. 20 lakhs
2. During 2019-2020, this centre supported one student to register starts-up.
3. CIIE has become the Member of Ministry of Education's Innovation Cell, part of which we have created Institute Innovation Council (IIC).
4. During the year 30 interested students got registered to work on Start-ups.
5. To support the students CIIE has initiated:
 - a. Mentorship programme.
 - b. Incubation services by provision of basic infrastructure and other facilities.

OUTREACH: INSTITUTE - INDUSTRY COLLABORATION

- i. Management Development Programme (MDP)
- ii. Unit Based Programme (UBP)
- iii. Consultancy Assignments
- iv. Memorandum of Understanding (MoUs)



**MANAGEMENT DEVELOPMENT PROGRAMME (MDP)****MANAGEMENT DEVELOPMENT PROGRAMMES CONDUCTED DURING
01/04/2019 TO 31/03/2020**

| Sr. No. | Course Title | Duration | Starting Date | Course Leader(s) | Total No. of Participants |
|----------------|--|-----------------|----------------------|--|----------------------------------|
| 01. | Project Planning & Control | 3 Days | 26.10.2019 | Prof. V. B. Khanapuri Prof. Kanchan Joshi | 05 |
| 02. | Managerial Skills for Technical Personnel | 3 Days | 14.10.2019 | Prof. D. K. Srivastava | 07 |
| 03. | Project Management | 3 Days | 03.02.2020 | Prof. Ashok K. Pundir | 05 |
| 04. | Project Procurement and Contracts Management | 3 Days | 13.02.2020 | Prof. V. B. Khanapuri Prof. Kanchan Joshi | 10 |
| 05. | Managerial Skills for Technical Personnel | 3 Days | 17.02.2020 | Prof. T. Prasad | 09 |

**UNIT BASED PROGRAMMES (UBP)**

| No | Name of Organisation | Course Title | Venue | Period | Days | Course Leader | No. of Part |
|----|--|---|------------------------------|--------------------------------|------|---|-------------|
| 1 | M/s. Sterlite Technologies Limited, Silvassa | Inventory Management | Silvassa - OFC Rakholi Plant | 15th -16th April 2019 | 2 | Prof. (Ms.) Karuna Jain Prof. Sushmita N. Aghalaya | 16 |
| 2 | M/s. Sterlite Technologies Limited, Silvassa | Manufacturing for Competitive Advantage | Silvassa - OFC Rakholi Plant | 06-07 June 2019 | 2 | Prof. Priyanka Verma Prof. (Ms.) Neha Srivastava | 18 |
| 3 | M/s. Naman Integrated Management Sevices Pvt. Ltd., Gujarat is agency of M/s. Elecon Engineering Pvt. Ltd. Gujarat | Quality Management | Gujarat | 18-19 June 2019 | 2 | Prof. Balkrishna Narkhede Prof. Kanchan Joshi | 32 |
| 4 | M/s. Naman Integrated Management Sevices Pvt. Ltd., Gujarat is their agency of M/s. Elecon Engineering Pvt. Ltd. Gujarat | Industrial Engineering | Gujarat | 17-18 September 2019 | 2 | Prof. Balkrishna Narkhede Prof. Jinil Persis | 29 |
| 5 | M/s. ITC limited-Hotels Division ITC Green Centre, Gurgaon | Supply Chain Management | Gurgaon | 24th - 26th Sept 2019 | 3 | Prof. Sushmita Narayana Prof. Debabrata Das | 31 |
| 6 | M/s. Naman Integrated Management Sevices Pvt. Ltd., Gujarat is their agency of M/s. Elecon Engineering Pvt. Ltd. Gujarat | Quality Management | Gujarat | 09th - 10th October 2019 | 2 | Prof. Balkrishna Narkhede Prof. Kanchan Joshi | 22 |
| 7 | M/s. Bharat Electronics Limited, Bangalore | Industrial Engineering Programme | Bangalore | 18th Nov 2019 to 13th Dec 2019 | 20 | Prof. KVSS Narayana Rao Prof. Ashok K. Pundir | 25 |
| 8 | M/s. Indian Oil Corporation Limited, Mumbai | Risk analysis & Hazop Study | NITIE | 19th - 21st Nov 2019 | 3 | Prof. Shankar Murthy Prof. Rauf Iqbal | 20 |



| No | Name of Organisation | Course Title | Venue | Period | Days | Course Leader | No. of Part |
|----|--|---|-------------|--|------------|---|-------------|
| 9 | M/s. Piramal Pharma Solutions, Mumbai | Web Based Session on Environmental Sustainability | Mumbai | 22nd November 2019 | 50 Minutes | Prof. Seema Unnikrishnan Prof. Anju Singh | - |
| 10 | M/s. Indian Oil Corporation Limited, Mumbai | Risk analysis & Hazop Study | NITIE | 18th-20th December 2019 | 3 | Prof. Shankar Murthy Prof. Rauf Iqbal | 18 |
| 11 | M/s. Hindustan Petroleum Corporation Limited, Mumbai | Risk Assessment and Emergency Preparedness | Nigdi, Pune | 06th-08th January 2020 | 3 | Prof. Anju Singh Prof. Rauf Iqbal | 16 |
| 12 | M/s. The Indian Hotels Company Ltd., | Sustainability Leadership Programme | NITIE | 03rd - 08th Feb 2020 excluding on 7th Jan 2020 | 5 | Prof. Shirish Sangle Prof. V. V. Gedam | 29 |
| 13 | M/s. Indian Rare Earths Limited, Mumbai | Managerial Skills for Technical Personnel | Odisha | 03rd - 08th Feb 2020 | 6 | Prof. T.Prasad Prof. Nikhil K. Mehta Prof. B. E. Narkhede Prof. Poonam Singh | 25 |
| 14 | M/s. Hindustan Petroleum Corporation Limited, Mumbai | Risk Assessment and Emergency Preparedness | Nigdi, Pune | 10th - 12th Feb 2020 | 3 | Prof. Seema Unnikrishnan Prof. Rauf Iqbal | 14 |
| 15 | M/s. Hindustan Petroleum Corporation Limited, Mumbai Conducted at Nigdi, Pune | Strategic Project Management | Nigdi, Pune | 02nd - 06th March 2020 | 5 | Prof. V. B. Khanapuri Prof. Kanchan D. Joshi | 23 |

**CONSULTANCY SERVICES****COMPLETED NITIE CONSULTANCY ASSIGNMENT (2019-20)**

| Sl.No | Name of the Organization | Area |
|-------|---|------------------|
| 1 | M/s. H & R Johnson, Pen, Division of M/s. Prism Cement Ltd. | Manpower Study |
| 2. | M/s. Parry Agro Industries Limited, | Ergonomics Study |
| 3. | M/s. Coromandel International Limited, Ankaleshwar Plant, Bharuch, Gujarat | Manpower Study |
| 4. | M/s. Coromandel International Limited, Ankaleshwar Plant, Bharuch, Gujarat | Manpower Study |
| 5. | M/s. Prism Cement Ltd. | Manpower Study |

CONSULTANCY IN PROGRESS

Year 2020-21

| Sl.No. | Name of the Organisation | Area |
|--------|--|--|
| 1. | M/s. Silica Ceramica Pvt. Ltd., (A Subsidiary of M/s. Prism Johnson Ltd., Vijayawada Plant | Manpower Study |
| 2 | M/s. TVS Institute for Quality & Leadership Bangalore | Industrial Workplace Improvement Study |
| 3 | M/s. Haldia Petrochemical Ltd., | Organisational Structure |

**Memorandum of Understanding (MoUs)****ACADEMIC MOUs**

Veermata Jijabai Technological Institute, Mumbai
PEC University of Technology, Chandigarh
College of Engineering, Pune
Indian Institute of Technology, Delhi
Indian Institute of Technology, Mumbai
National Institute of Food Technology
Entrepreneurship Management (NIFTEM), Kundli
Tata Institute of Social Sciences, Mumbai
Strategic Human Resource Management India Pvt.
Ltd. (SHRM), Mumbai
National Institute of Technology, Jalandhar
Malaviya National Institute of Technology, Jaipur
Indian Institute of Technology, Kharagpur
National Institute of Technology (NIT), Raipur
Administrative Staff College, Hyderabad

INDUSTRY (MoUs)

TVS Motors, Hosur
Larsen & Toubro Infotech, Mumbai

**INTERNATIONAL ACADEMIC
MOUs**

Ecole Centrale de Lille - France
University of Alabama -USA
University of Pittsburgh - USA

PROFESSIONAL MOUs

National Knowledge Network - New Delhi
Indian Institute of Industrial Engineering - Mumbai
National Productivity Council - New Delhi

FACULTY ACTIVITIES

- Faculty Resources
- Areawise Faculty List
- Conference / Seminars and Awards
- Research and Publications



Annual Report 2019-20

**FACULTY RESOURCES****DIRECTOR****Prof. Karuna Jain**

(Relieved w.e.f. 30/08/2019)

Prof. D.K. Srivastava(Director Incharge from 01/09/2019 to
04/11/2020)**Prof Manoj Kumar Tiwari**

(w.e.f. 5/11/2019)

PROFESSOR

1. Prof D K Srivastava
2. Prof S K Nair
3. Prof L Ganapathy
4. Prof R Ramaswamy
5. Prof KVSS Narayana Rao
6. Prof A K Pundir
7. Prof (Ms.) Seema Unnikrishnan
8. Prof (Ms.) Vijaya Gupta
9. Prof M Venkateshwarlu
(on lien from 1.04.19 to 31.03.2021)
10. Prof Sanjay Sharma
11. Prof M K Jha
12. Prof T Prasad
13. Prof V B Khanapuri
14. Prof (Ms.) Hema A Date
15. Prof Shankar Murthy
16. Prof (Ms.) Purnima S Sangle
17. Prof Shirish Sangle
18. Prof Milind M Akarte
19. Prof Padmanav Acharya

ASSOCIATE PROFESSOR

1. Prof (Ms.) R D Chikhalkar
2. Prof (Ms.) Anju Singh
3. Prof Sachin S Kamble
4. Prof. Maddululeddy
5. Prof Sanjeev Verma
6. Prof Rakesh Verma
7. Prof Ranjan Chaudhuri

8. Prof S K Md. Rauf Iqbal
9. Prof Nikhil Mehta
10. Prof Vivek V Khanzode
11. Prof Sanjeev C Panandikar
12. Prof Utpal Chattopadhyay
13. Prof Som Sekhar Bhattacharya
14. Prof Neeraj Pandey
15. Prof (Ms.) Sumi Jha
16. Prof (Ms.) Upasna A Agarwal
17. Prof B Koteswara Rao
18. Prof Balkrishna Eknath Narkhede

ASSISTANT PROFESSOR

1. Prof (Ms.) Hema Diwan
2. Prof Binilkumar A. S.
3. Prof (Ms.) Priyanka Verma
4. Prof (Ms.) Ruchita Gupta
5. Prof Ravindra Shridhar Gokhale
6. Prof Rakesh Dulichand Raut
7. Prof (Ms) K.S.Ranjani
8. Prof (Ms.) Poonam Singh
9. Prof Vipul Kumar Singh
10. Prof (Ms.) Sushmita N. Aghalaya
11. Prof Ajaya Kumar Panda
12. Prof (Ms) Kanchan Dilip Joshi
13. Prof Mainak Mazumdar
14. Prof Debabrata Das
15. Prof (Ms) D Jinil Persis.
16. Prof. Sumant Kumar Bishwas
17. Prof (Ms) Neha Srivastava
(on contract)
18. Prof Vidyadhar V Gedam
(on contract)
19. Prof Gaurav Kabra
(on contract)

Adjunct Faculty

1. Prof. Shashikant A Kelkar
2. Prof. M .D.Agarwal
3. Prof Arvind Shriram Patil

**AREA-WISE FACULTY LIST****Decision Sciences & Information Systems**

1. Prof R Ramaswamy
2. Prof (Ms.) Hema A Date
2. Prof (Ms.) Purnima S Sangle
3. Prof Rakesh Verma - Area Coordinator
5. Prof Sanjeev C Panandikar
6. Prof Debabrata Das

Economics and Strategy

1. Prof (Ms.) Vijaya Gupta - Area Coordinator
2. Prof Utpal Chattopadhyay
3. Prof Som Sekhar Bhattacharya
4. Prof Binilkumar A. S.
5. Prof (Ms.) Poonam Singh
6. Prof Mainak Mazumdar

Environmental Engineering and Management

1. Prof (Ms.) Seema Unnikrishnan
2. Prof Shankar Murthy - Area Coordinator
3. Prof Shirish Sangle
4. Prof (Ms.) Anju Singh
5. Prof (Ms.) Hema Diwan
6. Prof Vidyadhar V Gedam

Engineering Technology Project Management

1. Prof V B Khanapuri - Area Coordinator
2. Prof B Koteswara Rao
3. Prof (Ms.) Ruchita Gupta
4. Prof (Ms) Kanchan Dilip Joshi

Finance & Accounts

1. Prof M Venkateshwarlu
2. Prof (Ms) K.S.Ranjani
3. Prof Vipul Kumar Singh
4. Prof Ajaya Kumar Panda - Area Coordinator

Industrial Engineering and Manufacturing Systems

1. Prof L Ganapathy - Area Coordinator
2. Prof KVSS Narayana Rao
3. Prof A K Pundir
4. Prof Milind M Akarte
5. Prof Padmanav Acharya
6. Prof S K Md. Rauf Iqbal
7. Prof Vivek V Khanzode
8. Prof Balkrishna Eknath Narkhede
9. Prof (Ms.) Priyanka Verma
10. Prof (Ms) D Jinil Persis.

Marketing

1. Prof M K Jha - Area Coordinator
2. Prof (Ms.) R D Chikhalkar
3. Prof Ranjan Chaudhuri
4. Prof Sanjeev Verma
5. Prof Neeraj Pandey
6. Prof (Ms) Neha Srivastava



Organisation Behavior and Human Resource Management

1. Prof D K Srivastava
2. Prof S K Nair - Area Coordinator
3. Prof T Prasad
4. Prof Nikhil Mehta
5. Prof (Ms.) Sumi Jha
6. Prof (Ms.) Upasna A Agarwal
7. Prof. Sumant Kumar Bishwas

Operations & Supply Chain Management

1. Prof Sanjay Sharma
2. Prof Sachin S Kamble
3. Prof. K. Maddulatey
4. Prof Ravindra Shridhar Gokhale
5. Prof Rakesh Dulichand Raut
6. Prof (Ms.) Sushmita N. A - Area Coordinator
7. Prof Gaurav Kabra

**CONFERENCE / SEMINARS AND AWARDS**

| SR. NO. | NAME AND DESIGNATION | DESCRIPTION | ORGANISED BY | DATE & VENUE |
|----------------|---|---|---------------------|---|
| 1 | Prof (Ms.) Seema Unnikrishnan Professor | IAMOT-2019 28th International Conference at Management of Technology | IAMOT-2019 | 07-04-2019 TO 11-4-2019 NITIE, MUMBAI |
| 2 | Prof (Ms) K.S.Ranjani Assistant Professor | TAPMI International Marketing Conference | TAPMI | 26-04-2019 TO 28-04-2019 Manipal, India |
| 3 | Prof Rakesh Verma Associate Professor | Faculty Development Programme on Machine Learning with Business Application | IIM Bangalore | 20-05-2019 TO 25-05-2019 Bangalore |
| 4 | Prof (Ms.) Poonam Singh Assistant Professor | 28th International Conference on Management of Technology | IAMOT-2019 | 08-04-2019 TO 10-04-2019 NITIE, MUMBAI |
| 5 | Prof (Ms.) Sumi Jha Associate Professor | Training Programme on FDP Machine Learning with Business Application | IIM Bangalore | 20-05-2019 TO 25-05-2019 Bangalore |
| 6 | Prof Karuna jain Director | 2019 POMS Annual Conference Washington DC | POMS | 02-05-2019 TO 06-05-2019 USA |
| 7 | Prof V B Khanapuri Professor | 2019 POMS Annual Conference Washington DC | POMS | 02-05-2019 TO 06-05-2019 USA |
| 8 | Prof Nikhil Mehta Associate Professor | 28th International Conference on Management of Technology | IAMOT-2019 | 18-04-2019 to 19-04-2019 Mumbai |
| 9 | Prof Nikhil Mehta Associate Professor | 2nd International HR Conference | IBS Bombay | 07-04-2019 TO 11-4-2019 NITIE, MUMBAI |
| 9 | Prof Sanjeev Verma Associate Professor | 28th International Conference on Management of Technology | IAMOT-2019 | 07-04-2019 TO 11-04-2019 NITIE, MUMBAI |



| SR. NO. | NAME AND DESIGNATION | DESCRIPTION | ORGANISED BY | DATE & VENUE |
|----------------|---|---|--|---|
| 10 | Prof (Ms.) Hema A Date Professor | 28th International Conference on Management of Technology | IAMOT-2019 | 07-04-2019 TO 11-4-2019 NITIE, MUMBAI |
| 11 | Prof B Koteswara Rao Associate Professor | 28th International Conference on Management of Technology | IAMOT-2019 | 07-04-2019 TO 11-4-2019 NITIE, MUMBAI |
| 12 | Prof Som Sekhar Bhattacharya Associate Professor | 12th ELASM workshop on the challenges of Managing the third sector in Norwegian, University of Science and Technology | NTNU | 12-06-2019 TO 13-06-2019 Trondheim, Norway |
| 13 | Shri Mahesh Kumar Senior Stenographer | Modern Office Management for Executive Secretaries, PA/PS & Office Staff | SIERD | 24-06-2019 TO 26-06-2019 GOA |
| 14 | Prof (Ms.) Upasna A Agarwal Associate Professor | Certification Course in Talent Management offered by Harrison Assessment | Harrison Assessment | 06-06-2019 TO 07-06-2019 MUMBAI |
| 15 | Prof (Ms.) Anju Singh Associate Professor | Training Programme “2019 Global Leadership program on the Circular Economy | Australian Federal Government and Green Industries | 22-07-2019 TO 26-07-2019 South Australia |
| 16 | Shri Hariram Assistant Registrar | Orientation Programme on 18th July, 2019 | Ministry of Social Justice and Empowerment | 18-07-2019 New Delhi |
| 17 | Shri Anand Naidu Manager, Computer Centre | Human Resource Development and Right to Information Act, 2005 | Scope Complex, New delhi | 09-08-2019 New Delhi |
| 18 | Prof Debabrata Das Assistant Professor | POMS 2019 International Conference | Brighton, UK | 02-09-2019 to 04-09-2019 Brighton, UK |
| 19 | Prof Binilkumar A. S Assistant Professor | 2nd Annual Sustainability and Development Conference | Michgan, USA | 11-10-2019 to 14-10-2019 Michgan, USA |



| SR. NO. | NAME AND DESIGNATION | DESCRIPTION | ORGANISED BY | DATE & VENUE |
|---------|--|---|--|---|
| 20 | Prof Neeraj Pandey Associate Professor | International Conference on Management systems | Bangkok | 29-09-2019 to 30-09-2019 Bangkok |
| 21 | Prof (Ms) Kanchan Dilip Joshi Assistant Professor | 9th International Symposium on Operations Management and Strategy (ISOMS) 2019 | Tokyo, Japan | 04-09-2019 to 06-09-2019 Tokyo, Japan |
| 22 | Prof Milind M Akarte Professor | 2 days CEP Program on “3D Printing” | IIT Bombay | 26-08-2019 to 27-08-2019 Mumbai |
| 23 | Prof Padmanav Acharya Professor | Asia Oceania Systems Engineering Conference | AOSEC-19 | Bangalore |
| 24 | Prof Utpal Chattopadhyay Associate Professor | ICMC 2019 - International Conference on Management Cases | BIMTECH | Greater Noida |
| 25 | Prof Mainak Mazumdar Assistant Professor | Sustainability and Development Conference | University of Michigan | 11-10-2019 to 14-10-2019 Michigan, USA |
| 26 | Prof S K Md. Rauf Iqbal Associate Professor | 17th International Conference on Humanizing Work and Work Environment | Dr. B R Ambedkar NIT Jalandhar | Jalandhar |
| 27 | Prof Shankar Murthy Professor | Urban Air Pollution, Human Exposure Assesment & Public Policy | IIT Madras | 07-10-2019 to 17-10-2019 Chennai |
| 28 | Prof Gaurav Kabra Assistant Professor | GLOGIFT 2019, an International Conference | IIT, Roorkee | 06-12-2019 to 08-12-2019 |
| 29 | Prof Gaurav Kabra Assistant Professor | XXIII Annual International Conference of The Society of Operations Management (SOM 2019) | IIT, Kanpur | 19-12-2019 to 21-12-2019 Kanpur |
| 30 | Prof Ajaya Kumar Panda Assistant Professor | 1st Annual Capital Markets Conference (CMC) | National Institute of Securities Markets (NISM) Raigad | 21-11-2019 to 22-11-2019 Raigad |
| 31 | Prof Milind M Akarte Professor | 2019 IEEE International Conference on Industrial Engineering and Engineering Management (IEIM 2019) | Macau | 15-12-2019 to 18-12-2019 Macau |



| SR. NO. | NAME AND DESIGNATION | DESCRIPTION | ORGANISED BY | DATE & VENUE |
|----------------|--|---|-----------------------------------|---|
| 32 | Prof KVSS Narayana Rao Professor | 5th International Conference on Industrial Engineering (ICIE-2019) | SVNIT, Surat | 12-12-2019 to 14-12-2019 Surat |
| 33 | Prof (Ms.) Upasna A Agarwal Associate Professor | 6th Biennial Conference of the Indian Academy of Management (INDAM 2020) | IIM Tiruchirapalli | 02-01-2020 to 04-01-2020 Tiruchirapalli |
| 34 | Prof Neeraj Pandey Associate Professor | 8th AIMAMA (American Marketing Association) Sheth Foundation Doctoral Consortium | Greater Noida | 03-01-2020 to 05-01-2020 Greater Noida |
| 35 | Prof Neeraj Pandey Associate Professor | ISB-JM Research Development Workshop | ISB, Hyderabad | 11-01-2020 to 12-01-2020 Hyderabad |
| 36 | Prof Mainak Mazumdar Assistant Professor | 3 day workshop on Data environment Analysis for Performance Evaluation and Benchmarking | South Asian University, New Delhi | 12-01-2020 to 14-01-2020 New Delhi |
| 37 | Prof Ajaya Kumar Panda Assistant Professor | Changing Landscape of Securities Markets Conference | NISM & SEBI | 23-01-2020 to 24-01-2020 Navi Mumbai |
| 38 | Prof Shankar Murthy Professor | 6th Biennial Conference of the Indian Academy of Management (INDAM 2020) | IIM Tiruchirapalli | 02-01-2020 to 04-01-2020 Tiruchirapalli |

