Press Brochure for
51ST CONVOCATION
November 7, 2020
IIT Delhi celebrates its 51st Convocation on Saturday November 7, 2020. The Convocation is arguably the most important annual event of the Institute, a solemn occasion in where we celebrate our graduates and recognize them with our degrees and academic awards. This year, our Convocation is being graced by the Hon’ble Prime Minister of India, Shri Narendra Modi, as the Chief Guest (through video conferencing). Hon’ble Union Minister for Education Shri Ramesh Pokhriyal ‘Nishank’ and Hon’ble Union Minister of State for Education Shri Sanjay Dhotre will be Guests of Honour. We are honoured to have such distinguished presence amidst us for addressing the graduating students, current students, faculty and staff of the Institute.

This year has been unlike any other in the past and we are amidst the raging Covid-19 pandemic. As a result, academic activity got disrupted this year, when the country went into lockdown in March. At IIT Delhi, academics was restored in short order via the online mode. When it became clear that the pandemic is likely to extend, the Senate responded swiftly and approved on priority the Alternate Graduation Plan, primarily so that the students in their final semesters could graduate with minimal disruption, and move on with their further professional plans. The fact that we are able to hold the Convocation and celebrate our graduates is because we did not lose significant time in completion of academic requirements of these students.

Since the pandemic conditions still continue, we have been restricted in how we are able to conduct the Convocation this year. Consequently, we are having an in-person event with a small number of attendees in Dogra Hall in the main building of IIT Delhi, with most attendees joining online. It is slated to be an event which will be conducted in mixed mode, with seamless integration of the online content with the in-person content. We are not having a Phase II of the Convocation like we have had in the past few years.

This year, there are 873 graduates with UG degrees, including 744 B.Tech. degrees and 105 B.Tech. and M.Tech. degrees (Dual Degree). 298 students are graduating with a Ph.D. and the total number of students earning post-graduate degrees (including Ph.D., M.S. (R), M.Tech., M.Des., M.B.A., P.G. Diploma (Naval Construction), and DIIT) is 1146. In all this, while we witness this expansion in our academic strength, we are equally focused on enhancing the quality of our academic and research output, evidence of which you will see in these pages.

It may be noted that in this academic year, academic activities like Ph.D. defense were halted for several months because of the lockdown.
Academic activities have now picked up significantly over the past few months and are back to normal levels.

In 2020, several new academic initiatives have been undertaken by IIT Delhi. IIT Delhi has been appointed by the National Coordinator of MoE’s two flagship programmes, the ASEAN-PhD Fellowship Programme and the PMRF programme. Two new UG programmes have been introduced this year, namely the B.Tech. in Engineering and Computational Mechanics and the B.Tech. in Materials Engineering. An interdisciplinary M.Tech. in Cyber Security has been started, and M.S. (R) programme in Centre for Automotive Research and Tribology (CART), and a Joint PG Diploma in Visionary Leadership in Manufacturing (VLFM) with NITIE Mumbai. The School of Artificial Intelligence (ScAI) has been started, and is likely to begin its PG level academic activities in full swing in the current academic year.

2020-21 also being the Diamond Jubilee year of the Institute, there is an even stronger commitment to the cause of higher education. As we do take stock of our accomplishments, we also commit ourselves to ever higher academic and research targets, and in being more and more contextual to our own eco-system and the needs of the Nation. In these pages, you will find highlights of our efforts on all fronts.

We welcome you to join us on this auspicious 51st Convocation and share in our journey towards greater levels of excellence.

The Convocation Ceremony can be viewed online by following the link on www.convocation.iitd.ac.in.

Prof. Shantanu Roy
(Chairperson, Convocation Committee)
MEDALISTS
Students receiving Institute Medals in the 51st CONVOCATION

**Gold Medalists**

**President’s Gold Medal**

- Deepanshu Jindal
  - B.Tech. in Computer Science & Engineering

**Director’s Gold Medal**

- Aashi Agarwal
  - B.Tech. in Textile Technology

**Dr. Shankar Dayal Sharma Gold Medal**

- Muskan Kularia
  - M.Tech. in Applied Optics

**Perfect Ten Gold Medals**

- Muskan Kularia
  - M.Tech. in Applied Optics

- N Jayakrishnan
  - M.Tech. in Mechanical Design

- Himanshu Yadav
  - M.Sc. in Mathematics

**Silver Medalists**

- Simar Kaur Mattewal
  - B.Tech. and M.Tech. in Chemical Engg.