**RESEARCH AND PUBLICATIONS****Research and Publications**

- Singh, V., Chaudhuri, R., & Verma, S. (2019). Psychological antecedents of apparel-buying intention for young Indian online shoppers. *Journal of Modelling in Management*.
- Bhattacharya, A., Srivastava, M., & Verma, S. (2019). Customer experience in online shopping: a structural modeling approach. *Journal of Global Marketing*, 32(1), 3-16.
- Prasad, R. K., & Verma, S. (2019). Industry-Institute Perceptual Map (PM) and Management Students' Satisfaction Index (MSSI): A Road Map for Academic Excellence. *Prabandhan: Indian Journal of Management*, 12(11), 21-31.
- Prasad, R. K., & Verma, S. (2020). An Investigation on Brand Boycott: Understanding Negative Psychology of Consumers in the Era of Digital Marketing. *Academy of Marketing Studies Journal*, 24(1).
- Singh, S., Verma, R., and Koul, S. (2019) A New Approach to Decision Prioritization – Case for Healthcare Decision-Makers, *Int' l Journal of Operations and Quantitative Management*, 25 (4): 275-297. (SCOPUS, ELSEVIER).
- R. Verma, S. Koul and G. Singh, "Intelligent Decision-Making: Using Control Tower at a Logistics Company," 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 550-554, DOI: 10.1109/GUCON48875.2020.9231108.
- Verma, Rakesh and Koul, Saroj and Prasad, Babli, Expert System – A Case of Indian Railway's Track Maintenance and Renewal Operations (28 March 2020). Proceedings of the International Conference on Innovative Computing & Communications (ICICC) 2020, Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3563091> (ELSEVIER).
- Saroj Koul; CSN Venkata Datta; Rakesh Verma Car Rentals' Knowledge and Customer Choice, 2020 IEEE Int'l Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), Vellore, India, 2020, pp. 1-5, DOI: 10.1109/ic-TITE47903.2020.331
- Potdar, A., Unnikrishnan, S., and Singh, A. (2019) "A framework for climate change management in organisations: a case for India", *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 15, No. 3, pp. 303-334."
- Shrivastava S, Unnikrishnan S., (2019) Review of Life Cycle Assessment and Environmental Impacts from The Oil & Gas Sector. *Oil Gas Res* 5: 164. doi:10.4172/2472-0518.1000164
- Shrivastava S, Unnikrishnan S. , (2020) Life cycle assessment of oil storage unit in India. *Int. J. Oil, Gas and Coal Technology*, Vol. X, No. Y, xxxx
- Fuzzy multi-criteria decision analysis for environmentally conscious solid waste treatment and disposal technology selection; Manoj Govind Kharat, Shankar Murthy, Sheetal Jaisingh Kamble Rakesh D. Raut, Sachin S.Kamble, Mukesh Govind Kharat, *Technology in Society*, Volume 57, May 2019, Pages 20-29.
- Development of simplified WQIs for assessment of spatial and temporal variations of surface water quality in upper Damodar river basin, eastern India; Ravindra Kumar Verma, Shankar Murthy, Rajani Kant Tiwary, Sangeeta Verma, Received: 25 July 2017 / Accepted: 3 January 2019 / Published online: 22 January 2019, *Applied Water Science* (2019) 9:21 <https://doi.org/10.1007/s13201-019-0893-0>
- Bhagat, S., Gedam, V.V. & Pathak, P. (2020). Adsorption/desorption, Kinetics and Equilibrium Studies for the Uptake of Cu (II) and Zn(II) onto Banana Peel. *International Journal of Chemical*



Reactor Engineering, Volume 18: Issue 3. doi:10.1515/ijcre-2019-0109 (SCIE, Scopus index, IF-1.15, Publisher-DE GRUYTER)

Ajay H. Dwivedi, Vidyadhar V. Gedam, M. Suresh Kumar (2020), Sustainable hydrogen production from fruit and vegetable waste (FVW) using mixed anaerobic cultures via dark fermentation: kinetic aspects. *International Journal of Energy and Environmental Engineering*, DOI: <https://doi.org/10.1007/s40095-020-00340-6> (ESCI, Scopus indexed, IF-1.87, Publisher-Springer Berlin Heidelberg)

Anju Singh, Rohit Panchal, Mayuri Naik, 2020 Circular economy potential of e-waste collectors, dismantlers, and recyclers of Maharashtra: a case study, *Environmental Science and Pollution Research*, (2020) 27:22081–22099.

Hemant Bherwani, Anju Singh, Rakesh Kumar, 2020, Review Article on Assessment Methods of Urban Microclimate and its Parameters: A Critical Review to take the Research from Lab to Land, *Urban Climate*, Manuscript number UCLIM_2020_229_R2.

S. Verma, P. K. Singh, S. K. Mishra, V. P. Singh, V. Singh, A. Singh, 2020, Activation Soil Moisture Accounting (ASMA) for Runoff Estimation using Soil Conservation Service Curve Number (SCS-CN) Method, *Journal of Hydrology*, Volume 589, October 2020, 125114.

Purva Mhatre, Rohit Panchal, Anju Singh and Shyam Bibyan, 2020, A Systematic Literature Review on the Circular Economy Initiatives in the European Union, accepted in *Sustainable Production and Consumption*, vol 26, April 2021

Singh, A., Unnikrishnan, S., Naik, M., Sayanekar, S., 2019, CDM implementation towards reduction of fugitive greenhouse gas emissions, *Environment, Development and Sustainability*, April 2019, Volume 21, Issue 2, pp 569–586 | 2019

Sheetal Kamble, Anju Singh, Absar Kazmi, Markus Starkl, *Environmental and economic performance*

evaluation of municipal wastewater treatment plants in India: a life cycle approach *Water. Sci Technol* (2019) *Water Sci Technol* (2019) 79 (6): 1102-1112.

Sangeeta Verma, Pushpendra Kumar Singh, Surendra Kumar Mishra, Vijay Pratap Singh, and Anju Singh, 2019, Concept of Activation Soil Moisture Accounting in SCS-CN Methodology for Runoff estimation: A Runoff Elsevier Publication Accepted, *Journal of Hydrology*, June 2020, *Journal of Hydrology*, DOI: 10.1016/j.jhydrol.2020.125114

Singh, A., Unnikrishnan, S., Naik, M., Sayanekar, S., 2019, Performance evaluation of a decentralized wastewater treatment system in India, Springer publication, *Environmental Science and Pollution Research International*, 22 May 2019, 26(21):21172-21188, DOI: 10.1007/s11356-019-05444-z PMID: 31119547

Kamble, S.J. Singh, A., Kazmi, A., Starkl, M, 2019, Environmental and economic performance evaluation of municipal wastewater treatment plants in India: a life cycle approach, *Water. Sci. Technol*, *Water Sci Technol* (2019) 79 (6): 1102–1112, <https://doi.org/10.2166/wst.2019.110>

Kamble, S. J., and Singh, A, 2019, Recent Advances in Life Cycle Assessment and Municipal Wastewater Treatment: A Review and Agenda for Future Research, *Journal of Environmental Sciences*

Dalvi, M., Singh, A., and Gosavi, M, 2019, Business sustainability-an automobile industry perspective, *EPRA international journal of economic and business review -peer reviewed journal*, Volume : 7 ISSUE : 2

Potdar, A., Unnikrishnan, S., and Singh, A, 2019, A framework for climate change management in organisations: a case for India, *World Review of Entrepreneurship, Management and Sustainable Development*

Dalvi, M., Singh, A., Rambabu, P., and Murthy, N.N., 2019, *Business Sustainability - A Study of*



Most Sustainable Corporations Environmental Management and Sustainable Development, Environmental Management and Sustainable Development, ISSN 2164-7682 2019, Vol. 8, No. 2

Bhattacharya S S and Atre S , (2020) Additive Manufacturing Technology; realities and strategic perspectives from India”, International Journal of Asian Business and Information Management (IJABIM), Vol. 11, Issue 1 , pp-1-20.

Bhattacharya S S , (2020) Humanistic orientation in firm-stakeholder technology-based interaction and its impact on stakeholder satisfaction, Emerging Economy Studies, Vol 6, (No 1),pp-86-105.

Bhattacharya S S, (2020) Development of a typology regarding Collaborative Inter-Firm Corporate Social Responsibility (CIF-CSR) initiatives; Explication through conceptual archetypes., FIIB Business Review, Vol 9, No-1,pp-55-66.

Bhattacharya S S (2020) Doctoral Research Work in Strategic Management: Perspectives for Executives & Part-time Candidates, IJIR, Vol 55 ,No 4, pp-710-720.

Bhattacharya S S , Jha S and Sharma D , (2020) Development of a scale on individual perspectives on Corporate Social Responsibility constructs: Based on micro-foundation theory, Vision, Vol 24, No-1, pp- 47-59.

Bhattacharya S S (2020) Explicating the characteristics of ‘Yogic perspectives’ and ‘Vedic philosophy’ for individual growth; Evolving from manager to a business leader.IJIR, Vol 56, No 2, pp-374-383.

Yalla, S. P., Jain, K., & Bhattacharya, S. S. (2020). Impact of monetary policy announcements on bank index in India. Afro-Asian Journal of Finance and Accounting, 10 (1), 112-130.

Bhattacharya, S. S., & Naser, S. (2020). Comparative analysis of mergers and acquisitions in Indian and international pharmaceutical

industry with unique case-lets. International Journal of Business and Globalisation, 25(1), 112-136.

Jha, S., & Bhattacharya, S. S. (2020). Moderated Mediation Analysis of Leader Technology Orientation: A Study of Operations and Manufacturing Leaders of India. Journal of Operations and Strategic Planning, 3(1), 58-80.

Bhattacharya S S(2020) International Business Strategy: Development of an integrated framework and typology, Review of International Business and Strategy, Vol. 30 No. 3, pp. 345-373. <https://doi.org/10.1108/RIBS-10-2019-0138>

Bhattacharya SS, (2019) “Development of International Corporate Social Responsibility framework and typology” Social Responsibility Journal, Vol. 16 No. 5, pp. 719-744. <https://doi.org/10.1108/SRJ-04-2018-0094>

Bhattacharya S S and Verma S, (2019) .“The intellectual core and structure of International Business Strategies (IBS): a co-citation analysis, Review of International Business and Strategy, , Vol. 29 No. 3, pp. 180-206.

Bhattacharya S S, (2019), Study of industry level ‘Bargaining Power’: Quest for ‘Value Capture’ versus ‘Value Creation’, Journal of Services Research, Volume 19 Number 2 (Oct. 2019 – March 2020),pp-43-60.

Verma S, Chaurasia S and Bhattacharya S S,(2019) “The effect of government regulations on continuance intention of in-store proximity mobile payment services”, International Journal of Bank Marketing, Vol. 38 No. 1, pp. 34-62.

Verma S and Bhattacharya S S, (2019) The intellectual core of Mergers and Acquisitions- a co-citation analysis, International Journal of Business Innovation and Research, Vol. 20 No. 3, pp. 305-336.

Bhattacharya S S , Raghuwanshi V, Mohan K, Prasad A, Murari K and Sarkar A (2019)” An



empirical investigation of the internationalization of Indian engineering, procurement and construction firms.”, *Indian Journal of Industrial Relations*, Vol 55, No 3, pp-506-558.

Bhattacharya S S , (2019) Comparative cross cultural study of Indian managers’ perspectives on doing international business in Bedouin and Guanxi culture, *International Journal of Asian Business and Information Management (IJABIM)*. Vol. 10, Issue 3 , pp-1-21.

Bhattacharya S S and Nair S, (2019) ‘Explicating future of work; perspectives from India’ *Journal of Management Development*. Vol 38, No 3, pp- 175-194.

Nayak, B., Bhattacharya, S. S., & Krishnamoorthy, B. (2019). Integrating wearable technology products and big data analytics in business strategy. *Journal of Systems and Information Technology*, , Vol. 21 No. 2, pp. 255-275.

Bhattacharya, S. S., & Malik, A. (2019). Development of an integrated canvas on turnaround strategy. *International Journal of Organizational Analysis*, Vol. 28 No. 2, pp. 523-554.

Nayak, B., Bhattacharya, S. S., & Krishnamoorthy, B. (2019). Application of digital technologies in health insurance for social good of bottom of pyramid customers in India. *International Journal of Sociology and Social Policy*, Vol. 39 No. 9/10, pp. 752-772.

Bhattacharya S S and Fernandes C , (2019) Carasid: Interventions that make businesses sustainable” , *Vision*, Vol 23, No-2, pp-208-214.

Bhattacharya S S (2019) Development of an integrated perspective on strategy implementation, *IJIR*, October, Vol 55, No 2,pp-306-320.

Nair A and Bhattacharya S S , (2019) Comparative analysis of sustainability motive relative to transactional, value for money and innovation motives in the context of mobile applications, *Foresight*, Vol 21, No-2, pp-177-199.

Nair A and Bhattacharya S S , (2019) Mandatory corporate social responsibility in India and its effect on corporate financial performance: Perspectives from institutional theory and resource-based view.”, *Business Strategy and Development*, Vol 2 , No-1, pp-106-116.

Nayak B and Bhattacharya S S (2019), Integrating Digital Wisdom and Human Capital for Health Insurance Firms; Digitally Automated Processes or Human Resources, *Journal for Quality and Participation*, Vol 41, No 4, pp-20-23.

Bhattacharya S S , (2019) “Development of an integrated model on strategic alliance.” , *Indian Journal of Industrial Relations*, Vol 54, No-3, pp-441-457.

Bhattacharya S S. (2019) LokSuvidha, converting non-customers to customers; the saga of organizational growth through technology, *Emerging Economies Cases Journal*, 1(1-2), pp-33-42.

Bhattacharya SS, (2019) “Exploratory study of international CSR initiatives of Indian firms.”, *Business Strategy and Development*. Vol-2, No-1, pp-51-62.

Barun Kumar Thakur and Vijaya Gupta, (2019), Valuing health damages due to groundwater arsenic contamination in Bihar, India, *Economics and Human Biology*, Elsevier, 35, 123-132.

KS Ranjani, Poonam Singh. Reciprocity, performance, and training expenditure in microfinance institutions: evidence from South Asia, *Enterprise Development and Microfinance*, 2019, 30(2):97-116

Conference Papers

Shrivastava S, Unnikrishnan S., (2020). Life Cycle sustainability Assessment of crude oil refineries in India. *International Conference on “Energy and Environmental Technologies for Sustainable Development*. (14-16 Feb 2020, MNIT, prayagraj).



Shrivastava S, Unnikrishnan S., (2019). Review of Life Cycle Assessment and Environmental impacts from the Oil & Gas Sector. IAMOT conference. (7-11 April, 2019, NITIE Mumbai)

AK Vishwakarma, AK Nema, S Sangle (2019). What determines environmental pro-activeness in the Indian cement sector? An empirical study, *Journal of Cleaner Production* 234, 961-971

SS Panda, S Sangle, (2019). An exploratory study to investigate the relationship between social license to operate and sustainable development strategies *Sustainable Development* 27 (6), 1085-1095.

SS Panda and Shirish Sangle, (2020). Stakeholder engagement as dynamic capability, *Business Strategy and Development*, 3(2), 204-212

Chitra Pandey, Hema Diwan. Modeling farmer fertilizer use for Soil & Water Quality Management: INRM Approach. XIV World Aqua Congress. 2020.

Chattopadhyay, Utpal, Make, Break or Exit: Tata Motor's JLR Dilemma over Brexit, presented in International Conference on Management Cases (ICMC 2019), organised by Birla Institute of Management Technology (BIMTECH), Greater Noida, December 05-06, 2019.

Chattopadhyay, Utpal, Mukundan, R. and Arun, A., Technology Transfers through International Joint Ventures- Case of Indian Automotive Industry, presented in 28th International Conference of the International Association for Management of Technology IAMOT 2019, organised by NITIE and IAMOT, Mumbai, April 7-11, 2019.

Binilkumar Amarayil Sreeraman and Gyanendra Singh Konthoujam 2019 Preferences of Stakeholders over Sustainable Conservation of a Wetland Ecosystem: A Case of Loktak Lake in Manipur India presented at 2nd Annual Sustainability and Development Conference (Organised by Elsevier), held on 11-14, October 2019, at University of Michigan. Ann Arbor, Michigan (USA).

Binilkumar Amarayil Sreeraman and Karuna Jain 2019 Regional Innovation Systems and Competitiveness of MSME Clusters: A case of Sangli Raisin Making Cluster in Maharashtra, INDIA presented at 28th International Conference of the International Association for Management of Technology held on 7-10 April 2019 at Mumbai, India.

Mainak Mazumdar, 2019, Is Agriculture Still Important for Sustainability and Convergence of overall Economic Growth? The striking case of India” participated in the Sustainability and Development Conference. The conference was hosted by The University of Michigan and took place October 11-14, 2019.

Conference Proceedings

Hemant Bherwani, Anju Singh and Rakesh Kumar. “Methodologies for Assessment of Urban Micro-Climate”, International Workshop on Climate Change and Extreme Events, IIT Mandi, April 2019, Page 81.

Bhattacharya S S (2019) “ Development of a typology on Firm-Civil Society Organization collaborations in the context of Corporate Social Responsibility (CSR) engagement, The 12TH EIASM workshop on the challenges of managing the third sector ‘to be held on June 12-13, 2019 at NTNU Business School Trondheim, Norway.

Bhattacharya S S and Debnath S (2019) ‘Olympic Gold Quest (OGQ); The saga of a Civil Society Organization (CSO) transforming Indian sports.’, The 12TH EIASM workshop on the challenges of managing the third sector ‘to be held on June 12-13, 2019 at NTNU Business School Trondheim, Norway.

As a Centre Coordinator for Global Competitiveness of MSMEs organized a workshop on “Digitization of MSMEs: opportunities and Challenges, at NITIE on 02nd March 2019 (SIDBI sponsored Rs. 1, 00,000 for the event).



As a Centre Coordinator of The Centre for Global Competitiveness organized training on the Udyamimitra portal of SIDBI, provided to MSMEs and students attended the workshop on 02nd March 2019.

In IAMOT, organized two sub-themes in Technology Management in SMEs and Innovation System for MSMEs.

The Centre organized a workshop on Fintech Reinvesting MSME's in India, in MSME Entrepreneurship Conclave 2019, on 18th Oct. 2019, under the umbrella of AVARTAN.

Panda. A.K, Nanda S and Panda, P (2020), Working Capital Management, Macroeconomic Impacts, and Firm Profitability; Evidence from Indian SMEs, (Accepted), Business Perspectives and Research (Sage) SCOPUS

Panda. A.K. and Nanda S. (2020), Receptiveness of effective tax rate to firm characteristics; An empirical analysis on Indian listed firms, (Accepted), Journal of Asia Business Studies- (Emerald), SCOPUS.

Ranjani K.S., Singh Poonam (2019). Reciprocity, Performance and Training Spends: Evidence from South Asia. Enterprise Development and Microfinance. (Accepted)

Singh, V. K., Kumar, P., and Nishant, S. (2019). Feedback Spillover Dynamics of Crude Oil and

Global Assets Indicators: A System-wide Network Perspective. Energy Economics, 80(May), 321-335. <https://doi.org/10.1016/j.eneco.2019.01.005>

Nanda S. and Panda. A.K. (2019), A Quantile Regression Approach to Trail Financial Performance of Manufacturing Firms, Vol. 20, No: 3, pp: 290-310. Journal of Applied Accounting Research, SCOPUS, ABDC-C

Panda. A.K, Nanda S., and Paital R. R., (2019), An Empirical analysis of Stock Market Interdependence and volatility spillover in the Stock markets of Africa and Middle East Region, African Journal of Economic and Management, Vol. 10, No: 3, pp: 314-335; SCOPUS, ABDC-C

Panda. A.K, Nanda S., Singh V.K and Satish K., (2019) Evidence of leverage effects and volatility spillover among exchange rates of selected emerging and growth leading economies, Journal of Financial Economic Policy, Vol. 11 Issue: 2, pp.174-192, <https://doi.org/10.1108/JFEP-03-2018-0042>. SCOPUS, ABDC-B

Panda. A.K. and Nanda S., (2019) The Nexus between Exchange Rate and Long Term Investment in Indian Manufacturing Industry, Management Research Review, Vol. 42 Issue: 2, pp.174-198, <https://doi.org/10.1108/MRR-01-2018-0024>, SCOPUS, ABDC-C.