- Jashan Singh Suri
  - B.Tech. and M.Tech. in Biochemical Engg. and Biotechnology

- Siddhant Arora
  - B.Tech. and M.Tech. in Computer Science and Engg.

- Tarun Gupta
  - B.Tech. and M.Tech. in Mathematics and Computing

- Shreya Johri
  - B.Tech. in Biochemical Engg. and Biotechnology

- Ashutosh Raj
  - B.Tech. in Civil Engg.

- Amit Choudhary
  - B.Tech. in Chemical Engg.

- Khushal Sethi
  - B.Tech. in Electrical Engg.

- Jashan Singh Suri
  - B.Tech. and M.Tech. in Biochemical Engg. and Biotechnology

- Salil Chandra
  - B.Tech. in Electrical Engg. (Power and Automation)

- Saksham Jain
  - B.Tech. in Mechanical Engg.

- Kshitij Gupta
  - B.Tech. in Production and Industrial Engineering

- Chahat Chawla
  - B.Tech. in Mathematics and Computing

- Swarnava Sanyal
  - B.Tech. in Engineering Physics

- Khushank Singhal
  - B.Tech. in Textile Technology

- Venu Gopal Agarwal
  - M.S.(R) in Mechanical Engg.

- Hrit Roy
  - M.Sc. in Mathematics

- Shubham Choudhary
  - M.S.(R) in Electrical Engg.
KEY HIGHLIGHTS

- IIT Delhi is ranked 3rd overall and 2nd in Engineering category in the National Institutional Rankings Framework (NIRF) for 2020, and 193rd in the QS World University Rankings for 2021. In the Asian region, IIT Delhi is ranked 43 by QS and ranked 47 by Tiemen Higher Education.

- Programmes started at PG level:
  i. Interdisciplinary M.Tech. Programme in Cyber Security
  ii. M.S. (R) programme in the Centre for Automotive Research and Tribology (CART)
  iii. Joint PG Diploma in Visionary Leadership in Manufacturing (VLFM) Programme between IIT Delhi and NITIE Mumbai

- Programmes started at UG level:
  i. B.Tech. in Engineering and Computational Mechanics Programme in Applied Mechanics Department
  ii. B.Tech. in Materials Engineering in the Department of Materials Science and Engineering

- A new School of Artificial Intelligence (ScAI) has been established. The School will admit Ph.D. students from Semester II, 2020-21.

- IIT Delhi was designated by Ministry of Education to serve as the National Coordinator in its two flagship programmes, the Prime Minister’s Research Fellowship (PMRF) programme and the ASEAN-PhD Programme.

- IIT Delhi has approved the Online Courses in Continuing Education Programme mode, under the name eVidya. This will provide access to a very large number of students and professionals for attending online courses at IIT Delhi.