STUDENT AFFAIRS AND ACTIVITIES



Annual Report 2019-20



STUDENT AFFAIRS AND ACTIVITIES

- 1. ABHISANSKARAN-2019** (June 10, 2019) - The ABHISANSKARAN (orientation) was organised to introduce the new batches to the NITIE culture and officially marked the beginning of their two-year journey. The event started with a welcome address by Prof. (Ms) Karauna Jain, Director, NITIE and by all the Deans. Director, NITIE congratulated all the students and wished them success. Prof. (Ms) Hema Date, Dean (Student Affairs) shared NITIE way of life with students. Dean Academics, Prof. P Acharya made students aware of the different courses offered at NITIE and the importance of these courses with respect to the industry. Faculty members conducted the sessions to induce the students and acclimate them to the heritage, vision and culture of the Institute. Their narratives on institutional achievements encouraged the students to think towards their potential contribution in the overall growth of NITIE.
- 2. Tarang (Alumni Interaction) (August 04, 2019)** : Mr. Saurabh Shankar, 2005 NITIE Alumnus and founder of Stealth Mode (Fintech Startup) took the Finance session and educated the students about various work roles in the Financial sector.



Mr. Varun Udeshi, 2013 NITIE Alumnus, senior engagement lead in Oliver Wyman visited the campus to guide the Junior Batch on how to solve consultancy cases.





Mr. Bharath Katta (Senior Marketing Manager, Yes Bank) and Mr. Dinesh Valiramani (Senior Manager - Retail Marketing, Yes Bank), both 2016 NITIE Alumni visited the campus to guide the students about marketing as a career after MBA.

Mr. Shirish Janai, a 2005 NITIE Mumbai Alumnus, senior manager supply chain – Asian Paints educated the junior batch about the supply chain planning process.

3. **Independence day Marathon (August 15, 2019)** : On the occasion of 73rd Independence Day, the Sports Committee organised a



campus marathon. It began with an inauguration ceremony by Prof. Hema Date, Dean, Student Affairs. This year the marathon had **12 different categories**. The distance to be covered in the marathon was of **one lap** for boys & girls (under 5 & 10 years), **five laps** for boys, **three laps** for girls and one lap for faculty & staff members. At the end of the run, all the participants were provided with refreshments.



Top 3 winners from each category were awarded medals and certificates by the hands of honourable Director in the valedictory function that followed the flag hoisting ceremony in the NITIE campus.





4. **Entrepreneurship Workshop (September 21, 2019 to September 22, 2019)** : A two-day workshop was conducted by Mr. Nikhil Kulkarni, founder of Darwin Tech and also an alumnus of the 2006 batch of the PGDIM program.

The session was divided into two parts – one a lecture on “Entrepreneurship as a career option for MBAs” which was open to all followed by a workshop exclusively targeted at the budding entrepreneurs of the institute. A total of 10 students participated in the workshop.



1. Futsal
2. Cricket
3. Basketball (Men’s & Women’s)
4. Chess
5. Carrom
6. Volleyball
7. Table Tennis
8. Lawn Tennis



5. **Zest- An Intra-College Sporting Event (27th – 29th September, 2019)** : ZEST was organised to select college team of various games which represent NITIE in JOSH 2019 & various other Inter B-School Tournaments. Various events were conducted :-



We witnessed the participation from teams of every section of PGP-1st year & PGP-2nd year in all 8 sports. This year, VLFM & FPM were the new entrants to the event.

6. AVARTAN-2019 (October 12, 2019 – October 18, 2019) :

AVARTAN refers to a rhythmic cycle of Indian music. Chosen as the name for the grand unification, it captures the essence of various events coming together in harmony to create a symphony that befits NITIE.



AVARTAN an annual Fest is an umbrella event that amalgamates of Lakshya, Prerana, Empressaio, with the cultural festival - Josh and Arohan. The highlights of the AVARTAN 2019 were as follows:-

i) Lakshya Business Visionary Awards- In Avartan, the fraternities of NITIE felicitate business leaders with the 'Lakshya Business Visionary Award'. These awards were given in

recognition and appreciation of achievements, to those industry leaders, who have emerged winners due to their exemplary vision and extraordinary leadership. This year Dr. Srivastava, Director felicitated **Mr. S. P. Oswal (Chairman and Managing Director of the Vardhman Group)** with the "Lakshya Business Visionary Award 2019".



ii) LakshyaSM Industrial Engineering Conclave- The LakshyaSM Industrial Engineering Conclave provides an annual platform to exchange ideas and collaborate on the impact of market dynamics and new technologies for current and future industrial engineering leaders. Eminent speakers from various backgrounds spoke on the topic: "**The Wave of Productivity Driven by Data Analytics**"

The esteemed dignitaries for the Lakshya Industrial Engineering Conclave 2019 were:

- 1. Mr. Hemant Narvekar**, Head-Manufacturing Switchgear factory, Siemens Ltd.
- 2. Mr. Tanmay Agarwal**, Vice President & Head – Business Shared Services at Hindustan Coca-Cola Beverages Pvt Ltd.
- 3. Mr. Saikat Chakraborty**, Vice President-Retail Analytics, Accenture

iii) LakshyaSM Supply Chain Management Conclave- The LakshyaSM Supply Chain Conclave brought together globally renowned thinkers, achievers, and change-makers.



Focused on Supply Chain, the event brought in a valuable learning experience for young budding managers and decision-makers from various industries. This event has brought the best minds of the supply chain from different industries. Focused on Supply Chain, the event brought in the valuable learning experience for young budding managers, decision-makers from various industries, and students. The topic of the supply chain management conclave was **“Leveraging Disruptive technologies for Supply Chain 4.0”**. The esteemed dignitaries for the Lakshya Supply Chain Management conclave were:

1. **Mr. Alagu Balaraman**, Partner & Managing Director, CGN Global.
2. **Mr. Dheeraj Shah**, Global Head – Supply Chain Management Retail Business Group, Tata Consultancy Services.
3. **Mr. Hardeep Singh**, Chief Executive Officer, 7-Eleven India.
4. **Mr. Nandkumar Kulkarni**, Director-Integrated Supply Chain, Mondelez India Foods Private Limited.

iv) **LakshyaSM Manufacturing Conclave-** The LakshyaSM Manufacturing Conclave brought together globally renowned thinkers, achievers and change-makers on a common platform to exchange ideas and collaborate on the impact of market dynamics and new technologies for current and future manufacturing leaders. This year the conclave was focused on manufacturing, this conclave brought in a valuable learning experience for young budding managers and decision makers from various industries. The conference delivered an in-depth look at possible opportunities within different industries. The topic of the conclave was **“Smart Factories- The rise of the digital supply network”**





The distinguished speakers for the LakshyaSM Manufacturing conclave were:

1. **Mr. Amol Nagar**, Director - Manufacturing Operations & Supply Chain, GE Aviation.
2. **Mr. Anil Kumar**, Head - Manufacturing IT & Automation, Cipla.
3. **Mr. Anirban Saha**, Head - EHV Transformer & Reactor Business, CG Power and Industrial Solutions Limited.
4. **Mr. N C Chakrabarti**, Head - Smart Manufacturing, Reliance Industries Limited.
5. **Mr. Vinod Padmanabhan**, Director - Manufacturing Operations, Raymond

v) **On the Job Achiever's Contest**- This Contest was an ideal platform for budding & practising managers to present their innovative and path-breaking projects. The projects were judged by an elite jury panel consisting of industry stalwarts (VPs & MDs of top-notch firms). It is a confluence of best practices, technological advancements, their implementations and impact on the industry and equips the budding managers with the latest trends and advancements. Lakshya 2019 "On the Job Achievers' Contest" had participation from corporate sector across four well-defined verticals:

1. **Supply Chain Management**
2. **Operations Management**
3. **Systems & IT Management**
4. **Industrial Engineering**

Some of the organisations that participated in the event were Apollo Tyres Ltd., Mahindra Logistics Ltd., Ashok Leyland, Beiersdorf India, Sun Pharma, Hindustan Aeronautics Ltd., etc. The Jury for the above events was as follows:

1. **Mr. Deepak Bankapur**, Operations Leader- Supply chain, Becton Dickinson
2. **Mr. Pankaj Kapoor**, Head - New Product development, Marico Ltd.
3. **Mr. Vaibhav Agrawal**, Head- Customer service & Logistics, Fonterra Fortune
4. **Mr. Somnath Das**, Director – Supply chain, Beiersdorf (Nivea) India
5. **Mr. Pankaj Agrawal**, VP- Operational Excellence, Lupin Ltd.
6. **Ms. Poonam Bareja**, GM- Strategy & Deployment, Johnson & Johnson
7. **Mr. Akshay Shrawge**, GM – Sourcing, Parekhplast Limited
8. **Mr. Venugopala Rao Banki**, VP - Organisational design & Productivity Improvement, ACC Limited
9. **Mr. Abhay Chidri**, CEO & Partner, Discover India packaging
10. **Mr. Khatib Rehman**, GM- Supply chain, Yokohama Tire corporation (ATG)
11. **Mr. Govindamani Krishnan**, Consultant, Self-Employed
12. **Ms. Shaveta Wadhwa Jain**, Chief Information Officer(CIO), General Electric
13. **Mr. Krishna Tewari**, Executive Director, Lumina Datamatics Ltd.

vi) **Testimonials** – In this 20th edition of the event, we witnessed corporates visiting from various organisations & different sectors. This year team Lakshya put forwarded a novel initiative of making testimonial videos of juries and participants in association with Team TDX.

Participants shared their views about their experience of the event, suggestions, and encouraged the organisers to improvise future editions of Lakshya in a much bigger and



better way. The testimonials not only helped making memories but acted as medium for promotion of Avartan and NITIE as a brand.

vii) **Power Talks-** Under the umbrella of LakshyaSM, Power Talks was a candid Gyan

session to enlighten the ignited young managerial minds in the institute. This year, **Mr Vikas Dimri**, an Everester and Endurance athlete by passion, a banker by profession and also the founder of the Happy Feet program, graced the event. He shared his words of wisdom and enlightened everyone present with his inspiring experience and knowledge.

viii) AROHAN 2019





Arohan - The Annual Cultural Festival of NITIE Mumbai, entails three-day dance, music, drama and non-stop fun. Events range from poetry slam to plays, pop to rock shows, and fusion to fashion shows. All of these events were graced by famous professionals of the respective fields, as judges.

the country's economic and geopolitical growth through business talks. Over the years, leaders have shared their philosophies and success mantras with the industry and academia.

ix) Prerana Business Meet

The Prerana Business Meet (PBM), a flagship event of Prerana, is a conclave for the country's most influential leaders to discuss the current critical issues of business and its impact on



During Prerana Business Meet, NITIE hosted three brilliant minds of the industry, for Prerana Business Meet, 2019: Prof. D K Srivastava, Offg. Director, welcomed the speakers and shared his views on synthesizing global value chain.

Mr. Arvind Mathur, Chief Executive Officer, Raymond UCO Denim

Mr. Madan R. Krishnan, Vice President & Managing Director, Medtronic

Mr. Praveer Sinha, Chief Executive Officer & Managing Director, Tata Power

x) Summer Project Contest

In the Summer Project Contest (SPC) lies the genesis of Prerana. The event provided a platform for second year management students to showcase their summer projects and shared their internship experiences. Their presentations were scrutinised and judged by an elite panel of judges from the Industry and faculty from NITIE. This year the event saw the presence of students from Top management



schools presenting their internship experiences and project details to students and elite industry panelists. SPC comprised of three modules.

1. Operations/SCM
2. Marketing
3. Human Resources

XI) Prerana Decibelz

Prerana Decibelz is the music and dance night of Avartan at NITIE where the musicians,



celebrities, singers, DJs enthrall the students with their musical performances. The trailblazers from the world of performing arts and cinema showcases their performance, music legends like Shankar-Ehsaan-Loy, Sona Mahapatra, Anushka Manchanda, Indian Oceans, Euphoria, Terrazak and other big names have performed in the past, Decibelz promises to be a night full of excitement and ecstasy. This year, Decibelz witnessed the widely acclaimed and renowned Indian music artist, **Ritviz**, mesmerise the crowd with his music.

XII) Cita-De-La Prerana

It is an event where celebrities put forth a canvas of their colorful (and indeed successful) life stories to the audience. This year, we were blessed to have with us **Mr. Darshan**



Jariwalla, Padma Shri Manoj Joshi, Ms. Sonali Kulkarni and Ms. Sheeba Chadha. The diverse experiences shared by the dignitaries inspired the audience to follow their passion.

XIII) NITIE Finance Conclave

STREET, the Finance Forum in association with Avartan 2019 had successfully organized the Annual Flagship event 'NITIE Finance Conclave' as a part of Avartan on 17th October 2019. The Conclave provided a platform , an unparalleled opportunity, for interaction



between Academia and Leaders of Finance Industry and discuss some of the contemporary topics.

The theme for this year’s panel discussion was “Balancing fiscal deficit and the Economic growth of India”

We had the privilege of having the following distinguished Guests:

- **Mr. Sarang Bhutada**- Director, CRISIL Limited
- **Mr. Anand S**- Director and CFO, De Lage Landen (DLL) Financial Services
- **Mr. Chandru Badrinarayanan**- Managing Partner-, Ecube Investment Advisors
- **Mr. Sandeep Mantri**- VP & CFO, Datamatics Global Services Limited
- **Mr. Sunil K Pandey**- Director, Arth Vritt Capital LLP
- **Prof. Utpal Chattopadhyay**- Associate Professor, Economics and Strategy- NITIE Mumbai

XIV) Josh 2019 - JOSH, the annual Sports Festival of NITIE was organized from 12th -14th October 2019. JOSH is one of the largest sports festivals among the B-schools in the country. This year, JOSH witnessed participation from around 400 students representing IIMs, IITs, SP Jain and other premier B Schools.





JOSH has been promoted by eminent sporting personalities every year. This year JOSH was inaugurated by the Fastest 1000 run scorer in international cricket, **Mr. Vinod Kambli**. The students gathered in huge number to welcome the guest and were highly motivated by his inspirational words. Mr. Vinod Kambli spoke about the importance of Dream, Discipline and Dedication in the lives of humans.



XV) Empresario Entrepreneurship Awards

Empresario Entrepreneurship Award is a salute to leaders who have set exemplary standards, inspired all with their ideas, beliefs, persistence, and unparalleled businesses acumen. In a spirit of acknowledging entrepreneurs capabilities of innovating, introducing new technologies, generating new products and services. Empresario bestows the “Most Inspiring Entrepreneur of the Year” Award. The recipient of the award, Swapnil Jain left the audience with a unique perspective of his experience and challenges.

“I was able to succeed because I never knew the challenges were too big for me to solve alone.” - Swapnil Jain (Founder - Ather Energy).

XVI) MSME Entrepreneurship Conclave

E-Cell NITIE, Mumbai successfully organised the MSME Entrepreneurship Conclave in collaboration with Center for Global Competitiveness of MSMEs (CGCM) on 18th October 2019 as part of NITIE’s annual mega event Avaran.

Topic for this year’s panel discussion was “Fintech reinventing MSMEs in India”.

We were honoured to have below guests as our panelists:

- Mr. Vinod Kumar, President India SME Forum
- Mr. Nelson D’Souza, CFO Origa Leasing



- Mr. Ashish Patel, Partner, Plasma Engineering
- Dr. Vinish Kathuria, Professor, IIT Bombay

Classical Music and Culture among youth organized a folk music concert by Shri Nandesh Umap, Marathi Folk singer on 12 November 2019.

XVII) Other Events in AVARTAN 2019

- My Story
- Navkriti
- Brain Child
- Freshers Evening
- Headbangerz
- Sparsh
- Lakshawiz
- On the Job Achiever's contest
- Strategem
- Empower
- Vivad
- NITIE Youth Parliament
- Proicere
- Beat the Street

7. **SPICMACAY Folk music concert by Shri Nandesh Umap (12 Nov 2019)-** NITIE chapter of the Society for the promotion of Indian





8. Athletic meet (24 & 25 January 2020)

Sports Committee, NITIE conducted an **Athletics Meet** in the campus for all the students on the 24th and 25th of January 2020. The event was conducted for the second time in NITIE and saw active participation from students and fellows.



The meet comprised of **12 activities**:

| | |
|-----|------------------------|
| 1. | Sprint (100m) - Male |
| 2. | Sprint (100m) - Female |
| 3. | Sprint (200m) - Male |
| 4. | Sprint (200m) - Female |
| 5. | Sprint (400m) - Male |
| 6. | Relay (4*100m) - 4M |
| 7. | Relay (4*100m) - 3M+1F |
| 8. | Shotput - Male |
| 9. | Shotput - Female |
| 10. | Javelin Throw - Male |
| 11. | Discus Throw - Male |
| 12. | Discus Throw - Female |

All the activities were conducted in the Sports Ground wherein the tracks and fields were prepared. **Top 3 winners** in each activity were awarded with medals and certificates in the valedictory function following the flag hoisting ceremony on Republic Day.

9. Lohri (13 Jan 2020) The Cultural Committee, NITIE organized and celebrated Lohri festival on 13th January, 2020. The ancient significance of the festival is both as a winter crop season celebration and a remembrance of the Sun deity. Lohri songs mention the



10. Republic day Celebration (26 January 2020) On the occasion of 71st Republic Day, the Sports Committee in NITIE arranged a campus marathon to celebrate zeal and patriotism. The Marathon was organized on



Indian Sun God asking for heat and thanking him for his return. The crowd gathering and batch's response on this auspicious festival was overwhelming. We indeed had a great time dancing around the bonfire.





the morning of **Republic Day** in NITIE campus and had an active participation by the faculty, students and staff members. It began with an inauguration ceremony by Prof. Hema Date, Dean, Student Affairs. This year saw **9 different categories in the Marathon**. Republic day witnessed quite a large participation (Around 100+) for the 3.5km run and turned out to be a successful celebration filled with patriotism and energy.

On the auspicious morning of the 26th January, 2020, NITIE celebrated the 71st Republic Day in the college premises. It was a matter of great pride for all of us. The lawns were decked up in tricolour balloons, ribbons and flowers. Paper Flags and badges were distributed amongst all present there, followed by the National Anthem. Following that, Dean Student Affairs, Dean Academics, Professors,



students, teaching and non-teaching staff recited the Preamble of the Constitution of India. Cultural performances by the students, where patriotic songs like “Vande Mataram”, were sung and enjoyed by the applauding crowd. The Prize Distribution ceremony, honouring the winners of the Athletics Meet and Marathon, followed the performances. The program ended with the message to create a great Nation through collective efforts from all individuals.



- 11. **BOARDROOM DISCUSSION (05/02/2020)**
Samiksha organized a boardroom discussion on “Uber Eats acquisition by Zomato” on **05/02/2020**. Through this discussion, participants tried to emulate the actual discussion that would have taken place among the Board of Directors of Zomato. Different



domains of Operations, Marketing, Strategy, Finance, and HR were represented by different students, and the deal was analyzed by considering the present market scenario, different implications on the food-tech sector and its prospects for the future. It helped the participants and audience to visualize the deal comprehensively. Board room members comprised of students Kaustubh Kulkarni, Shubham Jain, Anmol Tamrakar, Shubham Mallik, Anshul Suryavanshi, Manas Rupainwar, and Himansu Sekhar Satapathy.

Post the boardroom discussion- an online quiz was conducted that involved participation from all boardroom members and students from the audience. The Quiz comprised of questions related to much talked about Mergers and Acquisitions in different industries at that time. Top 3 winners- were awarded e-certificates.

12. **B-Cube (09 Feb 2020)** Team Impact (Admission Committee) organized the 11th edition of B-Cube on 09 Feb 2020 in collaboration with Career Anna and Bolo Indya. Meant to impart skills imperative to crack the B-school interviews and experience the B-school life for a day, the event saw active participation from candidates with diverse domains of Industries. Opening with remarks from Prof Anju Singh, Professor-in-Charge, Admission Committee, the event continued with addresses from Prof Manoj Kumar Tiwari, Director, NITIE, Prof Hema Date, Dean,

13. **Ataria Jam 2020 (12 Feb 2020)** The senior students have always guided the Junior Batches through difficult time of SIP. They have been the ray of hope in a dark cave, and nothing less than elder brothers and sisters. To celebrate this special bond between Juniors and Seniors, Cultural committee, NITIE organized "Ataria Jam" on 12th Feb, 2020.



This event was a tribute to passing out senior students and seniors reciprocated beautifully by participating in full swing. We received enthusiastic participation from juniors and seniors. The night was full of music, poems, dance, laughter and tears of joy. That's how we bid our farewell to seniors.

14. NITIE Premier League- 10.0 (15 Feb - 22 Feb 2020) The month long cricketing extravaganza kicked off with the inter section cricket tournament, CRICKSHETRA, where the players got a chance not only to defend the pride of their respective sections, but also to showcase their talents on the field prior to the auctions. CRICKSHETRA was conducted from 30th Jan to 2nd February 2019 and it was **Fellow student's team** who emerged the winners in a tightly fought final against **Section F Senior**.



TEAM & PLAYER AUCTIONS Post the exciting event CRICKSHETRA , NPL extravaganza moved onto auctions in grand style, with the team auctions happening first on 6th February. 7 Groups of owners competed against each other for grabbing the 6 teams up for sale. Out of the six teams, 2

were retained from last year and 4 were wildcard entries. The owners employed their well thought out strategies for procuring the team at the lowest price.

OPENING CEREMONY All eyes moved to the New Auditorium on 15th February 2020 for the opening ceremony and inaugural ceremony of NPL 10.0 and to mark this occasion one of the eminent cricket personality Mr. Sandeep Patil inaugurated the event. In his speech Mr. Patil addressed the student gathering regarding how to maintain focus and passion towards achieving their goal. He shared an many inspiring instances of his cricket career with the audience.