- The Institute has signed five major collaborative MoUs viz (i) Open Health Systems Laboratory (OHSL), USA, (ii) Indian space Research Organization (ISRO), Bangalore, (iii) National Highways Authority of India (NHAI), New Delhi, (iv) Master card Technology Pvt. Ltd., Pune (v) Institute of Liver & Biliary Sciences (ILBS), New Delhi and 25 project related MoUs:
  i. Technology Innovation Hubs (TIH) on Cobotics sponsored by the Department of Science and Technology (DST), New Delhi, with the funds at the tune of ₹170 crores for five years for carrying out research in multi-disciplinary areas of Robot and Human interactions.
  ii. Sophisticated Analytical & Technical Help Institute (SATHI) sponsored by the Department of Science and Technology (DST), New Delhi, towards augmentation of infrastructure facilities for pursuing cutting-edge research. Funding support of ₹125 crores for five years have been received for this purpose.
  iii. Open Health Systems Laboratory (OHSL), USA, has signed an MoU on 9th February 2020 to set up the International Centre of Excellence for Computational and Biomedical Sciences (ICECBS) at the IIT Delhi. OHSL, USA, is supporting ₹10 crores for five years to pursue advanced research in the areas of Cancer Biology & Therapy, Ayurveda, Drug Development & Discovery, and Reconfigurable Computing & Hybrid Cloud C, etc.
  iv. An MoU has been signed between The National Highways Authority of India (NHAI) and IITD on 6th August 2020, for setting up a Centre of Excellence (CoE) on Advance Data Management System (ADMS) for Highways at IIT Delhi with the financial support of ₹15 crores for five years.
  v. M/s. Mastercard Technology Private Ltd. Pune has signed an MoU for research engagement in the area of Artificial Intelligence, Cyber Security, Data Science & Analytics, etc. towards Payment Technology aspects.
  vi. Institute of Liver Biliary Sciences (ILBS), New Delhi, and Indian Institute of Technology Delhi (IITD) has signed an MoU on 22nd
September 2020. The Institute shall pursue multi-disciplinary research in a few focused areas concerning Liver diseases and Artificial Intelligence (AI) and Machine Languages (ML), Sensor Development, Computational Biology, Big Data, etc.

- Agilent Technologies has signed an MoU with IIT Delhi to set up an incubator site for bio-analytical science to support research.
- Indigram Labs foundation has signed an MoU with FITT, IIT Delhi to support startups in the Agritech sector.
- STPI NOIDA has signed an MoU with FITT, IIT Delhi to support startups in the Electronics and Information technology domains.
- FITT has signed an MoU with Engineers India Limited to support startups with funding and mentoring under the EngSUI program.
- FITT has signed an agreement with Yuva Bharti Trust to set up an extension incubator in central Delhi.
- MoU with National Technical Research Organization (NTRO) and FITT for projects in the area of camera development (primarily custom image sensors) and processing (egAI) for intelligence related operations.

**COVID - 19**

When the COVID-19 pandemic disrupted the academic activities, the Institute swiftly updated the teaching to the online mode. Sufficient outreach, surveys and initiatives were taken up to support the students that were forced to continue study in the digital mode. The Senate provisioned the online doctoral defence for Ph.D. students so that minimal disruption in their academic progress and completion. Academic administration was completely brought online so that students can manage their academic activities with minimal disruption, even from their homes. Library resources were given access to even from outside campus. The AGP: ‘Alternate Graduation Plan’ was adopted for the graduating class. The ongoing and the next semesters are planned to be conducted in the online mode and institute with the support of its administrative staff is ready to take any unforeseeable challenge in this regard.

**PLACEMENT**

Placement of graduates is of highest priority to the Institute. Despite the pandemic challenges, as many as 943 students were placed through the Office of Career Services. A total of 1095 job offers were made to by the companies for the graduating class that includes 187 pre-placement offers while 60 students bagged more than one offer. Approximately 85.88% of the students who opted the services through the OCS were placed. The remaining opted for higher studies/research or working on their own startup ventures while some got jobs on their own.

**PUBLICATIONS 2019-20**

- **Books Authored/Co-Authored**: 27
- **Edited/Written Volumes**: 9
- **Conference Proceedings**: 65
- **Journals**: 614
- **Chapters In Edited Volumes**: 1380

**PLACEMENT 2019-20**

- **B. Tech.**: 509
- **M. Tech.**: 252
- **M.Sc.**: 86
- **M.S. (R)**: 13
- **M.B.A.**: 3
- **Dual Degree**: 3
- **M. Des.**: 9
- **M.B.A.**: 68
ALUMNI AFFAIRS AND INTERNATIONAL PROGRAMMES (AAIP)

Indian Institute of Technology Delhi lays great emphasis on interaction between the alumni and the alma mater. We are proud of our alumni and their achievements. The success of the alumni is one of the most important yardsticks by which we measure our achievements.