He also shared interested dressing room stories which reflected how team bonding and people management is important in an individual life. At the function, the NPL trophy was unveiled and the captains of all six team Participating in tournament with great anticipation, all the members and owners flocked to the venue to witness the inauguration. Prof. Manoj Kumar Tiwari, Director, NITIE extended a heartfelt thanks to Mr. Patil for gracing the occasion and motivating the student. Mr. Patil ensured that he would be giving all his support to NITIE regarding sports in future.





RESULTS The top 4 teams that qualified for the playoffs were: Siachen Soldiers, Mumbai Marathas, North Central United & Royal Ayodhya XI. The playoff saw some intense matches after which Siachen Soldiers & Royal Ayodhya XI made it to the finals.

The final was one for the ages. Royal Ayodhya XI posted a competitive total. Chased quite well in the tournament with one of the opening batsman Hari Shankar hitting century &

remaining not out at 118 of 38 balls. The crowd were in awe of such hitting from the Siachen Soldiers batsman. The winning team **Siachen Soldiers** was awarded with the cash prize of Rs. 85,000 and runner-up Royal Ayodhya XI with an amount of Rs. 70,000 and total cash prize amounted to **Rs. 2.25 lakhs**. This provided a befitting end to such a grand event.





15. Enactus (15 February 2020) Mentorship workshop on social entrepreneurship and innovation.

Enactus NITIE organized Social Incubation Workshop at NITIE in association with Enactus India on 15 February 2020. It was attended by 70 students of Enactus community from 10 Business Schools and Engineering colleges across West region of India. Sessions were conducted by Prof Devdip Purkayastha (President, Enactus India and Adjunct Professor, IIT Bombay), Prof Raj Jaswa (Serial Entrepreneur and Visiting Professor, IIT Bombay) and Ms Shmita Ramkumar (Vice President and Chief Programme officer, Enactus India). They guided the students on how to create a social venture with valuable insights on social entrepreneurship and how to scale the projects to become a flourishing business.

Prof VB Khanapuri, Professor and Dean(SRIC), NITIE welcomed the Enactus India Team and interacted with the students teams during the proceedings of day and provided insights to the teams on their respective projects.

16. SAMIKSHA (22 Feb 2020) PANEL DISCUSSION Samiksha organized a panel discussion on 22/02/2020 on the topic “**Supply Chain 4.0 - Overcoming challenges in supply chain digitization**”. The event was graced by Prof. Manoj Kumar Tiwari, Director and moderated by Prof Ashok Pundir, Professor Operations Area. The event was graced by the presence of following esteemed panelists:

1. Mr. Akash Srivastava, Partner, Deloitte India
2. Dr. Rakesh Paras Singh, Chairman, Institute of Supply Chain Management
3. Mr. Venkatesh Seshadri, Head- Supply Chain Consulting, Confederation of Indian Industry
4. Mr. Murugan Pugalenti, Director, J&J Consumer
5. Mr. Ranjan Sharma, CIO, Head SCM BestSeller India
6. **Mr. Raghavan Santhanam, Ex- Country Head, Standard Chartered Bank**





The event was guided by Prof. Sachin Kamble, Professor in Charge, Samiksha, Associate Professor of Operations and Supply Chain, and was marked by the presence of **Prof. Hema Date**, Dean Student Affairs and Prof. Padmanav Acharya, Dean Academics. Prof. Manoj Kumar Tiwari, Director delivered a keynote address highlighting the importance of digital transformation, major challenges, and opportunities for different sectors.

17. Marksfest (23 Feb 2020) Marketing Interest Group, MIG at NITIE organized its corporate Panel discussion on **“Levering Customer Experience Through Mar Tech”**. The event was graced by Prof Hema Date, Dean, Student Affairs. She addressed the students with a keynote highlighting the importance of Technology in marketing. The other esteemed panelist were:-

1. Mr Vishnu Subhash, Director PwC
2. Dr Kushal Sanghavi, Business Head, Reliance Entertainment and Digital
3. Ms Jacqueline P Mundkur, Sr Advisor and Customer Engagement, Transaction Square
4. Mr Shiv Tiwary, Chief Marketing Officer, Reliance Nippon Life Insurance
5. Mr Nikhil S Gurjar, President, Consulting Connoisseurs

6. Mr Sharjeel Siddiqui, Chief Marketing Officer, Netsoftmate

7. Prof Neeraj Pandey, Associate Professor, NITIE, Marketing Management

Mark-Sense: Live Case Study Competition :

This Marketing Case Study Competition was based on live challenges faced by industries. It aimed at testing the ability of participants to apply the marketing concepts to practical situations through an exhaustive business case, students provided solutions to the problems currently faced by company/ industry. Competition was open to all B-school students and consisted of 2 Rounds.

Market Rook: Annual marketing magazine :

This year Market Rook took up latest trends in marketing and sales function. The magazine was distributed across 100+ B-schools and articles were collected through a Pan India article writing competition.

18. SAMIKSHA (29 Feb 2020) Samiksha organized a panel discussion on 29/02/2020 on the topic “Shift to a Circular Economy: A changing view on value creation in the supply chains”. The event marked the presence of Prof. Manoj Kumar Tiwari, Director, NITIE and moderated by Prof Ashok Pundir, Professor and Former Dean Student Affairs, NITIE. The event was graced by the presence of following esteemed panelists:





1. Dr. Rakesh Sinha, Founder and CEO, Reflexive Supply Chain Solutions
2. Mr. Balaji Reddipalli, Group Head – Supply Chain and IT, Borosil Group
3. Mr. Ponraj Periswami, Head SCM, Wahl Clipper Corporation
4. Mr. Ashish Bansal, Head – India Procurement, Colgate-Palmolive India Ltd.
5. Mr. Umesh Madhyan, AVP-SC Strategy & Transformation, HCCB

Launch of Newsletter and Pharma Sector Analysis

Samiksha launched its newsletter and sectoral analysis of the pharma industry post the panel discussion. The newsletter 2020 by Samiksha provides insights from different industry



verticals about essential supply chain management components, emerging trends, strategies and new practices being adopted via/thorough analysis of Pharma Sector industries 2020. Samiksha tried to delve deeper into the nitty-gritties of its supply chain, the vision of market leaders and what prospects the sector holds for the future.

The event was then addressed by Prof. Manoj Tiwari, Director, NITIE. He delivered a keynote address where he shared his notions about the need for collaborative approaches and new business opportunities while adopting a circular economic framework.

The event was guided by Prof. Sachin Kamble, Professor in Charge, Samiksha, Associate Professor of operations and supply chain, NITIE and was attended by Prof. Hema Date, Dean Student Affairs.

19. Post budget Analysis (28 February 2020)

Team Street, The Finance Forum of NITIE, organised the 6th edition of “Post Budget Analysis” on 28th February 2020. The event provided an opportunity for students to gain meaningful and practical insights about the Union Budget for the fiscal year 2020-2021, along with the prospect of interacting with senior executives from the finance domain. This year, we hosted the following as our esteemed Speakers:



- (i). **Dr. Sachchidananda Shukla**, Chief Economist, Mahindra Group; Chairperson of Banking, Finance and Economic Activity of the Bombay Chambers of Commerce and Industry(BCCI); Member in Panel of Economists, NITI Aayog; Member of ASSOCHAM Shadow Monetary Policy Committee.
- (ii). **Mr. Mayur R. Dwivedi**, Executive Vice President and Head of Strategy at Religare Group, Former Senior President and Head of Corporate Banking, Yes Bank,
- (iii). **Mr. Hersh Shah**, SIRM, Promoter and CEO of Gleco, India Affiliate Partner of Institute of Risk Management, UK, Member of Institute of Chartered Accountants, Founder and Former Head of TIVikas – a micro-finance NBFC at The Investment Trust of India.
- (iv). **Mr. Ashok Vashisht**, Finance Controller/ Regional CFO at Essel Propack Limited, Global Finance Professional Fellow Member, Chartered Institute of Management Accountants, Fellow Member, Institute of Cost Accountants of India, Fellow Member, CPA Australia.

The Panel Discussion was led by **Dr. Aditi Chaubal**, Associate Professor of Economics, IIT Bombay. The event was also graced by the presence of Professor Hema Date, Dean Student Affairs and Professor Mainak Mazumdar, Asst.Professor of Economics.

20. Farewell to 2018-20 Batch (03 March 2020)

The end of a term marked a very important stage in the lives of postgraduates who stepped into NITIE two years ago with a dream to achieve and explore their potentials. NITIE bid a warm farewell to the final year 2018-2020 batches. The farewell was organized by cultural committee for the outgoing 2018-2020



batch on March 3, 2020. A colourful event and moments to relive the good memories they had of the time spent with their companions and teachers at NITIE. A rocking performance from renowned band was organized followed by a video compiling old memories of the seniors at NITIE, gifts and great food were all the ingredients of the farewell.



21. NITIE Futsal Championship (02 March to 6th March 2020) The Sports Committee in NITIE organized NITIE Futsal Championship in the campus from 2nd to 6th of March 2020. This year, NFC launched its second edition. The conduction of NFC 2.0 had following objectives:

1. To portray and encourage football talent of students.
2. To enhance comprehension among students regarding applications of managerial skills.
3. To build harmony and cooperation among student community.

This year, 6 teams participated in NFC. A team could be owned by maximum 1 playing and 2 non-playing owners. The 6 teams that were registered under NFC 2.0 were –



1. Northern Knights FC
2. Kerala Tuskers FC
3. Madras Mariyans
4. Jaipur Jaguars
5. Wasseypur FC
6. SFC बम्बई

The winning team and runners up were awarded with cash prizes and a trophy at the closing ceremony held at the Sports Ground by the hands of Prof. Rauf Iqbal.

22. Sustainability & You (Safety Week- 02 March 2020) On the eve of Safety Week, SAY has organized a Corporate Panel Discussion. The discussion was themed on the topic of: **Sustainability Reporting**

Following were the Industry Leaders, who enlightened the minds of students and grace this event with their presence:

Ashwini Mavinkurve, Sr. Manager Corporate Sustainability, TATA Motors

Richa Pant, CSR and Sustainability Head, L&T Finances

Ruchi Birla, Principal EHS Specialist, Medtronic

Priyanka Mathur, Lead, Corporate Reporting Consortium, CII-ITC Centre of Excellence for Sustainable Development.



The discussion was moderated by **Ms. Ruchi Birla**, an **Alumnus of NITIE (ISEM-09)**. The session has provided a brief overview on the intricacies of Sustainability Reporting, and it's growing significance aligned with the current Organizational and Consumer needs.

23. Mantrana 9.0 (Consul' Live) - NITIE Students' Consulting Club conducted its annual event Mantrana 9.0 which had CONSUL'LIVE - Case study competition as one of its events. This time case was provided by WebXpress and was based on the problem of supply chain. It had an attractive cash prize of Rs 30,000 for grabs. Continuing with the legacy of past Mantrana events, this year also

witnessed a participation of 120+ teams from top B-Schools of India. All the registered teams had access to the case. Registered teams had to provide their solution to the given case study by WebXpress in PowerPoint presentation format. The last round was held on 6th March 2020 which saw 6 teams from NITIE, IIM K, NMIMS, SJMSOM and JBIMS competing in front of our esteemed jury members, Dr. Ranjan Chaudhuri – NITIE, Mr. Akshay Sawant, Head – Projects, Mr. Shams Nagaonkar, Head – Projects, Mr. Rahul Malkani, Design Head - Platforms from WebXpress. The joint winners of CONSUL'LIVE, 2020 were Black Mamba (NITIE Mumbai) and Team Ruhani (IIM K).





PLACEMENT

Summer Internship

Total of 491 students out of 491 students of PGDIE, PGDIM, PGDISEM, PGDMM & PGDPM (Class of 2021) have been placed in 134 organizations across the country for 8-weeks Summer Internship from 27 March 2020 to 03 June 2020. However, due to COVID-19 pandemic situation and extended lockdown period total of 05 recruiter have cancelled their offer of summer Internship. The affected 15 students were being offered from other recruiters and also the Institute projects have been offered to them. Also, the Internship period was then extended upto 28 June 2020.

Final Placements

In the mission of creating tomorrow's leaders for the country, we at NITIE are extremely focused on providing quality education alongwith developing overall personality of our students. The aim is to create well balanced individuals who would be the change agents of future yet carry forward the legacy of NITIE. Over the years, our rich blend of students has managed to excel in the industry and this belief has been reinforced by the consistent faith of recruiters in offering our students diverse and key roles in their organisation.

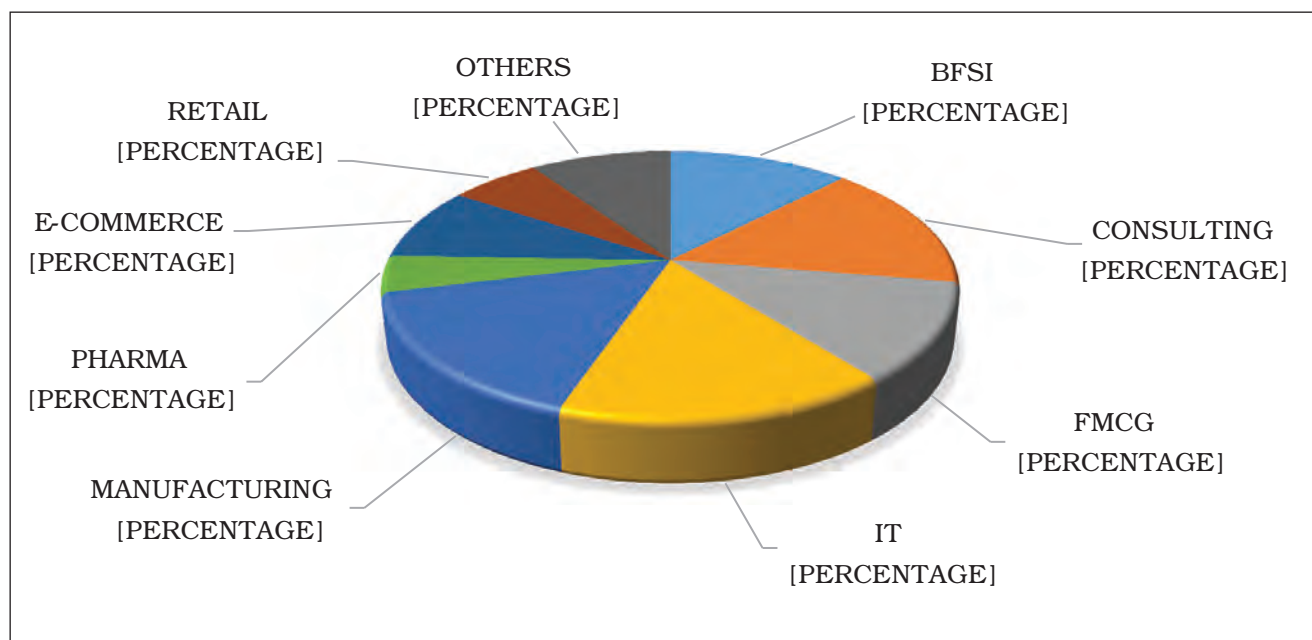
REPORT ON FINAL PLACEMENTS OF PG DIPLOMA IN INDUSTRIAL ENGINEERING (PGDIE-48), INDUSTRIAL MANAGEMENT (PGDIM-25), INDUSTRIAL SAFETY & ENVIRONMENTAL MANAGEMENT (PGDISEM - 18), POST GRADUATE DIPLOMA IN MANUFACTURING MANAGEMENT (PGDMM-05) AND PROJECT MANAGEMENT (PGDPM -05) BATCHES - YEAR 2019-20

| Particulars | | Year : 2019-20 | | | | | |
|-------------|--|----------------|------------|-----------|-----------|-----------|------------|
| 1 | No of companies | 125 | | | | | |
| 2 | No of students placed | PGDIE | PGDIM | PGDISEM | PGDMM | PGDPM | Total |
| | PPO | 35 | 83 | 3 | 6 | 3 | 130 |
| | LRP | 17 | 90 | 6 | 1 | 4 | 118 |
| | CRP | 50 | 62 | 5 | 21 | 14 | 152 |
| | Domestic | 102 | 235 | 14 | 28 | 21 | 400 |
| | Foreign | 5 | 4 | 0 | 0 | 0 | 9 |
| | Total Placed | 107 | 239 | 14 | 28 | 21 | 409 |
| 3 | No of students yet to be placed | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | No. of Students opted for DPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | No of students opted out of placements | 0 | 3 | 1 | 0 | 1 | 5 |
| 6 | Total number of students in the batch | 107 | 242 | 15 | 28 | 22 | 414 |



2. Sector-wise Placements of Students (2018-2020 Batch)

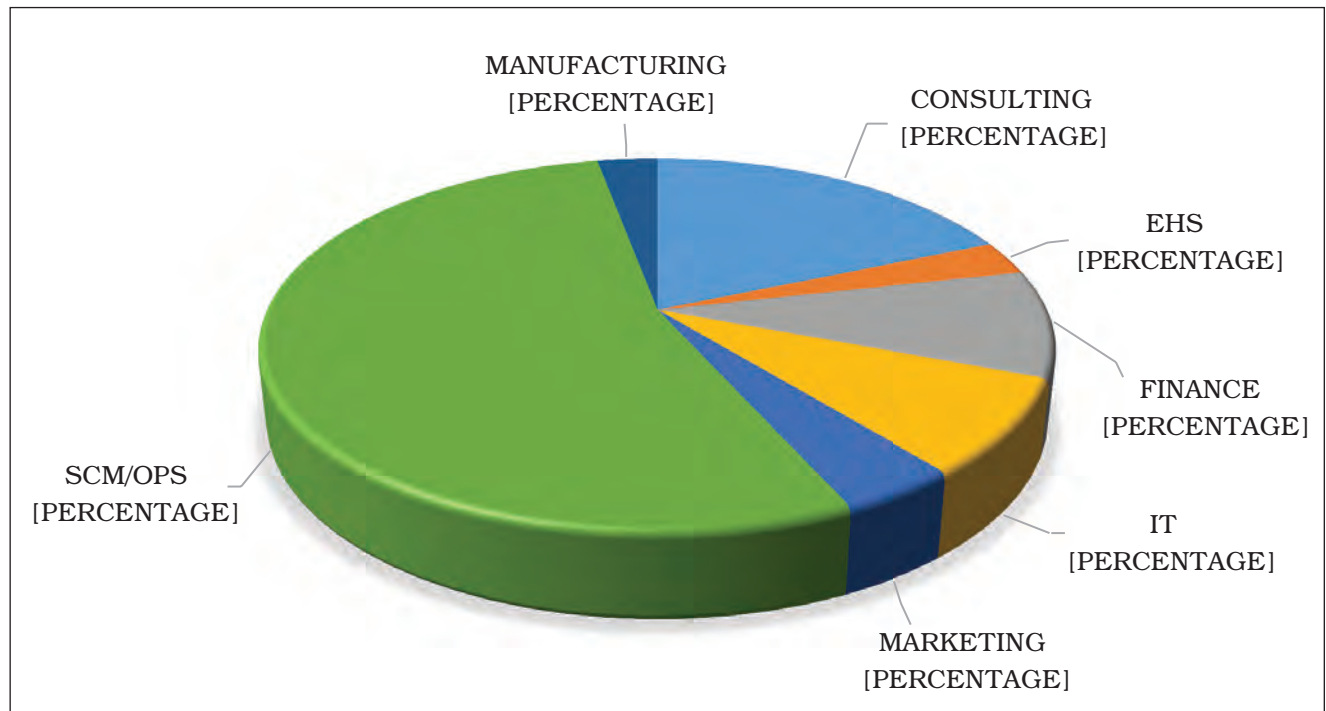
| Sector | PGDIE | PGDIM | PGDISEM | PGDMM | PGDPM | Total |
|-------------------------|------------|------------|-----------|-----------|-----------|------------|
| Banking and Finance | 9 | 36 | 0 | 2 | 3 | 50 |
| Consulting | 14 | 45 | 2 | 1 | 1 | 63 |
| FMCG | 21 | 26 | 1 | 0 | 0 | 48 |
| IT | 15 | 36 | 2 | 9 | 3 | 65 |
| Manufacturing / Process | 25 | 26 | 4 | 7 | 3 | 65 |
| Pharma | 0 | 13 | 1 | 3 | 1 | 18 |
| E-commerce | 4 | 28 | 0 | 0 | 4 | 36 |
| Retail | 9 | 9 | 1 | 4 | 2 | 25 |
| Others | 10 | 20 | 3 | 2 | 4 | 39 |
| Total | 107 | 239 | 14 | 28 | 21 | 409 |





3. Function wise Placements of Students (2018-2020 Batch)

| Function | IE | IM | ISEM | MM | PM | Total |
|---------------------------|------------|------------|-----------|-----------|-----------|------------|
| Consulting | 14 | 57 | 0 | 3 | 2 | 76 |
| EHS | 0 | 0 | 12 | 0 | 0 | 12 |
| Finance | 5 | 29 | 0 | 1 | 3 | 38 |
| IT & ITES | 3 | 26 | 0 | 4 | 1 | 34 |
| Sales & Marketing | 7 | 8 | 0 | 1 | 1 | 17 |
| Supply Chain / Operations | 75 | 115 | 2 | 16 | 12 | 220 |
| Manufacturing | 3 | 4 | 0 | 3 | 2 | 12 |
| Total | 107 | 239 | 14 | 28 | 21 | 409 |



PHYSICAL FACILITIES AND INFRASTRUCTURE



Annual Report 2019-20

**ESTATE**

The Estate Section carries out the maintenance and repairs to office and residential buildings of the campus. The Institute is in need additional capacity for accommodation students, faculty and also renovation of its existing management development building (Pragati Vihar). Besides Institute's is also in need of strenghtening security of the campus with a compound wall and also a Bungalow for Director. Necessary measures have been initiated and estimates have been worked out with the help of CPWD for carrying out these important projects.

The Institute has received approval from MHRD vide letter No. F. No.18-1/2019-TS.VII dated 25th Otober, 2019 for its proposal regarding the requirement of funds for capital works through loan from HEFA for following projects:

| Sl. No. | Project | Cost (Rs. in Cr.) |
|---------|--|-------------------|
| 1. | Boundary Wall Phase-II | 10.00 |
| 2. | Taylor Hall - Phase II | 22.00 |
| 3. | Pragati Vihar - Renovation | 2.50 |
| 4. | Construction of Director's Bungalow | 1.50 |
| 5. | Construction of Type V-B/Type VI-A Quarters | 45.00 |
| 6. | Multipurpose Hall & Students Activity Centre | 14.50 |
| | Total | 95.50 |

The Institute has applied for the loan which is under process with HEFA authorities.

The various maintenance works undertaken by section of value of more than 10 lakhs is given below:

| Sr. No. | Name of Work | Agency | Amount |
|---------|---|---|----------------|
| 1. | Non-comprehensive annual maintenance contract for firefighting system, addressable fire alarm system and public address system at Academic cum Library Building and Taylor Hall Building. | M/s Target Safety Protection and Services | 22,36,920.00 |
| 2. | Comprehensive annual maintenance contract including spare parts and labour (with oil and refrigerant) of HVAC plant (high & low side) at ALB. | M/s Daikin Air Conditioning India Pvt. Ltd. | 11,26,580.00 |
| 3. | Supply of casual labourers for various activities in NITIE campus. | M/s Moosa Services Company | 1,98,74,827.00 |
| 4. | Proposed interior work at rear wing of 6th floor ALB for NITIE at Powai Mumbai | M/s Bhagyasri Design Consultants | 17,30,407.50 |



| Sr. No. | Name of Work | Agency | Amount |
|---------|--|--|--------------|
| 5. | Internal/external painting to campus buildings of NITIE | M/s Nityanand Painting Contractor | 58,38,498.00 |
| 6. | Replacement of main doors of 168 rooms and repairs to door frames at Gilbreth Hall | M/s Inter Art | 14,43,336.00 |
| 7. | A/A of ground floor and basement of Anand Vihar to convert into Director's residence | M/s Panchratna Decorators | 17,16,093.00 |
| 8. | Repairs and renovation of dispensary | M/s Inter Art | 10,02,574.00 |
| 9. | Patch repairs to campus road | M/s G R Engineering and Infrastructure | 12,33,836.00 |
| 10. | Internal and external painting and patch plaster repairing of Godavari building | M/s Panchratna Decorators | 21,77,123.00 |



NITIE DISPENSARY

The National Institute of Industrial Engineering's (NITIE's) Dispensary is well managed with well qualified Paramedical and Medical staff members under the control and guidance of **Medical Officer**. The dispensary is the backbone of the Health of all NITIE community. NITIE Dispensary is open every day for 12 hours morning 9.00 am to 9.00 pm. The daily patient attendance is approximately 70-75 numbers. NITIE Dispensary provides services to the all PGP and PhD. Students, including all staff and faculty members and their families.

The NITIE Dispensary has **paramedical staff Nurse, Compounder** and **Residential Medical officer (RMO)** for **24hours** and to attend emergencies. Day to Day basis medicines are dispensed including Intravenous injectables. Service has been provided since last 30 years without any interruption and with dedication.

The Following visiting Doctors' were available in Dispensary during the year:

- 1) **Ophthalmologist:** One consulting Ophthalmologist visits NITIE Dispensary once in a week for 2 hours and take care of all the patients.
- 2) **Gynaecologist:** One Gynaecologist consulting Doctor visits NITIE Dispensary once in a week to take care of ladies patients.
- 3) **Paediatrics:** One Paediatrics consulting Doctor visits NITIE Dispensary twice a week for two hours.
- 4) **Physician:** Physician consulting Doctor visits NITIE Dispensary five days a week for two hours.
- 5) **Dentist:** One Dental Consulting Doctor visits NITIE Dispensary five days a week for two hours. NITIE Community is been beneficiary of these services provided by NITIE Dispensary.
- 6) **Homeopathy:** Presently three hours twice a week homeopathy medicines and consultation is being made available for NITIE Community by qualified Doctors.
- 7) **Orthopaedic:** Presently one consulting orthopaedic doctor visit NITIE Dispensary for two hours in a week.
- 8) **Counselor:** In order to help with the academic pressure and hectic work schedule the service of one qualified counsellor has been arranged in NITIE Dispensary. This service is available twice a week for two hours.
- 9) **Physiotherapist:** Physiotherapist consultant is always available from Monday to Friday for two hours in NITIE Dispensary to take care of NITIE Student and Employee community.
- 10) **Ambulance Service:** One full fledge ready Ambulance has been hired on contract and made available for 24X7 to NITIE Community.



SECURITY & TRANSPORT

NITIE has 3 security guards (Watchman) at present; further NITIE has outsourced the security work to Maharashtra State Security Corporation (MSSC). NITIE has 63 acres land and its surrounding has been dwelled by encroached dwellers which is challenging job to security personnel. The encroachers, time and again are involved in extension of construction with the present occupied structure which need high vigilance and prevention. Whenever such incidents take place the security personnel deployed in NITIE premises take up the matter with BMC and Powai Police Station for legal course.

The security personnel deployed in NITIE premises patrols 24x7 including land of NITIE. At present

there are 11 designated posts spread across NITIE Campus.

NITIE Transport Section has 1 Bus which is off road with effect from 01 May 2019 & which was earlier providing transport facility to our students as and when required to visit the industries.

As and when the need arises, the vehicles from travel agencies are also hired for providing transport facility to the students.

In addition, the Institute has one Corolla car which is used for official travel of the Director of the institute.

Superintendent (Security & Transport), Dy. Registrar (Administration) and Registrar are looking after the work for smooth functioning.



RIGHT TO INFORMATION ACT

Right to Information (RTI) is an Act of the Indian Parliament enforced from the year 2005, to provide for a practical regime for citizens to secure access to information under the control of public authorities. This aims to promote transparency and accountability in the working of every public authority.

The basic object of the Right to Information Act is to empower the citizens, to promote transparency and accountability in the working of the Government, to contain corruption, and to enhance people's participation in democratic process thereby making our democracy work for the people in a real sense. The Act is a big step towards making the citizens informed about the activities of the Government.

As per the mandate of RTI act, mandatory disclosure has been uploaded in the Institute

website by computerizing the records for the purpose of wide spread relay so that any information sought by the public can be processed quickly aided by the information categorization.

Director, NITIE is the Appellate Authority and Shri Anand Naidu, Manager Computer Centre has been designated as Central Public Information Officer to deal with the request of information and also to assist the persons seeking information. The Heads of the Departments/Sections are designated as Public Information Officers. The reply to RTI seekers is provided by the CPIOs within the prescribed time-limit.

Total No. of 3 RTI requests and 1 Appeal was received during the year 2019, and replies were provided to the RTI applicants, as per the guidelines under the RTI Act.

VISITS OF FOREIGN EXPERTS

a. Foreign Experts visits to NITIE



Annual Report 2019-20

**FOREIGN EXPERTS VISITS TO NITIE**

| | | |
|---|---------------------------------|--|
|  | Prof. Alok Choudhary | Department of Supply Chain Management, Loughborough University, UK |
|  | Prof. Mukesh Kumar | Operations Management, IFM – University of Cambridge, UK |
|  | Prof. Satish Bukkapatnam | Industrial and Systems Engineering, Texas A&M University, USA |
|  | Prof. Bhavik Bakshi | Chemical and Biomolecular Engineering, Ohio University, USA |
|  | Dr. Urmila Diwekar | President, Stochastic Research Technologies LLC, USA |



| | | |
|---|---------------------------------|--|
|  | Prof. Peruvemba S Ravi | Operations and Decision Sciences, Wilfrid Laurier University, Canada |
|  | Prof. Rob A Zuidwijk | Global Supply Chains and Ports, Rotterdam School of Management, The Netherlands |
|  | Prof. Ashesh Kumar Sinha | Industrial and Manufacturing Systems Engineering, Kansas State University, USA |
|  | Prof. Subhash Sarin | Industrial and Systems Engineering, Virginia Polytechnic Institute and State University, USA |
|  | Prof. Rahul Rai | Mechanical & Aerospace Engineering at University at Buffalo, USA |



| | | |
|--|-----------------------------------|---|
|  | <p>Mr. Darryl Day</p> | <p>MD, International Centre of Excellence in Water Resources Management, Australia</p> |
|  | <p>Dr. Marco Andreozzi</p> | <p>PegasoCanton, Italy</p> |
|  | <p>Prof. Vithala Rao</p> | <p>Marketing and Quantitative Methods, Samuel Curtis Johnson Graduate School of Management, Cornell University, USA</p> |

NITIE ALUMNI ASSOCIATION



Annual Report 2019-20

**NITIE ALUMNI ASSOCIATION (NAA)****A. Annual General Body Meeting:**

NITIE Alumni Association organized the 35th Annual General Body Meeting on 2nd November, 2019, at NITIE, Mumbai. The members discussed the activities carried out by NAA and shared their views on the same. Annual Statement of Account for the year 2018-2019 was passed by the members.

Following is the list of Executive Committee Members for year 2019-2020

| | |
|---------------------|--|
| President | : Prof. Dr. Manoj Kumar Tiwari, NITIE. |
| Chairman | : Mr. Dev Bhattacharya |
| Hon. Secretary | : Prof. Sumi Jha |
| Hon. Treasurer | : Prof. K.S. Ranjani |
| Vice-Chairman (PGP) | : Mr. Nikhil Gurjar |
| Vice-Chairman (MDP) | : Mr. P.R.Kondekar |

Zonal Representative:

| | |
|-----------------------|---|
| West Zone (PGP) | : West Zone (MDP): Lt.Co.(R) Rameshwar Naik |
| East Zone (PGP) | : Mr. Deb Kumar Guha |
| North Zone (PGP) | : Mr.Siddharth Tripathi |
| South Zone (PGP) | : Mr.Paresh Masade |
| Fellow Representative | : Prof. Nigel D'Silva |

The Annual General Body Meeting was attended by 64 members of NAA, NITIE Faculty members and students representatives. Sansmaran was attended by 400 members.

B. Alumni Activities:

1. Alumni Felicitation:

- a) Distinguished Alumnus Awards were presented to the outstanding alumni - Mr. Sushil Kumar Rathi and AVSM Rajiv Gandotra during Sansmaran on 2nd November, 2019. Similarly, the Promising Young Alumnus Award was presented to Ms. Vaishali Bansal and Mr. Mandeep Manocha by NAA.
- b) Following PGP, Fellowship and MDP batches were felicitated during Sansmaran, on 2nd November 2019 -
 - a) 40 years of completion (PGDIE 7th Batch)
 - b) 25 years of completion (PGDIE 23rd Batch, PGDIM 1st Batch) – Silver Jubilee Batches
 - c) 10 years of completion
 - (i) PGDIE – 37
 - (ii) PGDIM – 14
 - (iii) PGDISEM – 7
 - (iv) Fellow Students – Completion year 2009
 - (v) MDP Participants – Completion year 2009



2. Faculty Award/Student Rangan & Madala Scholarship, were presented on 2nd November, during Sansmaran' 2019:



Best faculty award for special contribution to society / student community sponsored by Mr. Dev Bhattacharya, awarded by Dr. Ganesh Natarajan to Prof. Utpal Chattopadhyay, and presided by Dr. D.K. Srivastava, Director Incharge, NITIE.



Award sponsored by Mr. Dev Bhattacharya to Prof. Sumi Jha for her consistent efforts towards new initiatives for betterment of NITIE Alumni Association, awarded by Dr. Ganesh Natarajan and presided by Dr. D.K. Srivastava, Director Incharge, NITIE.

Rangan Scholarship award sponsored by Mr. Ashwin Rangan was given to following students:

1. Ms. Laveena Rastogi
2. Ms. Shaily Singh

Madala Scholarship award sponsored by Mr. Srinu Madala was given to following students:

1. Mr. Bhargav Bhatt
2. Mr. Sarthak Singh

3. Website and mobile application were launched during Sansmaran 2019. The website is up to date with latest events held within the campus and achievements of our alumni as well. A new feature to accept donations for the alma mater is now active on the portal.
4. NAA organized Regional Alumni Meets at cities like Bangalore, Delhi, Mumbai, Kolkata, Pune, Chennai and Hyderabad during April-May 2019. Apart from within India, RAM has also been organized in the US, Singapore and Dubai. As a rebranding initiative for Regional Alumni Meet, NAA newly named regional meets as 'Anusmriti'.
5. Involving Alumni in Institute administration as members of Board of Governor and Academic Council of NITIE.
6. NAA organized periodical guest lectures as alumni and interaction with students to develop their knowledge base.



7. Institute involved various alumni to be part of admission process of PGDIE/IM/ISEM/MM/PM Course. This was initiated to get industry perspective at the time of students' admission.
8. NAA organized alumni-student interaction through our engagement initiatives like Abhisanskaran, Tarang, Pre-placement guidance sessions amongst various others.
9. Prof. D.K.Srivastava, Director I/c & President NAA released "AlumNiti" the alumni magazine on 2nd November, 2019 at the Annual Meet "Sansmaran"- 2019.

Executive Committee Meeting:

NITIE Alumni Association organized Executive Committee Meetings on 2nd August, 2019 at NITIE and on 27th March, 2020 via Zoom Platform.

INSTITUTE EVENTS

- a) XXV Convocation NITIE
- b) HINDI Implementation
- c) Vigilance Awareness Week
- d) Yoga Day
- e) NITIE Cultural and Welfare Activities





XXV CONVOCATION - NITIE

On 14th September, 2019, National Institute of Industrial Engineering (NITIE) celebrated XXV Annual Convocation Ceremony. The event was graced by Shri Bishnupada Sethi, IAS, Managing Director, Odisha State Disaster Management Authority (OSDMA) Odisha, India as Chief Guest and the Guest of Honour Shri Ramanathan Ramanan, Mission Director, Atal Innovation Mission, NITI Ayog. 384 students of PGDIE-XLVII, PGDIM-XXIV, PGDISEM-XVII, PGDMM-IV and PGDPM-IV Batches have been awarded Degree/Diploma certificates and 18 students have been awarded Fellow of NITIE. The first batch of 17 (seventeen) students were awarded PGPEX-VLFM programme.



XXV Annual Convocation Ceremony – Chief Guest Shri Bishnupada Sethi, IAS, Managing Director, Odisha State Disaster Management Authority (OSDMA) Odisha, India and the Guest of Honour Shri Ramanathan Ramanan, Mission Director, Atal Innovation Mission, NITI Ayog with Prof. Sanjay G. Dhande, Chairman, Board of Governors, Prof. Dinesh K. Srivastava, Director Incharge.



XXV Annual Convocation Ceremony – Chief Guest Shri Bishnupada Sethi, IAS, Managing Director, Odisha State Disaster Management Authority (OSDMA) Odisha, India and the Guest of Honour Shri Ramanathan Ramanan, Mission Director, Atal Innovation Mission, NITI Ayog with Prof. Sanjay G. Dhande, Chairman, Board of Governors, Prof. Dinesh K. Srivastava, Director Incharge, Shri Basavaraj Swamy, Registrar, Board Members and Teaching Faculty Members of NITIE, Mumbai .

HINDI IMPLEMENTATION

OFFICIAL LANGUAGE ACTIVITIES:

1. HINDI WORKSHOP (April - June, 2019):

A one-day Hindi Workshop was organised in NITIE on 17th May, 2019. Eight Officers/ Employees of the Institute participated in the workshop. The eminent personalities working for the progress of Hindi delivered lectures on various subjects i.e. Implementation of Official Language Policy and Annual Programme; Information Technology and Hindi; Correct use of Grammar & Spelling in Hindi, Original form of Official Correspondence in Hindi,. Shri Prashant Goswami, Mrs. Shobhana Suresh, Shri Ramotar Kumawat, Mrs. Jalaja Ramachandran, Mrs. Sushma Bele, Shri Devendra Swant, Shri Prabhakar Parab and Shri Sanjay Rane were present in this workshop. Md. Aftab Alam, Hindi Officer, NITIE conducted the programme and gave vote of thanks.



Dr. Jawahar Karnavat, GM(Official Language), Bank of Baroda, Mumbai with the participants of Hindi Workshop.

2. HINDI WORKSHOP (July - September, 2019):

A one-day Hindi Workshop was organised in NITIE on 21st August, 2019. Ten Officers /

Employees of the Institute participated in the event. The eminent personalities working for the progress of Hindi delivered lectures on various subjects i.e Computer and Hindi Unicode, Official Correspondence and Practice, Grammar & Spelling in Hindi : Easy Solutions, Official Language Implementation in Govt. Offices, etc. Mrs. Bhagyashree E. Korday, Mrs. Sangita N. Jadhav, Mrs. Pratima N. Dabholkar, Ms. Sunita R.Karkera, Shri C.N. Mokal, Shri Rajesh V. Lad, Shri Ravi A. Sawant, Shri Nitin V. Devikar, Shri M. Bhoominathan and Shri Dipesh D. Rawool were present in this workshop. Md. Aftab Alam, Hindi Officer, NITIE conducted the programme and gave vote of thanks.



Dr. Anant Shrimali, Asstt. Director, Central Hindi Teaching Sub Institute, Govt. of India, Navi Mumbai delivering his lecture to the participants of Hindi Workshop.

3. HINDI WORKSHOP (October - December, 2019):

A one-day Hindi Workshop (October - December, 2019) was organised in NITIE on 15th November, 2019. Nine Officers / Employees of the Institute participated in the event. The eminent personalities working for the progress of Hindi delivered lectures on various subjects i.e Correct use of Grammar & Spelling in Hindi, Official Noting - Drafting and

Practice, Official Correspondence and Practice, Implementation of Official Language Policy and Annual Programme. Shri Liju David Mathew, Mrs. Lakshmi Narayan, Shri G.M. Kokani, Shri A. K. Vishwakarma, Mrs. Archana S. Padman, Shri V. A. Patankar, Shri Y. N. Thombare, Shri Atul M. Dhoble and Shri Dinesh G. Solanki were present in this workshop. Md. Aftab Alam, Hindi Officer, NITIE conducted the programme and gave vote of thanks.



Dr. Rajeshwar Uniyal, Deputy Director (O.L), CIFE, Mumbai with the participants of Hindi Workshop.

4. SPECIAL HINDI WORKSHOP (January - March, 2020):

A special Hindi Workshop was organised in NITIE on 20th January, 2020. Seventeen Faculty Members, Officers and Employees of the Institute (including Prof. Manoj Kumar Tiwari, Director, NITIE) participated in the event. Ms. Suniti Sharma, Director (OL), Ministry of HRD, Government of India, New Delhi delivered lectures on various subjects i.e Official Language Policy, Official Correspondence, Implementation of Annual Programme, etc. Prof. Purnima Sangle, Prof. BE Narkhede, Shri Basavaraj Swamy, Shri Anand Naidu, Mrs. Sangita Jadhav, Dr. Smruti Patel, Shri Prashant Salunkhe, Shri Prashant Goswami, Shri BT Havelikar, Mrs. Sobhana

Suresh, Ms. Sunita Karkera, Shri Ramotar Kumawat, Mrs. Jayashree Nair, Mrs. Vandana Parkhal and Shri Rakesh Kumar Shaw were present in this special Hindi Workshop. Md. Aftab Alam, Hindi Officer, NITIE conducted the programme and gave vote of thanks.



Ms. Suniti Sharma, Director(OL), Ministry of HRD, Government of India, New Delhi delivering her lecture to the participants of special Hindi Workshop.

5. OFFICIAL LANGUAGE IMPLEMENTATION COMMITTEE & HINDI CO-ORDINATION COMMITTEE MEETINGS:

During the year 2019-20, NITIE conducted Four joint meetings of "Official Language Implementation Committee" and "Hindi Co-ordination Committee" constituted for the implementation of Official Language Hindi in the Institute on 28.6.2019, 30.8.2019, 3.12.2019 and 5.3.2020. Director, NITIE and Chairperson of the Committee presided over the meetings. The Committee discussed in detail in meetings and appropriate decisions were taken regarding the implementation of Official Language Hindi in the Institute.

6. HINDI FORTNIGHT CELEBRATIONS - 2019

NITIE celebrated Hindi Fortnight from 14th September, 2019 to 30th September, 2019. Essay writing, Memory Power, Cross Word Puzzle, Questionnaire (About office), Debate, Noting Writing, Hindi Stenography, Hindi



Typing, Photo Story Writing, Self written Poetry, Legible Handwriting, Dictation Competition were organised on this occasion for Faculty Members, Officers, Staff and Student in which many participants were won the prizes.

The valedictory function was organised on 26th November, 2019 and the prizes and letters of appreciation to the winners of various Hindi competitions were distributed by the Chief guest and Director of the Institute.

At the valedictory function, Chief guest Dr. Kiran Roy, Associate Professor, Maharashtra National Law University, Powai, Mumbai congratulated the winners of the competitions of Hindi fortnight and appreciated to all for regular use of Hindi.

Prof. Manoj Kumar Tiwari, Director, NITIE appreciated the Officers and the staff of the Institute for using Hindi in their work and congratulated the winners of the competitions of Hindi Fortnight. Shri Basavaraj Swamy, Registrar, NITIE expressed his commitment to propagate the use of Official Language Hindi in the Institute and congratulated all the winners.