AAIP office has been making active efforts to raise funds for various Institute initiatives and it was able to successfully raise an amount of ₹53.22 Crores in period from 1st November, 2019 to 5th October, 2020.

LAUNCH OF ENDOWMENT FUND

On 31st October 2019 Hon’ble President of India, Shri Ram Nath Kovind, launched the IIT Delhi Endowment Fund, the first of its kind in India’s history from Rashtrapati Bhawan. Prof. V. Ramgopal Rao, Director, IIT Delhi and Prof. Sanjeev Sanghi, Dean, Alumni Affairs and International Programmes and some of the alumni founders of the Endowment fund were present for this launch. IIT Delhi launched the endowment fund with an initial commitment of ₹255 crore. The endowment fund will work towards the development of the institute, encourage innovation and entrepreneurial spirit.
DISTINGUISHED ALUMNI AWARDS

Distinguished Alumni Awards

Prof. Neville G. Pinto
(B. Tech. in Chemical Engineering, 1980)
President of the University of Cincinnati

Prof. H.V. Jagadish
(B. Tech. in Electrical Engineering, 1981)
Bernard A. Galler Collegiate Professor of Electrical Engg & Computer Science at University of Michigan.

Prof. Nemkumar Banthia
(M.Tech. in Structural Engineering, 1982)
Canada Research Chair and Professor of Civil engineering at the University of British Columbia.

Mr. Yashish Dahiya
(B.Tech. in Textile Technology, 1994)
Co-Founder and Group CEO, PolicyBazaar.com.

Mr. Deepinder Goyal
(Integrated M.Tech. in Mathematics and Computing, 2005)
Founder & CEO, Zomato

Graduates of Last Decade (GOLD) Awards

Mr. Pankaj Chadda
(B.Tech. in Mechanical Engineering, 2007)
Co-Founder Zomato and Mindhouse

Prof. Sanjam Garg
(B.Tech. in Computer Science & Engineering, 2008)
Assistant Professor at the University of California, Berkeley

Distinguished Alumni Service Award

Mr. Vikram Gupta
(B.Tech. in Chemical Engineering, 1993)
Founder and Managing Partner, IvyCap Ventures

SPONSORED RESEARCH PROJECTS AND CONSULTANCY (IRD AND FITT)

- 316 Sponsored Projects with total funding of ₹344.10 Crores have been undertaken.
- 309 Consultancy Assignments worth ₹21.46 Crores have been undertaken.
- New Faculty grant to the tune of ₹48 Lakhs have been given to new Faculty member (₹1 Lakh per faculty).
- 86 FIRP and 89 MFIRP projects have been supported to date since their inception.
- 19 Student Start-up Action and 32 Discover & Learn projects have been supported to date since their inception.
- 56 technology development and transfer projects worth ₹13.67 Crores have been contracted at FITT.
- From November 2019 to September 2020, 146 patents & IPs were filed and 18 licensing deals were closed.

Major Sponsored Projects (with sanctioned funds ₹5 Crores & above) started during 2019-20

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Sponsoring Agency</th>
<th>Sanctioned Funds (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Establish Sophisticated Analytical and Technical Help Institute (SATHI) at IIT Delhi</td>
<td>Department of Science &amp; Technology</td>
<td>125.00</td>
</tr>
<tr>
<td>DST - IITD Energy Storage Platform on Batteries (ESPOB) (Multi Institutional Project)</td>
<td>DST, Ministry of Science &amp; Technology</td>
<td>10.87</td>
</tr>
<tr>
<td>ASEAN Ph.D. Fellowship Programme Secretariat</td>
<td>Ministry of Human Resource &amp; Development</td>
<td>9.27</td>
</tr>
<tr>
<td>Technology Innovation Hub (TIH) on Cobotics</td>
<td>DST, Ministry of Science &amp; Technology</td>
<td>7.25</td>
</tr>
<tr>
<td>Design and Demonstration of Sustainable Building Infrastructure (sub project under CoESI)</td>
<td>Yardi Systems, USA</td>
<td>6.70</td>
</tr>
<tr>
<td>Enhancing India’s Policy Analysis Capabilities to Meet Energy and Environment Challenges</td>
<td>Children’s Investment Fund Foundation - UK</td>
<td>5.32</td>
</tr>
</tbody>
</table>

Trends & Statistics of Research Funding

<table>
<thead>
<tr>
<th>CONSULTANCY JOBS UNDERTAKEN</th>
<th>Financial Year</th>
<th>Consultancy Jobs (IRD)</th>
<th>Technology Development Projects/ Contract Research Projects (FITT)</th>
<th>Total Sanctioned Value (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of Projects Sanctioned</td>
<td>Sanctioned Value (in Cr.)</td>
<td>No. of Projects Sanctioned</td>
</tr>
<tr>
<td></td>
<td>2015-16</td>
<td>365</td>
<td>29.29</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>2016-17</td>
<td>318</td>
<td>20.36</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>2017-18</td>
<td>282</td>
<td>22.18</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>2018-19</td>
<td>292</td>
<td>26.86</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>2019-20</td>
<td>278</td>
<td>19.02</td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPONSORED RESEARCH PROJECTS UNDERTAKEN</th>
<th>Financial Year</th>
<th>No. of Sanctioned Projects</th>
<th>Sanctioned Value (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015-16</td>
<td>136</td>
<td>72.44</td>
</tr>
<tr>
<td></td>
<td>2016-17</td>
<td>158</td>
<td>140.21</td>
</tr>
<tr>
<td></td>
<td>2017-18</td>
<td>282</td>
<td>417.19</td>
</tr>
<tr>
<td></td>
<td>2018-19</td>
<td>317</td>
<td>347.52</td>
</tr>
<tr>
<td></td>
<td>2019-20</td>
<td>316</td>
<td>344.10</td>
</tr>
</tbody>
</table>

Fig. 1: Trends in Sponsored Research Projects

Fig. 2: Number of Projects Sanctioned
Some of the notable recognitions (partial list) received by our faculty in the last one year include the following:

- Prof. V. Ramgopal Rao, Director, IIT Delhi, has been invited to be a member of Editorial Advisory Board of Nano Letters, a very prestigious journal having impact factor of 12, for a period of three years starting from January 1, 2020.
- Prof. Abhisek Dixit, Department of Electrical Engineering, has been elected as a fellow of The Institution of Electronics & Telecommunication Engineers "ITEE".
- Prof. M. Balakrishnan, Computer Science Engineering, has been selected for "Life Time Award".
- Prof. Amit Kumar, Computer Science Engineering, was awarded the "Prof. P.C.P. Bhatt Faculty Research Award" for Basic Research. The award was instituted by our distinguished alumnus Mr. K. Ananth Krishnan.
- Prof. Sreedevi Upadhyayula, Department of Chemical Engineering has been awarded "Innovation Award 2018-2018" for K-Model: Quick and Accurate Prediction of Crude Oil Blend Compatibility and Blend Optimization of N-Number of Crude Oils from Secretary, Government of India, Ministry of Petroleum & Natural Gas.
- Prof. Shashank Deep, Department of Chemistry has been elected as a fellow of "Follow the Royal Society of Chemistry" (FRSC).
- Prof. Sanjeev Sanghi, Applied Mechanics Department & Dean, Alumni Affairs and International Programmes has been selected as a members of the editorial board of Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy.
- Prof. Shalini Gupta, Department of Chemical Engineering have been awarded the 'National award for young women showing excellence through application of technology, for societal benefits', instituted by DST.
- Prof. Swades De, Department of Electrical Engineering has been selected for the Shri Om Prakash Bhasin Award 2019 in the field of Electronics and Information Technology.
- Prof. Suddhasatwa Basu, Department of Chemical Engineering has been elected as a fellow of "Royal Society of Chemistry".

INFRASTRUCTURE DEVELOPMENT

Key new infrastructure projects which are in advanced stages and are likely to be completed very soon are.