Prof. Manoj Kumar Tiwari, Director, NITIE delivering his speech on the occasion of Valedictory Function of Hindi Fortnight. On Dias, Dr. Kiran Roy, Chief Guest & Assoc. Professor, Maharashtra National Law University-Mumbai; Prof. Sachin Kamble, Assoc. Professor and Shri Basavaraj Swamy, Registrar, NITIE were present.

7. HINDI TRANSLATION TRAINING (Compulsory):

- (i) Shri Rakesh Kumar Shaw, Jr. Hindi Translator successfully completed Hindi Translation Training (compulsory) from 1st April to 14th May, 2019 organised by Central Bureau of Translation, Ministry of Home Affairs, Govt. of India, Belapur CBD, Navi Mumbai.
- (ii) Shri Mohd. Aftab Alam, Hindi Officer successfully completed Hindi Translation Training (compulsory) from 6th January 2020 to 14th February, 2020 organised by Central Bureau of Translation, Ministry of Home Affairs, Govt. of India, Belapur CBD, Navi Mumbai. He received “Silver Medal” in Translation Training Examination also.

8. RAJBHASHA KEERTI AWARD TO NITIE:

NITIE was awarded with “2nd prize of Rajbhasha Keerti Award” in “B” region by Official Language Department, Ministry of Home Affairs, Govt. of India for the year 2018-19 for the excellent implementation of Official Language Hindi in the Institute. Md. Aftab Alam, Hindi Officer received the prestigious award from Hon’ble Home Minister of India Shri Amit Shah. at Vigyan Bhavan, New Delhi on 14th September, 2019 on the occasion of Hindi Day.

The Official Language Department, Ministry of Home Affairs, Govt. of India invited entries for Rajbhasha Award in which Central Govt. Offices / Institutions / Undertakings etc. through out of India send their Hindi Implementation reports. It is a matter of pride and pleasure that NITIE has been chosen for this prestigious award.

It is worth noticing that NITIE has been honoured with “Official Language Award” for diferent years (2005-06, 2007-08, 2013-14,



2014-2015 and 2017-2018) for the excellent implementation of Official Language Hindi in the Institute. Prof. D. K. Shrivastava, Director in-charge of the Institute expressed pride and happiness and reiterated NITIE's commitment to speed up Hindi Implementation in the Institute in coming years.



Md. Aftab Alam, Hindi Officer, NITIE, receiving the "Rajbhasha Keerti Award" by Shri Amit Shah, Hon'ble Home Minister of India. Shri Nityanand Rai & Shri Kishan Reddy, Minister of State for Home Affairs were also present on this occasion.

9. AASHIRWAD RAJBHASHA AWARD TO NITIE:

NITIE was awarded with 3rd prize of "Aashirwad Rajbhasha Award" for carrying out excellent work in Hindi for the year 2018-19 by Aashirwad, a Literary-Socio-cultural Organisation. Md. Aftab Alam, Hindi Officer, received this Award from Shri Kaiser Khalid, Inspector General of Police, in a special function organised on 20th September, 2019 at Walchand Auditorium, Indian Merchant Chambers, Churchgate, Mumbai. On this occasion, Dr. Umakant Bhajpayee, Director, Aashirwad and several eminent personalities of media, literature and official Language were present.



Md. Aftab Alam, Hindi Officer, NITIE, receiving the "Aashirwad Rajbhasha Award" on behalf of the Institute.

10. TOLIC PRIZE TO SHRI ANAND WARE, LDC (SRIC) :

Received consolation prize for Computer Hindi Typing competition organised by Town Official Language Implementation Committee (TOLIC), North Mumbai (Offices) at Office of the Development Commissioner, SEEPZ - SEZ, Andheri (E), Mumbai on 12.03.2019. Honoured by Shri Chandrapal Singh Chauhan, Development Commissioner, Office of the Development Commissioner, SEEPZ - SEZ, Andheri (E), Mumbai with Shawl, Bouquet and Memento in 2nd Half Yearly meeting organised by the committee.



Shri Anand Ware, LDC (SRIC) receiving the prize of TOLIC.

**11. DETAILS OF CONFERENCE/MEETING/WORKSHOPS, ATTENDED:****PROF. SANJEEV VERMA, ASSOCIATE PROFESSOR**

Participated in 2nd half yearly meeting organised by Town Official Language Implementation Committee (TOLIC), North Mumbai (Offices) at Office of the Development

Commissioner, SEEPZ - SEZ, Andheri (E), Mumbai on 18th December, 2019.

MD. AFTAB ALAM, HINDI OFFICER

Participated in 2nd half yearly meeting organised by Town Official Language Implementation Committee (TOLIC), North Mumbai (Offices) at Office of the Development Commissioner, SEEPZ - SEZ, Andheri (E), Mumbai on 18th December, 2019.

EK BHARAT SHRESHTHA BHARAT

Under the directives of MHRD regarding initiatives of EK Bharat Shreshtha Bharat (EBSB), NITIE is paired with IIT Bhubaneswar, Odisha. The objective of this programme is to promote national integration through systematic exchange between paired state/UTs in the cultural literary and linguistic fields. In the pursuance of these objectives, NITIE, Mumbai initiated several activities under EBSB Club at NITIE. During the year (January 2020-March 2020), following events were organized under the auspice of this club.

| SN | Event | Start Date | End Date | No. of participants | No. of resource person |
|----|---|------------|------------|---------------------|------------------------|
| 1 | Inauguration of EBSB Club | 13-01-2020 | 13-01-2020 | 150 | 8 |
| 2 | Swachta Pledge in Odiya, Marathi, Hindi, English | 13-01-2020 | 13-01-2020 | 150 | 8 |
| 3 | Celebration of the confluence of various Indian harvest festivals like Agira Purnima (Odisha), Makar Sankranti (several states of India), Lohri (Punjab), Pongal (Tamil Nadu) along with NITIE Hostel Student activities. | 13-01-2020 | 13-01-2020 | 150 | 8 |
| 4 | EBSB DAY: Photo Exhibition of Odisha's cultural heritage | 24-01-2020 | 26-01-2020 | 150 | 10 |
| 5 | EBSB Odia and Marathi Language Classes and Swachta Pledge in Odiya, Marathi, Hindi and English | 10-02-2020 | 10-02-2020 | 30 | 5 |
| 6 | EBSB DAY: EBSB Heritage Video Screening on Maharashtra and Odisha | 26-02-2020 | 26-02-2020 | 35 | 2 |
| 7 | Saraswati Pooja along with NITIE Hostel Student activities | 29-01-2020 | 29-01-2020 | 800 | 10 |



In view of COVID-2019, the cultural exchange trip to IIT, Bhubaneswar (planned in March 2020) was postponed until later.





VIGILANCE AWARENESS WEEK

NITIE observes Vigilance Awareness Week every year to create awareness amongst all our stakeholders.

This year NITIE observed the Vigilance Week from 28th October, 2019 to 2nd November, 2019 with the theme “Integrity : way of Life (ईमानदारी – एक जीवन शैली)” and the following activities were conducted:

1. Printing of Posters, Banners, Stickers and Display (Bilingual)
2. Integrity Pledge
3. Organizing Debate and Guest Lecture by an eminent person
4. Other Programmes:
 - a) A write-up on Anti-corruption was displayed on the Institute website.
 - b) A Slogan competition (in Hindi or English) on the theme “Integrity : way of Life (ईमानदारी – एक जीवन शैली)”.
5. Display of books on the subject ‘Anti-corruption’.



YOGA DAY

As per the directives of MHRD, NITIE celebrated 5th International Yoga Day on Friday, 21st June 2019.

On this occasion, a Yoga Workshop was organized for the students, faculty, officers, staff and campus residents. Ms Charu Doshi, Yoga Trainer from Kaivalyadham, Mumbai conducted the workshop at Taylor Hall, NITIE.

Poster display competition on the theme “Yoga and You” was also organized. A book display at Library during the week. Various available books on Yoga in the Library were displayed.



More than 50 participants participated in the event. Prof. Karuna Jain, Director, NITIE, Dr Basavaraj Swamy, Registrar NITIE, all the Deans, faculty members, students, and campus residents were present during the occasion.

Shri Ajay Maderana and Prof. Nikhil K Mehta conducted the proceedings while Mr Liju Thomas proposed the vote of thanks. The programme concluded with the national anthem.



NITIE CULTURAL AND WELFARE ACTIVITIES

Women Development Cell of NITIE - WDC

1. A session on Art of living was organized by WDC. It was successfully conducted by Varsha D'Souza, a senior Art of Living faculty member and Soham D'Souza. This session included meditation, sukshma yoga, techniques for mind management and stress-reduction.
2. WDC organized a self-defence workshop for women in NITIE conducted by the renowned Trainer Mr Rajenderan Nair, Erstwhile Head-Admin & Corporate Affairs at TATA Power. This was part of the confidence building for the women and girl students at NITIE.
3. A soft copy of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 was circulated to all employees and students by the Women Development cell as a part of awareness building in the campus.
4. The Honourable Director of NITIE has approved the provision of a ladies room for girl students and employees as requested by the WDC and also has approved the purchase of an incinerator for safe disposal of sanitary napkins in the ladies Hostel

Women's Day Celebrations

Women Development Cell of NITIE, Mumbai organized many events on the occasion of Women's day under the Guidance of Prof. Seema Unnikrishnan, Prof. Anju Singh, Prof. Upasana Aggarwal & Prof. Priyanka Verma.

Competitions like Essay writing, Drawing, Poster and Debate competition on women empowerment have been conducted for all the members of the NITIE Fraternity. All the topics were related to the UN theme for Women's day this year - "An Equal world is an enabled world", promoting the thought of equal position for women in our Society.

Sports events like slow cycling, 100 m race, Table tennis and badminton were held on 8th of March, International Women's Day for women in the NITIE campus.

Prize distribution ceremony and Panel discussion by successful corporate women on topic "Leadership and Women empowerment" was held on 11th March 2020. Esteemed guests for the event were Ashu Khanna, Founder and CEO of ARKA Leadership.Neha Parekh, GM Planning at GCPL,Santoshi Kittur, MD Service Delivery Centre PWC, Kanimozhi Subburaman, Data Scientist Raw Material Sourcing at Mondelez International.

The panelists were from diverse professional backgrounds and shared their inspirational journey to leadership positions in the corporate world. The panelists motivated budding managers of NITIE to develop grit, grace and confidence to pursue their dreams and career. Have a voice, declare your aspirations and persevere, was a strong message from all panelists to the audience.



Self Defence workshop



The art of Living Workshop by WDC:



Panel Discussion By WDC Held on 11th March 2020:



Debate Competition on Women Empowerment:



Prize Distribution to the winners of WDC competitions by our Honorable Director

Institute also celebrated the following activities as per Government of India norms for the year 2019-2020.

1. Independence Day
2. Yoga Day
3. Swachhata Abhiyan
4. Rashtriya Ekta Day
5. Constitution Day
6. Republic Day Celebration
7. Matrubhasha Day
8. Women's Day

ANNUAL ACCOUNTS



Annual Report 2019-20

**ANNUAL ACCOUNTS**

For the financial year 2019-2020 the ministry (MHRD / MOE) has been sanctioned an Amount of Rs.7331.00 lakhs towards Grant-in-Aid to the institute. The details as below.

- Grant in Aid - An amount of Rs. 22,97,00,000/- (Rupees Twenty-Two Crore Ninety-Seven Lakhs Only) under OH-31 (Non salary), Rs.75,00,000/- (Rupees Seventy-Five Lakhs Only) under OH-35 (Creation of Capital assets), and Rs. 49,59,00,000/- (Rupees Forty-Nine Crores Fifty-Nine Lakhs Only) under OH-36 (Salary) was sanctioned during the Financial Year 2019-2020 by GOI, MHRD to NITIE, Mumbai.
- The total Grant in aid sanctioned from MHRD is Rs. 73,31,00,000/- (out of which Rs. 46,31,00,000/- was received during the year and the remaining Rs. 27,00,00,000/- was shown as grant receivable) for the financial year 19-20 and Internal Revenue Generated is Rs. 65,94,19,651/-
- Total Expenditure is Rs. 142,72,15,317/- (Under OH-31 is Rs. 90,98,02,352/-, For OH-35 is Rs. 04,21,95,666/ and OH-36 is Rs. 47,52,17,299/- Closing balance as on 31st March 2020 is (negative) Rs. - 6,74,14,412/-
- The closing balance amount as on 31.3.2020 under OH-35 (Capital Assets) is overspent of Rs. (-) 6,74,14,412/- and the balance under OH-31 (Non Salary) is Rs. (-) 5,86,83,723/- and under OH-36 (Salary) is Rs. 5,86,83,723/- hence the net effect and available balance under OH-31 & OH-36 is Rs. NIL.
- Total expenditure accounted under the OH-31 (Non Salary) is Rs. 90,98,02,352/- which included actual expenditure of Rs. 44,29,75,607/-, plus an amount of Rs. 9,55,00,000/- which is transferred to building fund and Rs. 9,33,65,349/- which is transferred to contribution towards corpus / capital fund. An amount of Rs. 27,79,61,396/- earmarked towards the transfer to Endowment account from the Capital fund of Main Account.

| Object Head | Opening Balance As on 1.4.2019 | Grant Sanctioned / received during the year | Internal Revenue Generated | Total Gross | Expenditure | Balance as on 31.3.2020 |
|---------------------|--------------------------------|---|----------------------------|----------------------|----------------------|-------------------------|
| OH 31 (Non Salary) | -3,80,01,022 | 22,97,00,000 | 65,94,19,651 | 85,11,18,629 | 90,98,02,352 | -5,86,83,723 |
| OH 35 Capital) | -3,27,18,746 | 00,75,00,000 | - | -02,52,18,746 | 04,21,95,666 | -6,74,14,412 |
| OH 36 (Salary) | 3,80,01,022 | 49,59,00,000 | - | 53,39,01,022 | 47,52,17,299 | 5,86,83,723 |
| Total | -3,27,18,746 | 73,31,00,000 | 65,94,19,651 | 135,98,00,905 | 142,72,15,317 | -6,74,14,412 |

**Details of Fund-Flow- Object head wise for the year 2019-20.****Details of Bank Accounts:**

| Sr.No | Name of the Account | Bank | Operational Purpose. |
|-------|---|---|--|
| 1 | NITIE Main A/c (Non Plan) | State Bank of India, Vihar Lake, Mumbai | Recurring Expenditure |
| 2 | NITIE Main A/c (Plan) | Canara Bank, IIT, Mumbai | Capital Expenditure |
| 3 | NITIE BCPAAA A/c | State Bank of India, Vihar Lake, Mumbai | Internal account for Misc. Activities. |
| 4 | NITIE Endowment Fund A/c | State Bank of India, Vihar Lake, Mumbai | Endowment Fund |
| 5 | NITIE GPF A/c | State Bank of India, Vihar Lake, Mumbai | GPF of Employees |
| 6 | NITIE CPF A/c | State Bank of India, Vihar Lake, Mumbai | CPF of Employees |
| 7 | NITIE Post-Retirement Medical Scheme (PRMS) A/c | State Bank of India, Vihar Lake, Mumbai | Medical Benefits to Retired Employees |
| 8 | NITIE DDF A/c | State Bank of India, Vihar Lake, Mumbai | Director Discretionary Fund |
| 9 | NITIE TIFAC - CORE | State Bank of India, Vihar Lake, Mumbai | Project Account |
| 10 | NITIE IIPC A/c | State Bank of India, Vihar Lake, Mumbai | Project Account |
| 11 | NITIE Main A/c (Savings) | Canara Bank, IIT, Mumbai | For receiving grants from Ministry |
| 12 | NITIE Avartan Account (Savings) | Canara Bank, IIT, Mumbai | Recurring expenditure – Student Activities |

The Institute maintains separate Bank account for the funds received from government under Plan (OH-35) and Non Plan grants (OH-31 & OH-36). Funds are banked at Canara Bank and State Bank of India. Details of all operating accounts are mentioned below.

The Institute has opened separate Saving Bank Account for receiving Grant-in-Aid from the Ministry, as per the instructions received from MHRD & subsequent approval of Chairman, BOG NITIE, Mumbai. Saving Account no. 2724101113266 opened in the name of “NITIE Main Account” at Canara Bank, IIT Powai, Mumbai.

As per the revised formats of Financial statement for Central Institutions, the Institutes prepares separate Financial statement of Annual Accounts for all these accounts. The Institute maintains Receipts & Payments Accounts, Income & Expenditure Accounts and Balance Sheet in respect of the following accounts.

**Table 1 : Institute Account**

| Sr. No. | Name of the Account |
|---------|---|
| 1 | NITIE Main A/c - Plan and Non-Plan Account |
| 2 | NITIE BCPAA A/c - Boarding Charges for Participants and Aluminise Amenities Account |
| 3 | NITIE Endowment Fund Account |
| 4 | NITIE DDF A/c - Director Discretionary Fund Account |

Table 2 : Internal Accounts

| Sr. No | Name of the Account |
|--------|---|
| 1 | NITIE GPF A/c and CPF A/c - General Provident Fund Accounts and Contributory Provident Fund Account |
| 2 | NITIE PRMS A/c - Post Retirement Medical Scheme Account |
| 3 | NITIE Projects A/c - TIFAC CORE & IIPC Account |
| 4 | NITIE New Plan Scheme - Closed Project |

The financial statement of the Institute Accounts for the financial year 2019-20 is annexed here with.

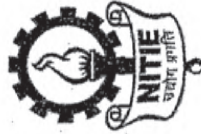


Financial Statement for the Financial Year

2019-2020

Main Account (Plan & Non-Plan)

- 1. Balance Sheet**
- 2. Income & Expenditure Account**
- 3. Receipts & Payments Account**
(With All Schedules)



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING

Vihar Lake, Mumbai - 400 087



**NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
BALANCE SHEET AS AT 31ST MARCH, 2020**



(Amount in Rupees)

| SOURCES OF FUNDS | Schedule No. | Current Year | Previous Year |
|--|--------------|----------------------|----------------------|
| | | 2019-2020 | 2018-2019 |
| CORPUS/CAPITAL FUND | 1 | 1,656,003,317 | 514,332,436 |
| DESIGNATED / EARMARKED / ENDOWMENT FUNDS | 2 | 183,753,277 | 910,382,163 |
| CURRENT LIABILITIES & PROVISIONS | 3 | 275,612,101 | 253,679,540 |
| TOTAL | | 2,115,368,695 | 1,678,394,139 |

| APPLICATION OF FUNDS | Schedule No. | Current Year | Previous Year |
|---|--------------|----------------------|----------------------|
| | | 2019-2020 | 2018-2019 |
| FIXED ASSETS | 4 | | |
| Tangible Assets | | 984,064,957 | 174,973,226 |
| Intangible Assets | | 2,911,161 | 2,327,116 |
| Capital Work In Progress | | 168,630,040 | 1,046,869,518 |
| INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS | 5 | | |
| Long Term | | - | - |
| Short Term | | 46,489,074 | 43,665,515 |
| INVESTMENTS - OTHERS | 6 | 484,923,980 | 292,643,147 |
| CURRENT ASSETS | 7 | 53,480,121 | 25,817,716 |
| LOANS, ADVANCES & DEPOSITS | 8 | 374,869,363 | 92,097,901 |
| TOTAL | | 2,115,368,695 | 1,678,394,139 |

Delip

INTERNAL AUDITOR

Arund Naidu

ACCOUNTS OFFICER

Arund Naidu

DY. REGISTRAR (ACCOUNTS)

Arund Naidu

REGISTRAR

Arund Naidu

DIRECTOR



**NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020**



(Amount in Rupees)

| Particulars | Schedule No. | Current Year 2019-2020 | Previous Year 2018-2019 |
|--|--------------|------------------------|-------------------------|
| INCOME | | | |
| Academic Receipts | 9 | 620,952,244 | 314,815,893 |
| Grants / Subsidies | 10 | 725,600,000 | 327,500,000 |
| Income From Investment | 11 | 36,776,278 | 41,733,457 |
| Interest Earned | 12 | 123,841 | 91,040 |
| Other Income | 13 | 1,567,288 | 17,640,584 |
| Prior Period Income | 14 | - | 1,854,301 |
| TOTAL (A) | | 1,385,019,651 | 703,635,275 |
| EXPENDITURE | | | |
| Staff Payments & Benefits (Establishment Expenses) | 15 | 552,730,043 | 380,180,786 |
| Academic Expenses | 16 | 125,480,260 | 100,179,151 |
| Administrative and General Expenses | 17 | 55,501,028 | 58,713,871 |
| Transportation Expenses | 18 | 736,259 | 1,620,281 |
| Repairs & Maintenance | 19 | 64,009,324 | 52,907,292 |
| Finance Costs | 20 | 132,929 | 176,695 |
| Depreciation | 4 | 110,759,368 | 14,649,479 |
| Other Expenses | 21 | 2,825,094 | - |
| Prior Period Expenses | 22 | 6,018,601 | - |
| Total (B) | | 918,192,906 | 608,427,555 |
| Balance being excess of income over Expenditure (A-B) | | 466,826,745 | 95,207,720 |
| Transfer to / from Designated Fund | | | |
| Building Fund | | 95,500,000.00 | - |
| Others (Contribution towards Corpus / Capital Fund) | | 93,365,349.00 | - |
| Balance being Surplus / (Deficit) carried to Capital Fund | | 277,961,396 | 95,207,720 |

[Signature]
INTERNAL AUDITOR

[Signature]
ACCOUNTS OFFICER

[Signature]
DY. REGISTRAR (ACCOUNTS)