- Nalanda Research Scholars Apartments (Phase-I)
- Research and Innovation Park
- Engineering Blocks 99B and 99C
- Faculty Housing
- Boys Hostel ‘E’
- Indoor Sports Complex
- Girls Hostel

Construction of new major projects being taken up this FY include Diamond Jubilee Block (known as Academic Block 103), 105 Nos. Professors’ apartments, Boys hostel (approx.1450 students capacity), Girls hostel (approx. 950 students capacity), 21 Nos. Type ‘C’ quarters for staff and SATHI building at Sonepat for Central Research Facility (CRF) through IOE fund / EWS grant. In addition, construction of Nalanda Research Scholars Apartments (Phase-II) is also being taken up through HEFA loan.

At Sonepat campus, for the CRF purchase and installation of equipment worth about ₹200 crore have also been initiated/completed under HEFA loan and IOE grant.

For Jhajjar Campus, Government of Haryana has also been kind enough to allot 21 acres of land near to AIIMS Jhajjar Campus partly in exchange of land allotted to us near Najafgarh drain.

Ministry of Housing and Urban Affairs (MOHUA) have agreed to allot 2.344 acre of land at R.K. Puram (Sector-3) where we are planning to construct faculty and staff houses.

FACULTY ACHIEVEMENTS

IIT Delhi is backed up by a strong research community, led by a faculty strength of 562 members. It is complimented by an additional research and academic staff of 111 members that includes 72 postdoctoral fellows. With the current sanctioned strength of 776 members, the institute aggressively looks to expand this strength in a phased manner for the next five years. In the last year, the institute has made offers to 80 new faculty members and 61 of them have already joined the institute already. Many faculty members have also been appointed as Chair Faculty sponsored by alumni, industry and institute.
• Prof. Ashok K. Ganguli, Department of Chemistry, have been nominated for "Professor J.N. Mukherjee Memorial Award", 2019 by the Council of the Indian Chemical Society,

• Prof. Bhim Singh, Professor of Department of Electrical Engineering on being conferred the INAE Outstanding Teacher Award 2020 (copy attached) by the Governing Council of the Academy of Indian National Academy of Engineering.

• Prof. N.M. Anoop Krishnan of the Department of Civil Engineering, have been selected for the INAE Young Engineer Award 2020.

• Prof. Sumit Kumar Pramanick of the Department of Electrical Engineering have been selected for the INAE Young Engineer Award 2020.

• Prof. Anurag S. Rathore Department of Chemical Engineering has been named an Agilent Thought Leader in recognition of his leadership and contributions to the field of advanced methods for characterization of heterogeneity in biosimilar products.

• Prof. Naveen Garg, Department of Computer Science & Engineering, Fellow of the Indian National Academy of Engineering.

• Prof. Kamal Kishore Pant, Department of Chemical Engineering, Fellow of the Indian National Academy of Engineering.

• Prof. Indra Narayan Kar, Department of Electrical Engineering, Fellow of the Indian National Academy of Engineering.

• Prof. Jayadeva, Department of Electrical Engineering, Fellow of the Indian National Academy of Engineering.

• Prof. Suddhasatwa Basu, Department of Chemical Engineering, Fellow of the Indian National Academy of Engineering.

• Prof. Bhim Singh, Professor of Department of Electrical Engineering has been conferred the Institution of Engineers (India), Delhi State Centre Eminent Engineering Personalities with "Eminent Engineer Award for the year 2020" for their distinguished services in Engineering Profession.
VISION

• To contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and remain a source of pride for all Indians.

MISSION

• To generate new knowledge by engaging in cutting-edge research and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and doctoral programmes.
• To identify, based on an informed perception of Indian, regional and global needs, areas of specialization upon which the Institute can concentrate.
• To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry.
• To develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

VALUES

• Academic integrity and accountability.
• Respect and tolerance for the views of every individual.
• Attention to issues of national relevance as well as of global concern.
• Breadth of understanding, including knowledge of the human sciences.
• Appreciation of intellectual excellence and creativity.
• An unfettered spirit of exploration, rationality and enterprise.