[Signature]
REGISTRAR

[Signature]
DIRECTOR





NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020



| RECEIPTS | Current Year 2019-2020 | Previous Year 2018-2019 | PAYMENTS | Current Year 2019-2020 | Previous Year 2018-2019 |
|--|---------------------------|----------------------------|--|---------------------------|----------------------------|
| I. Opening Balances | | | I. Expenses | | |
| a) Cash Balances | 12,003 | 86,200 | a) Establishment Expenses | 407,380,388 | 354,614,781 |
| b) Bank Balance | - | - | b) Academic Expenses | 196,987,263 | 111,368,256 |
| i. In Current Accounts | | | c) Administrative Expenses | 47,964,357 | 50,651,157 |
| SBI - Main Account | 12,959,169 | 23,453,941 | d) Transportation Expenses | 504,734 | 680,270 |
| Canara Bank - Plan Account | 3,969,251 | 6,126,158 | e) Repairs & Maintenance | 44,591,794 | 40,917,714 |
| Canara Bank - Avaritan Account | 1,183,868 | - | f) Prior period Expenses | 7,338,366 | 325,246 |
| ii. In Deposit Accounts | | | g) Other Expenses | - | - |
| iii. Savings accounts | - | - | | | |
| II. Grants Received | | | II. Payments against Earmarked / Endowment Funds | | |
| a) From Government of India | 463,100,000 | 432,850,000 | | 294,704,162 | 518,108,089 |
| b) From State Government | - | - | | | |
| c) From other sources | - | - | | | |
| III. Academic Receipts | | | III. Payments against Sponsored Projects / Schemes | | |
| | 605,215,691 | 337,011,339 | | 900,371 | 1,056,633 |
| IV. Receipts against Earmarked / Endowment Funds | | | IV. Payments against Sponsored Fellowships / Scholarships | | |
| | 199,553,797 | 150,365,044 | | | |
| V. Receipts against Sponsored Projects / Schemes | | | V. Investments and Deposits made | | |
| | 916,218 | 1,586,100 | a) Out of Earmarked/Endowments funds | | |
| | | | b) Out of own funds (Investments - Others) | 1,228,169,824 | 1,835,447,832 |
| VI. Receipts against sponsored Fellowships and Scholarships | | | VI. Term Deposits with Scheduled Banks | | |
| | | | | | |
| VII. Income on Investments from | | | VII. Expenditure on Fixed Assets and Capital Work - In - Progress | | |
| a) Earmarked/Endowment funds | - | - | a) Fixed Assets | 42,126,061 | 24,094,166 |
| b) Other Investments | - | 35,126,929 | b) Capital Works - in - Progress | | |





| RECEIPTS | Current Year 2018-19 | Previous Year 2017-18 | PAYMENTS | Current Year 2018-19 | Previous Year 2017-18 |
|---|-------------------------|--------------------------|---|-------------------------|--------------------------|
| VIII. Interest received on | | | VIII. Other Payments including statutory payments | 40,994,110 | 100,770,813 |
| a) Bank Deposits | 26,105,861 | 5,004,336 | | | |
| b) Loans and Advances | 115,389 | 100,197 | | | |
| c) Savings Bank Accounts | 781,112 | - | | | |
| IX. Investments encashed | 1,035,888,991 | 2,003,959,684 | IX. Refunds of Grants | - | - |
| X. Term Deposits with Scheduled Banks encashed | - | - | X. Deposits and Advances | 96,397,623 | 47,549,620 |
| XI. Other income (including Prior Period Income) | 7,700,175 | 8,525,288 | XI. Other Payments | 280,095,495 | 55,273,717 |
| XII. Deposits and Advances | 99,941,735 | 35,893,397 | XII. Closing balances | | |
| | | | a) Cash in hand | 110,159 | 12,003 |
| | | | b) Bank balances | | |
| | | | In Current Accounts | | |
| | | | SBI - Main Account | 23,258,460 | 12,959,169 |
| | | | Canara Bank - Plan Account | 21,330,747 | 3,969,251 |
| | | | Canara Bank - Avartan Account | 1,448,473 | 1,183,868 |
| | | | In Savings Accounts | | |
| XIII. Miscellaneous Receipts including Statutory Receipts | 41,249,917 | 99,320,634 | | | |
| XIV. Any Other Receipts | 235,609,211 | 19,573,339 | | | |
| TOTAL | 2,734,302,387 | 3,158,982,585 | TOTAL | 2,734,302,387 | 3,158,982,585 |

[Signature]

INTERNAL AUDITOR



[Signature]
ACCOUNTS OFFICER

[Signature]
BY: REGISTRAR (ACCOUNTS)

[Signature]
REGISTRAR

[Signature]
DIRECTOR



Financial Statement for the Financial Year

2019-2020

ENDOWMENT FUND

1. Balance Sheet
2. Income & Expenditure Account
3. Receipts & Payments Account



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
Vihar Lake, Mumbai - 400 087



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
BALANCE SHEET AS AT 31ST MARCH, 2020
ENDOWMENT FUND

(Amount in Rupees)

| Previous Year 2018-2019 | Liabilities | Current Year 2019-2020 | Previous Year 2018-2019 | Assets | Current Year 2019-2020 |
|----------------------------|--|---------------------------|----------------------------|--------------------------------|---------------------------|
| | Corpus/ Capital Fund | | | Interest Accrued | |
| 572,428,534 | Opening Balance | 572,428,534 | 71,739,428 | Opening Balance | 59,319,477 |
| - | Add/Less: During the year | - | 12,555,831 | Add: During the year | 54,472,108 |
| 572,428,534 | Closing Balance | 572,428,534 | (24,975,782) | Less: Last year | (3,906,908) |
| | Matching Grant | | 59,319,477 | | 109,884,677 |
| 96,481,000 | Opening Balance | 96,481,000 | | Investment | |
| - | Add/Less: During the year | - | 1,505,728,464 | Opening Balance | 1,946,534,750 |
| 96,481,000 | Closing Balance | 96,481,000 | 2,050,406,821 | Add: Invested during the year | 3,479,316,236 |
| | Reserves & Surplus | | (1,609,600,535) | Less: Encashed during the year | (3,327,746,678) |
| 914,802,048 | Opening Balance | 1,336,944,692 | 1,946,534,750 | | 2,098,104,308 |
| 422,142,644 | Add: Excess of Income over Expenditure | 204,883,687 | | Bank Balance | |
| 1,336,944,692 | Closing Balance | 1,541,828,380 | - | SBI | 2,748,929 |
| 2,005,854,227 | TOTAL | 2,210,737,914 | 2,005,854,227 | TOTAL | 2,210,737,914 |

D. Lakshmi
INTERNAL AUDITOR

[Signature]
ACCOUNTS OFFICER

[Signature]
DY. REGISTRAR (ACCOUNTS)

[Signature]
REGISTRAR

[Signature]
DIRECTOR






 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
 INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
 ENDOWMENT FUND

| | | (Amount in Rupees) | | | |
|----------------------------|-----------------------------------|---------------------------|----------------------------|--|---------------------------|
| Previous Year 2018-2019 | Expenditure | Current Year 2019-2020 | Previous Year 2018-2019 | Income | Current Year 2019-2020 |
| | Interest Credited to Endowment | - | | <u>Interest earned on Investment</u> | |
| | | | 67,111,585 | Interest received during the year | 59,112,649 |
| | <u>Other Expenses</u> | | 12,555,831 | Add: Interest accrued during the year | 54,472,108 |
| 53 | Bank Charges | 1,882 | - | Add: Tax recovered on interest - Refund to be obtained | - |
| | | | (24,975,782) | Less: Interest accrued during previous year | (3,906,908) |
| | | | 54,691,634 | <u>Other Income</u> | 109,677,849 |
| | | | | Misc. Receipts | 95,207,720 |
| | | | 367,451,064 | | |
| 422,142,644 | Excess of Income over Expenditure | 204,883,687 | | | |
| 422,142,698 | TOTAL | 204,885,569 | 422,142,698 | TOTAL | 204,885,569 |

Devi

INTERNAL AUDITOR

Arund Naidu

ACCOUNTS OFFICER

Arund Naidu

BY. REGISTRAR (ACCOUNTS)

[Signature]

DIRECTOR





NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
ENDOWMENT FUND

| (Amount in Rupees) | | | | | |
|-------------------------|------------------------|------------------------|-------------------------|----------------------------|------------------------|
| Previous Year 2018-2019 | Receipts | Current Year 2019-2020 | Previous Year 2018-2019 | Payments | Current Year 2019-2020 |
| | <u>Opening Balance</u> | | 2,050,406,821 | Investment during the year | 3,479,316,236 |
| 6,243,690 | SBI | | | <u>Other Expenses</u> | |
| 1,609,600,535 | Investment Encashed | 3,327,746,678 | 53 | Miscellaneous Expenses | 1,882 |
| 67,111,585 | Interest Received | 59,112,649 | | | |
| | <u>Other Incomes</u> | | | | |
| 367,451,064 | Misc. Receipts | 95,207,720 | | <u>Closing Balance:-</u> | |
| - | Sundry Debtors | - | | SBI | 2,748,929 |
| 2,050,406,874 | TOTAL | 3,482,067,047 | 2,050,406,874 | TOTAL | 3,482,067,047 |

D. Chopra
INTERNAL AUDITOR

[Signature]
ACCOUNTS OFFICER

Anand Naidu
DY. REGISTRAR (ACCOUNTS)

[Signature]
REGISTRAR

[Signature]
DIRECTOR





Financial Statement for the Financial Year

2019-2020

BCPAAA

(Boarding Charges for Participants & Aluminiies Amenities)

- 1. Balance Sheet**
- 2. Income & Expenditure Account**
- 3. Receipts & Payments Account**
(With All Schedules)



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING

Vihar Lake, Mumbai - 400 087





 NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
 BALANCE SHEET AS AT 31ST MARCH, 2020
 BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALLUMINIES AMENITIES)

(Amount in Rupees)

| SOURCES OF FUNDS | Schedule No. | Current Year 2019-20 | Previous Year 2018-19 |
|--|--------------|----------------------|-----------------------|
| CORPUS / CAPITAL FUND | 1 | 51,498,754 | 48,811,659 |
| DESIGNATED / EARMARKED / ENDOWMENT FUNDS | 2 | 990,735 | 990,735 |
| CURRENT LIABILITIES & PROVISIONS | 3 | 2,589,316 | 2,592,502 |
| TOTAL | | 55,078,805 | 52,394,896 |

| APPLICATION OF FUNDS | Schedule No. | Current Year 2019-20 | Previous Year 2018-19 |
|---|--------------|----------------------|-----------------------|
| FIXED ASSETS | 4 | | |
| Tangible Assets | | 4,757,039 | 4,951,413 |
| Intangible Assets | | - | - |
| Capital Work In Progress | | - | - |
| INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS | 5 | | |
| Long Term | | - | - |
| Short Term | | - | - |
| INVESTMENTS - OTHERS | 6 | 42,395,513 | 39,442,159 |
| CURRENT ASSETS | 7 | 6,580,567 | 7,305,035 |
| LOANS, ADVANCES & DEPOSITS | 8 | 1,345,686 | 696,289 |
| TOTAL | | 55,078,805 | 52,394,896 |

Devi
INTERNAL AUDITOR

Arund Naidu
DY. REGISTRAR (ACCOUNTS)

Devi
ACCOUNTS OFFICER

[Signature]
REGISTRAR

[Signature]
DIRECTOR



**NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALUMINIUMS AMENITIES)**



| Particulars | Schedule No. | (Amount in Rupees) | |
|--|--------------|----------------------|-----------------------|
| | | Current Year 2019-20 | Previous Year 2018-19 |
| INCOME | | | |
| Academic Receipts | 9 | - | - |
| Grants / Subsidies | 10 | - | - |
| Income From Investment | 11 | 2,441,925 | 2,363,466 |
| Interest Earned | 12 | - | - |
| Other Income | 13 | 2,250,891 | 218,204 |
| Prior Period Income | 14 | - | 102,291 |
| TOTAL (A) | | 4,692,816 | 2,683,961 |
| EXPENDITURE | | | |
| Staff Payments & Benefits (Establishment Expenses) | 15 | 28,349 | 1,880,675 |
| Academic Expenses | 16 | - | - |
| Administrative and General Expenses | 17 | 1,779,998 | 2,694,365 |
| Transportation Expenses | 18 | - | - |
| Repairs & Maintenance | 19 | - | - |
| Finance Costs | 20 | - | - |
| Depreciation | 4 | 194,374 | 194,374 |
| Other Expenses | 21 | - | - |
| Prior Period Expenses | 22 | 3,000 | - |
| Total (B) | | 2,005,721 | 4,769,414 |
| Balance being excess of Income over Expenditure(A-B) | | 2,687,095 | (2,085,453) |
| Transfer to / from Designated Fund | | | |
| Building Fund | | | |
| Others(Specify) | | | |
| Balance Being Surplus / (Deficit) carried to Capital Fund | | 2,687,095 | (2,085,453) |

[Signature]
DIRECTOR

[Signature]
REGISTRAR

[Signature]
DY. REGISTRAR (ACCOUNTS)

[Signature]
ACCOUNTS OFFICER

[Signature]
INTERNAL AUDITOR



**NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
BCPAAA (BOARDING CHARGES FOR PARTICIPANTS & ALLUMINIES AMENITIES)**



(Amount in Rupees)

| RECEIPTS | Current Year 2019-20 | Previous Year 2018-19 | PAYMENTS | Current Year 2019-20 | Previous Year 2018-19 |
|---------------------------------------|-------------------------|--------------------------|---|-------------------------|--------------------------|
| I. Opening Balances | | | I. Expenses | | |
| a) Cash Balances | - | - | a) Establishment Expenses | 678,023 | 1,880,675 |
| b) Bank Balance | | | b) Academic Expenses | - | - |
| I. In Current Accounts | | | c) Administrative Expenses | 1,710,285 | 2,604,072 |
| SBI | 1,163,577 | 314,973 | II. Investments and Deposits made | | |
| ii. In Deposit Accounts | - | - | a) Out of Earmarked/Endowments funds | - | - |
| iii. Savings accounts | - | - | b) Out of own funds (Investments - Others) | 150,015,361 | 175,653,322 |
| II. Grants Received | | | III. Expenditure on Fixed Assets and Capital Works - In - Progress | | |
| a) From Government of India | - | - | a) Fixed Assets | - | - |
| b) From State Government | - | - | b) Capital Work-in-Progress | - | - |
| c) From other sources | - | - | IV. Other Payments | | |
| III. Academic Receipts | | | a) Telephone Expenses | 104,094 | 116,240 |
| IV. Income on Investments from | | | b) Newspaper & Magazine Expenses | 36,824 | 31,941 |
| a) Earmarked / Endowment funds | - | - | c) UBP Expenses | - | 20,786 |
| b) Other investments | 2,253,541 | 2,163,653 | d) Prior Period Expenditure | 3,000 | 60,741 |
| V. Investments encashed | | | e) Sundry Creditors | 3,186 | 1,011,272 |
| a) Other income | 147,062,007 | 178,922,738 | f) Others | 664,966 | 925,417 |
| VI. Other income | | | V. Closing Balances | | |
| a) Accrued Interest | 199,813 | 572,113 | a) Cash in hand | - | - |
| b) Prior Period Income | - | 163,032 | b) Bank balances | | |
| c) Others | 2,975,910 | 1,331,534 | i. In Current Accounts | | |
| | | | SBI | 439,109 | 1,163,577 |
| | | | ii. In Deposit Accounts | - | - |
| | | | iii. Savings accounts | - | - |
| TOTAL | 153,654,848 | 183,468,043 | TOTAL | 153,654,848 | 183,468,043 |

[Signature]
DIRECTOR

[Signature]
REGISTRAR

[Signature]
BY REGISTRAR (ACCOUNTS)

[Signature]
ACCOUNTS OFFICER

[Signature]
INTERNAL AUDITOR





Financial Statement for the Financial Year

2019-2020

DIRECTOR DISCRETIONARY FUND (DDF)

1. Balance Sheet
2. Income & Expenditure Account
3. Receipts & Payments Account



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING
Vihar Lake, Mumbai - 400 087



**NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
BALANCE SHEET AS AT 31ST MARCH, 2020
DIRECTOR DISCRETIONARY FUND (DDF)**



| | | (Amount in Rupees) | | | |
|--------------------------|---|-------------------------|--------------------------|-------------------------------------|-------------------------|
| Previous Year 2018-19 | LIABILITIES | Current Year 2019-20 | Previous Year 2018-19 | ASSETS | Current Year 2019-20 |
| | Corpus Fund | | | | |
| 12,131,775 | Opening Balance | 12,798,463 | | <u>Interest Accrued</u> | |
| 666,688 | Add: Excess of Income over Expenditure | 1,283,900 | 883,164 | Opening Balance | 523,528 |
| - | Less: Excess of Expenditure over Income | - | 125,278 | Add: During the year | 96,927 |
| 12,798,463 | Closing Balance | 14,082,363 | (484,914) | Less: Last year | (125,278) |
| | Reserves & Surplus | | 523,528 | | 495,177 |
| | | | | <u>Investment</u> | |
| | | | 10,900,000 | Opening Balance | 12,105,518 |
| | | | 48,917,847 | Add: Invested during the year | 39,399,158 |
| | | | (47,712,329) | Less: Encashed during the year | (38,868,742) |
| | | | 12,105,518 | | 12,635,934 |
| | | | | <u>Loans & Advances</u> | |
| | | | 188,000 | Opening Balance | 136,500 |
| | | | 45,000 | Add: Given during the year | - |
| | | | (96,500) | Less: Received back during the year | (70,000) |
| | | | 136,500 | | 66,500 |
| | | | | <u>Bank Balance</u> | |
| | | | 32,917 | SBI | 884,752 |
| 12,798,463 | TOTAL | 14,082,363 | 12,798,463 | TOTAL | 14,082,363 |

[Signature]
DIRECTOR

[Signature]
REGISTRAR

[Signature]
DY. REGISTRAR (ACCOUNTS)

[Signature]
ACCOUNTS OFFICER



[Signature]
INTERNAL AUDITOR



NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
DIRECTOR DISCRETIONARY FUND (DDF)

(Amount in Rupees)

| Previous Year 2018-19 | Expenditure | Current Year 2019-20 | Previous Year 2018-19 | Income | Current Year 2019-20 |
|--------------------------|-----------------------------------|-------------------------|--------------------------|--|-------------------------|
| - | Interest Credited to DDF | - | - | Interest earned on Investment | 784,714 |
| | | | 1,107,035 | Interest received during the year | 96,927 |
| 20,015 | Other Miscellaneous Expenses | 12,135 | 125,278 | Add: Interest accrued during the year | - |
| - | Out of Pocket Expenses | - | - | Add: Tax recovered on interest - Refund to be obtained | (125,278) |
| - | Consultancy Share | - | (484,914) | Less: Interest accrued during previous year | 756,363 |
| 60,000 | Admn. Misc. Expenses | 204,740 | 747,399 | Other Income | - |
| 696 | Misc. Expenses | 1,263 | - | Consultancy Fees | 745,675 |
| | | | - | Transfer of Funds | - |
| 666,688 | Excess of Income over Expenditure | 1,283,900 | - | | |
| 747,399 | TOTAL | 1,502,038 | 747,399 | TOTAL | 1,502,038 |

Dilip Kumar
INTERNAL AUDITOR

P. S. Patil
ACCOUNTS OFFICER

Anand Naidu
DY. REGISTRAR (ACCOUNTS)

S. D. D. D.
REGISTRAR

[Signature]
DIRECTOR




NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE), MUMBAI
RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2020
DIRECTOR DISCRETIONARY FUND (DDF)

(Amount in Rupees)

| Previous Year 2018-19 | RECEIPTS | Current Year 2019-20 | Previous Year 2018-19 | PAYMENTS | Current Year 2019-20 |
|--------------------------|----------------------------|-------------------------|--------------------------|------------------------------|-------------------------|
| 160,611 | <u>Opening Balance</u> | 32,917 | 48,917,847 | Investment during the year | 39,399,158 |
| | SBI | | | Other Misc. Expenses | |
| 47,712,329 | <u>Investment Encashed</u> | 38,868,742 | 45,000 | Refund of Loans & Advances | - |
| | | | 20,015 | Out of Pocket Expenses | 12,135 |
| | <u>Interest Received</u> | | 60,000 | Admn. Miscellaneous Expenses | 204,740 |
| 622,121 | Interest on Investment | 659,436 | 696 | Miscellaneous Expenses | 1,263 |
| 484,914 | Accrued Interest | 125,278 | - | Consultancy Share | - |
| | <u>Other Income</u> | | - | Transfer of Funds | - |
| | Consultancy Fees | - | | | |
| 96,500 | Loans & Advances | 70,000 | | | |
| | Consultancy Share | - | | <u>Closing Balance</u> | |
| | Transfer of Funds | 745,675 | 32,917 | SBI | 884,752 |
| 49,076,475 | TOTAL | 40,502,048 | 49,076,475 | TOTAL | 40,502,048 |

Delip...
INTERNAL AUDITOR

ACCOUNTS OFFICER

...
ACCOUNTS OFFICER

...
DY. REGISTRAR (ACCOUNTS)

...
REGISTRAR

...
DIRECTOR



**INSTITUTE - EXTRACT IN FORM GFR - 19**

APPENDIX TO THE Annual statement of the Accounts of the Institute - Extracts in form GFR -19 regarding assets of permanent value and machinery and equipment having a life of not less than 5 years and consting Rs. 10,000/- and above (each item)

FORM GFR - 19

| | |
|---|--|
| Name of the Grantee Institution | : NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING |
| Brief Purpose of the grant | : FOR INFRASTRUCTURAL FACILITIES |
| Whether any condition regarding the right of ownership of Govt. In the Property or other assets acquired out of the grant was incorporated in the grant in aid sanction | : YES OWNERSHIP VESTS WITH THE GOVT. |
| Purpose for which utilized at present | : FOR ACQURING EQUIPMENT |
| Encumbered or not | : N. A. |
| Reason and authority if any for disposal | : OBSOLETE |

| No. and date of sanction | Amt. of the San. Grant | Particulars of Assets | Value of Asset as on 31.3.2020 | Disposed | Amt. realized on disposal | Remarks |
|---|------------------------|--|--------------------------------|----------|---------------------------|---------|
| Plan EuiP& Films 2019-20/01 dt. 30.4.2019 | 1,79,616/- | Daikin 8.5 TR Ductable AC | 172182/- | | | |
| CPSC/CCTV/2019-20/01 | 2,43,198/- | 18.5 Inch Samasung LED Screebn | 243198/- | | | |
| CPSC/Water Dispenser/2019-20/01 dt. 3.9.2019 | 1,51,512/- | Water Dispenser with Provision of Dispensing Normal, Hot and Cold Water Voltas | 151512/- | | | |
| Note: S&T/CCTV/NG/2019-20 dt. 04.09.2019 | 13,688/- | CCTV 4U Rack & 2U Rack | 13688/- | | | |
| Note: S&T/CCTV/NG/2019-20 dt. 11.09.2019 | 23,600/- | CCTV 4 Mtr. Pole | 23600/- | | | |
| Admn/DO/I Phone 2019-20/08 | 68,900/- | Apple I Phone ii Black 128 GB | 68900/- | | | |
| CPSC/Admn/Photocopy Machine/2019-20 | 1,06,499 | Photocopy Machine Digital Multifunctional System | 106499/- | | | |
| CPSC/Water Dispenser/2019-20/002 | 10,100/- | Water Dispenser with Provision of Dispensing Normal, Hot and Cold Water Voltas | 10100/- | | | |



| No. and date of sanction | Amt. of the San. Grant | Particulars of Assets | Value of Asset as on 31.3.2020 | Disposed | Amt. realized on disposal | Remarks |
|---|------------------------|--|--------------------------------|----------|---------------------------|---------|
| CPSC/Acd/Photocopier Machine/2019-20/005 | 4,99,500/- | Photocopy Machine Sharp MX-4070N/MX-4070V | 499500/- | | | |
| CPSC/Xerox Machine/BS/2019-20/06 dt. 17.12.2019 | 4,98,515/- | Xerox MFD Attalink C8045 | 498515/- | | | |
| Plan Equi & Films 2019-20/04 | 61,605/- | Mitsubishi 1.5 TR Inventor Split AC | 61605/- | | | |
| Plan Equipment & Films /19-20/03 | 90,072/- | SHP Kirloskar Borwell Submersible Pumpset KS4E 55021 SHP 3 PH/21 Stage | 82992/- | | | |
| Equipment Estate/19-20/01 | 88,117.68 | Successor Board | 83922/- | | | |
| CPSC/Water Dispenser/B&S/2019-20/07 | 15,980/- | hot or Cold Water Dispenser Voltas | 15980/- | | | |
| NITIE/PGPH/Student Welfars/2019-20/06 | 3,63,000/- | Washing Machines | 362999/- | | | |
| Plan Equi & Films 2019-20/02 | 1,10,936/- | Power LED Based flood Light fitting | 110936/- | | | |
| CPSC/Photocopier Machine Library/2019-20/06 | 1,35,256/- | Xerox Versalink B7025 | 135256/- | | | |
| CPSC/A/cs/Photocopy Machine /2019-20/009 | 3,46,909/- | Sharp MX-m5050 | 346909/- | | | |
| cpsc/HP Laser Jet/RO/19-20/01 | 39,199/- | Desktop Computer i5 7500/44B/win 10 | 38900/- | | | |
| CPSC/Dispensary/2019-20 | 2,13,920/- | Comen M-Para Patient Monitor STAR 8000H B613104 Heartstert FRX Dfibrillator | 2,13,920/- | | | |
| Library/2019-20 dt. 1.8.2019 | 5,33,333.74 | Double Side K.D. Book Racks | 533334/- | | | |
| 18/NLB /2019-20 dt. 9.8.2019 | 13,159/- | Godrej Book Rack Single Side | 13159/- | | | |
| ALB/F&F/2019-20 | 80,04,558.80 | WOA001893-56101706 SD00203 APO Unlearn with Groutg 1350W woa 00436 56101522 SD1101/ Diva 7046R Chair | 60156/- | | | |



| No. and date of sanction | Amt. of the San. Grant | Particulars of Assets | Value of Asset as on 31.3.2020 | Disposed | Amt. realized on disposal | Remarks |
|--|------------------------|---|--------------------------------|----------|---------------------------|---------|
| NITIE/PGPH2019-20/04 | 1,74,699 | Green Com. Ecotek Plywood | 174698/- | | | |
| 18/nlb-cpsc/2019-20 | 2,13,333/- | Metal Double Side Book Rak | 213330/- | | | |
| CPSC/SRIC/Steel filing Cabinet/2019-20/001 | 88,500/- | Steel Filing Cabinets | 88500/- | | | |
| CPSC/SRIC/Steel Almirah/2019-20/002 | 51,600 | Cupboard Almirah steel | 51600/- | | | |
| CC/Desktop/Gem/ | 59,29,800/- | Lenovo V530-17/10 TWS OD200 Desktop Inter care 17 8th gen, 8gb ram | 5929800/- | | | |
| CC/MFP/2019-20/ACT/1 dt. 1.7.2019 | 17393/- | Dell LED Monitor | 17393/- | | | |
| CC/MFP2019-20/ACT/2 | 21984/- | HP Laser Jet Pro M128fn Printer | 21984/- | | | |
| CCHP Laser Jet /ro/2019-20/01 | 51,330 | HP CLJ Pro MFP M181 FW Printer | 51330/- | | | |
| 307/CPSC/CC/Wi-Fi/ALB | | Wi-Fi Services at ALB | 9517587/- | | | |
| CPSC/CC/ACD/2019-20 | 69,630/- | HP Desktop 280G4 (i7) Monitor HP 21.5 | 69630/- | | | |
| CC/SW/2019-20/1 | 90000/- + 18 GST | Typeset University Solution compising (License) | 1062000/- | | | |
| | | HP Laser Jet Pro M128fn Multifunctin Printer | 22300/- | | | |
| cc/19-20/com/PRN/1 | 1,16,338/- | 1) Dell Optiplex Desktop 7070 MT 2) Ram for mini Tower 8GB 3) Dell Monitor 27" SE2719H 4) HP Color Lazerjet Printer 5) HP B/W Printer M202 dw | 161338/- | | | |
| CC/SW/2019-20/2 | 22,80,220/- | Matlab Full Suite (All Toolbokes Unlimited Access) | 2280220/- | | | |



| No. and date of sanction | Amt. of the San. Grant | Particulars of Assets | Value of Asset as on 31.3.2020 | Disposed | Amt. realized on disposal | Remarks |
|----------------------------------|-------------------------|---|--------------------------------|----------|---------------------------|---------|
| CC/SW/2019-20/3 | 12,85,920/- + 18 GST | Anylogic Iniversity Research Team License | 1517385/- | | | |
| CC/SW/2019-20/4 | 19,25,337/- | IBM SPSS Stalistic Base | 1925337/- | | | |
| CPSC/ Placement/ 2019-20/7 | 1,45,000/- | mUni Seagull Platform Services for Students Campus Placement | 141600/- | | | |
| CC/SW/2019-20/ | 10,36,040/- | Quik Heal Antivirus EPS Fresh License | 1036040/- | | | |
| 18/Libsys/2018-19 | 4,15,950/- | License fee for Upgradation to Web centric | 83200/- | | | |
| CC/WIFI/19-20/4 | 1,92,930/- | 1) LIC-ENT Meraki MR Enterprise Enterprise License 2) MR42-HW Meraki MR 42 Cloud Managed AP 3) AIR PWRINJ6 Power Injector | 192930/- | | | |
| | | Total | 29154630/- | | | |

ANNEXURES



Annual Report 2019-20



ANNEXURES

ANNEXURE I : PROFORMA FOR FURNISHING THE INFORMATION RELATING TO NO. OF CIVILIAN POSTS, THEIR DESIGNATION AND SCALES OF PAY, ETC. IN RESPECT OF CIVILIAN EMPLOYEES OF THE AUTONOMOUS BODIES AS ON 31-03-2020

| Sr. No. | Designation of the Post in Full | 7 CPC Pay (Min. - Max.) | Level | Status of Post | | | Group of Post Group-A Group-B Group-C Group-D Unclassified | No. of sanctioned Posts | Number of Employees in Position |
|---------|---------------------------------|-------------------------|-------|-------------------|---------|------------|---|-------------------------|---------------------------------|
| | | | | Gazetted /Non-Gaz | Regular | Tempo-rary | | | |
| | ACADEMIC | | | | | | | | |
| 1 | DIRECTOR | 225000 Fixed | 17 | * N.G. | 1 | 0 | 0 | 1 | |
| 2 | PROFESSOR | 159100-220200 | 14A | * N.G. | 16 | 0 | 0 | 19 | |
| 3 | ASSOCIATE PROFESSOR | 139600-211300 | 13A2 | * N.G. | 27 | 0 | 0 | 18 | |
| 4 | ASSISTANT PROFESSOR GR.I | 101500-167400 | 12 | * N.G. | 14 | 0 | 0 | 19 | |
| 5 | ASSISTANT PROFESSOR GR.II | 84800-117200 | 11 | * N.G. | 14 | 0 | 0 | | |
| 6 | ASSISTANT PROFESSOR GR.II | 70900-98200 | 10 | * N.G. | 14 | 0 | 0 | | |
| 7 | MANAGER, COMPUTER CENTRE | 78800-209200 | 12 | * N.G. | 1 | 0 | 0 | 1 | |
| 8 | LIBRARY & INFO. OFFICER | 67700-208700 | 11 | * N.G. | 1 | 0 | 0 | 1 | |
| 9 | SYSTEMS DESIGNER | 67700-208700 | 11 | * N.G. | 2 | 0 | 0 | 1 | |
| 10 | SENIOR PROGRAMMER | 67700-208700 | 11 | * N.G. | 2 | 0 | 0 | 1 | |
| 11 | PROGRAMMER | 44900-142400 | 7 | * N.G. | 4 | 0 | 0 | 2 | |

* Non-Gazetted

** Academic Pay

ANNEXURE II: PROFORMA FOR FURNISHING THE INFORMATION RELATING TO NO. OF CIVILIAN POSTS, THEIR DESIGNATION AND SCALES OF PAY, ETC. IN RESPECT OF CIVILIAN EMPLOYEES OF THE AUTONOMOUS BODIES AS ON 31-03-2020

| Sr. No. | Designation of the Post in Full | 7 CPC Pay (Min. - Max.) | Level Gazetted / Non-Gaz. | Status of Post | | | Group of Post Group-A Group-B Group-C | No. of sanctioned Posts | Number of Employees in Position |
|---------|---------------------------------|-------------------------|---------------------------|----------------|-----------|---------------|---------------------------------------|-------------------------|---------------------------------|
| | | | | Regular | Temporary | Supernumerary | | | |
| | NON-ACADEMIC | | | | | | | | |
| 1 | REGISTRAR | 144200-218200 | 14 | * N.G. | 1 | 0 | A | 1 | 1 |
| 2 | C.O.E. | 78800-209200 | 12 | * N.G. | 1 | 0 | A | 1 | 1 |
| 3 | DEPUTY REGISTRAR | 67700-208700 | 11 | * N.G. | 3 | 0 | A | 3 | 1 |
| 4 | MEDICAL OFFICER | 56100-177500 | 10 | * N.G. | 1 | 0 | A | 1 | 1 |
| 5 | ASSISTANT REGISTRAR | 56100-177500 | 10 | * N.G. | 3 | 0 | A | 3 | 3 |
| 6 | ACCOUNTS OFFICER | 44900-142400 | 7 | * N.G. | 1 | 0 | B | 1 | 1 |
| 7 | HINDI OFFICER | 44900-142400 | 7 | * N.G. | 1 | 0 | B | 1 | 1 |
| 8 | SECRETARY TO DIRECTOR | 44900-142400 | 7 | * N.G. | 1 | 0 | B | 1 | 0 |
| 9 | SR. SUPERINTENDENT | 44900-142400 | 7 | * N.G. | 2 | 0 | B | 4 | 1 |
| 10 | ASST. LIB. & INFO. OFFICER | 44900-142400 | 7 | * N.G. | 1 | 0 | B | 1 | 1 |
| 11 | SUPERINTENDENT | 35400-112400 | 6 | * N.G. | 11 | 0 | B | 13 | 8 |
| 12 | HINDI TRANSLATOR (SR.) | 44900-142400 | 7 | * N.G. | 1 | 0 | B | 1 | 0 |
| 13 | SR. LIB. & INFO. ASSISTANT | 35400-112400 | 6 | * N.G. | 1 | 0 | B | 2 | 1 |
| 14 | ASSISTANT | 35400-112400 | 6 | * N.G. | 9 | 0 | B | 12 | 2 |
| 15 | NURSE | 35400-112400 | 6 | * N.G. | 0 | 0 | B | 1 | 1 |
| 16 | SR. STENOGRAPHER | 35400-112400 | 6 | * N.G. | 5 | 0 | B | 11 | 3 |
| 17 | LIB. & INFO. ASSISTANT | 35400-112400 | 6 | * N.G. | 1 | 0 | B | 2 | 1 |
| 18 | JR. HINDI TRANSLATOR | 35400-112400 | 6 | * N.G. | 0 | 0 | B | 1 | 1 |
| 19 | HOSTEL MANAGER | 29200-92300 | 5 | * N.G. | 0 | 0 | C | 1 | 0 |
| 20 | CASHIER | 29200-92300 | 5 | * N.G. | 1 | 0 | C | 1 | 1 |

* Non-Gazetted



| Sr. No. | Designation of the Post in Full | 7 CPC Pay (Min. - Max.) | Level Gazetted / Non-Gaz. | Status of Post | | | Group of Post Group-A Group-B Group-C | No. of sanctioned Posts | Number of Employees in Position |
|---------|---------------------------------|-------------------------|---------------------------|----------------|-----------|---------------|---------------------------------------|-------------------------|---------------------------------|
| | | | | Regular | Temporary | Supernumerary | | | |
| | NON-ACADEMIC | | | | | | | | |
| 21 | COMPOUNDER | 29200-92300 | 5 | * N.G. | 1 | 0 | C | 2 | 1 |
| 22 | T.O.C.R. | 25500-81100 | 4 | * N.G. | 2 | 0 | C | 2 | 2 |
| 23 | JR. STENOGRAPHER | 25500-81100 | 4 | * N.G. | 1 | 0 | C | 2 | 1 |
| 24 | U. D. C. | 25500-81100 | 4 | * N.G. | 12 | 0 | C | 13 | 10 |
| 25 | L. D. C. | 19900-63200 | 2 | * N.G. | 14 | 0 | C | 26 | 15 |
| 26 | LIBRARY CLERK | 19900-63200 | 2 | * N.G. | 3 | 0 | C | 4 | 1 |
| 27 | DESPATCH RIDER | 19900-63200 | 2 | * N.G. | 0 | 0 | C | 1 | 0 |
| 28 | TELEPHONE OPERATOR | 19900-63200 | 2 | * N.G. | 5 | 0 | C | 6 | 4 |
| 29 | MULTI TASKING STAFF | 18000-56900 | 1 | * N.G. | 2 | 0 | D | 0 | 4 |
| 30 | MISTRY | 18000-56900 | 1 | * N.G. | 2 | 0 | D | 5 | 0 |
| 31 | DAFTARY | 18000-56900 | 1 | * N.G. | 3 | 0 | D | 3 | 2 |
| 32 | LIB. ATTENDANT | 18000-56900 | 1 | * N.G. | 3 | 0 | D | 4 | 2 |
| 33 | BEARER | 18000-56900 | 1 | * N.G. | 5 | 0 | D | 7 | 2 |
| 34 | HOSTEL ATTENDANT | 18000-56900 | 1 | * N.G. | 3 | 0 | D | 7 | 1 |
| 35 | PEON | 18000-56900 | 1 | * N.G. | 10 | 0 | D | 20 | 6 |
| 36 | WATCHMAN | 18000-56900 | 1 | * N.G. | 7 | 0 | D | 12 | 4 |
| 37 | SWEEPER | 18000-56900 | 1 | * N.G. | 10 | 0 | D | 19 | 4 |
| 38 | MALI | 18000-56900 | 1 | * N.G. | 1 | 0 | D | 2 | 0 |
| 39 | ATTENDANT | 18000-56900 | 1 | * N.G. | 10 | 0 | D | 18 | 7 |

* Non-Gazetted

**ANNEXURE III : PROFORMA FOR FURNISHING THE INFORMATION RELATING TO NO.OF CIVILIAN POSTS,
THEIR DESIGNATION AND SCALES OF PAY, ETC.IN RESPECT OF CIVILIAN EMPLOYEES OF
THE AUTONOMOUS BODIES AS ON 31-03-2020**

| Sr. No. | Designation of the Post in Full | 7 CPC Pay (Min. - Max.) | Level | Status of Post | | | Group of Post Group-A Group-B Group-C | No. of sanctioned Posts | Number of Employees in Position |
|---------|---------------------------------|-------------------------|-------|--------------------|---------|-----------|--|-------------------------|---------------------------------|
| | | | | Gazetted / Non-Gaz | Regular | Temporary | | | |
| | TECHNICAL | | | | | | | | |
| 1 | EXECUTIVE ENGINEER | 67700-208700 | 11 | * N.G. | 1 | 0 | A | 1 | 1 |
| 2 | VIDEO CAMERAMAN | 35400-112400 | 6 | * N.G. | 1 | 0 | B | 1 | 0 |
| 3 | DATA PROCESSING ASST. GR.B | 44900-142400 | 7 | * N.G. | 0 | 0 | B | 2 | 0 |
| 4 | TECHNICAL ASST.(SR) | 35400-112400 | 6 | * N.G. | 1 | 0 | B | 2 | 1 |
| 5 | JR. ENGINEER | 35400-112400 | 6 | * N.G. | 2 | 0 | B | 3 | 2 |
| 6 | TECH. ASSISTANT | 29200-92300 | 5 | * N.G. | 0 | 0 | C | 2 | 0 |
| 7 | DATA ENTRY OPR.GR-C | 35400-112400 | 6 | * N.G. | 2 | 0 | B | 2 | 1 |
| 8 | DATA ENTRY OPR.GR-B | 29200-92300 | 5 | * N.G. | 2 | 0 | C | 4 | 0 |
| 9 | MECH. 'A' | 25500-81100 | 4 | * N.G. | 4 | 0 | C | 5 | 0 |
| 10 | DRAUGHTSMAN | 25500-81100 | 4 | * N.G. | 0 | 0 | C | 1 | 0 |
| 11 | DATA ENTRY OPR GR-A | 25500-81100 | 4 | * N.G. | 0 | 0 | C | 3 | 0 |
| 12 | MECH. 'B' | 25500-81100 | 4 | * N.G. | 1 | 0 | C | 2 | 1 |
| 13 | DRIVER | 19900-63200 | 2 | * N.G. | 6 | 0 | C | 9 | 3 |
| 14 | PLUMBER | 19900-63200 | 2 | * N.G. | 2 | 0 | C | 2 | 0 |
| 15 | MECH. 'C' | 19900-63200 | 2 | * N.G. | 7 | 0 | C | 8 | 4 |
| 16 | DUPLICATING OPERATOR | 19900-63200 | 2 | * N.G. | 2 | 0 | C | 2 | 1 |
| 17 | PUMP ATTENDANT | 18000-56900 | 1 | * N.G. | 1 | 0 | D | 3 | 0 |
| 18 | BUS ATTENDANT | 18000-56900 | 1 | * N.G. | 1 | 0 | D | 2 | 1 |
| 19 | MOTOR CLEANER | 18000-56900 | 1 | * N.G. | 1 | 0 | D | 2 | 1 |
| 20 | WORKSHOP ATTENDANT | 18000-56900 | 1 | * N.G. | 1 | 0 | D | 1 | 1 |

* Non-Gazetted

**ANNEXURE IV: SUMMARY OF NO.OF SANCTIONED POSTS AND
NO. IN POSITION - GROUPWISE**

| GROUP OF POST | SANCTIONED POST | EMPLOYEES IN POSITION (R+T) |
|----------------------|------------------------|--|
| ACADEMIC | | |
| A | 91 | 61 |
| B | 4 | 2 |
| C | 0 | 0 |
| D | 0 | 0 |
| SUB-TOTAL | 95 | 63 |
| NON-ACADEMIC | | |
| A | 9 | 7 |
| B | 51 | 21 |
| C | 58 | 35 |
| D | 97 | 32 |
| SUB-TOTAL | 215 | 95 |
| TECHNICAL | | |
| A | 1 | 1 |
| B | 10 | 4 |
| C | 38 | 9 |
| D | 8 | 3 |
| SUB-TOTAL | 57 | 17 |
| TOTAL | 367 | 175 |

R - Regular

T - Temporary

Contact us at.....

National Institute of Industrial Engineering (NITIE)

Vihar Lake, NITIE PO., Mumbai-400 087, India

Tel.: +91-22-28573371-77

Fax: +91-22-28573251

Website: <http://www.nitie.ac.in>



National Institute of Industrial Engineering (NITIE)

Vihar Lake, Mumbai - 400 087



Telephone : (022) 2857 3371
Fax : (022) 2857 3251
Email : director@nitie.ac.in
Website : www.nitie.ac.in