

FITT FOUNDATION FOR INNOVATION & TECHNOLOGY TRANSFER

ANNUAL REPORT 2019-2020

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Director's Report

Since its inception in 1992, the Foundation for Innovation and Technology Transfer (FITT) at IIT Delhi has been the vanguard of knowledge transfer activities from academia. FITT is counted amongst the foremost organisations of its kind in the country. The constantly evolving relationship between industry and academia largely determines FITT's approach in shaping its outreach for economic development. The continued support of academia at IIT Delhi helps the team at FITT to contribute significantly more than efficient delivery of services.

FITT is actively enabling innovations, industry partnerships, R&D programs, licensing, industry visits etc. This is mandated by the key agenda of the Foundation to transfer technology and also inspire industrial orientation in teaching and research. Importantly, FITT offers flexible and convenient formats for external engagement by academia. The FITT newsletters depict some of the best that IIT Delhi has to offer in terms of its expertise, knowledge base and infrastructure as well as other opportunities towards research collaborations.

The foundation believes that strong cooperation between the Government, Academia and Industry can help in creating effective policy tools / strategy for finding solutions to various challenges facing our country. Directed research and innovation programs can lead to impactful solutions in the important areas of healthcare, manufacturing, infrastructure, cleanliness, water, energy, financial inclusion etc. FITT plays an important role in exploiting the research capability at IIT Delhi by creating effective outreach channels. FITT provides superior program management services and is steadily increasing its operational landscape which, while encouraging, is challenging it to attain higher levels of effectiveness and success in its stated mission. FITT has helped in the filing of over 950 patents for IIT Delhi, and actively works to increase the licensing deals. Over 110 technologies have since been commercialized.

The Technology Business Incubation program at the campus has provided incubation residence to over 140 start-up companies out of which 35 start-ups are presently being sheltered. Several Government support programs of DST, BIRAC, DeitY, MSDE and MSME are being facilitated by FITT. FITT works with several corporates like Pfizer, POSOCO, Barclays, Samsung etc. towards supporting the incubation programs on the campus. To further encompass the innovation value chain, FITT has now embarked on the mission to organize Research Parks on IIT Delhi's campuses to deepen industry engagement, enhance R&D programs and significantly augment the start-up ecosystem. Importantly, FITT supported the Institute faculty and start-ups in the fight against Covid-19 by taking several technology solutions to the market where they were well received. FITT strives to initiate, build and sustain external partnerships and keeps on strategizing for increased value creation and thus, maintains its special position at IIT Delhi.



Key Activities, Projects and Initiatives

FINANCIAL YEAR 2019-2020

Outreach and Engagements

FITT has been working as an interface organization at IIT Delhi since its inception. The evolving relationship between industry and academia has supported knowledge transfer and technology commercialization. The engagement with industry and other organizations is sustained by continued efforts towards various developmental collaborations and other partnership opportunities.

 FITT facilitates active industry-academia dialogue and enables mutual visits to explore partnership prospects. In pursuance of this goal, industry representatives are regularly invited for presentations, highlighting their priority R&D areas to faculty groups in the Institute, and opportunities for collaborative work with IIT Delhi. Several contract R&D projects and consultancy assignments have been conducted at the Institute under the aegis of FITT. During the year 2019-2020 there have been a number of visits to FITT by senior people from organizations Pfizer, Havells, Boeing, ONGC, JBM and delegations from various countries across the globe.



Delegation from the University of Queens, Belfast visited FITT on May 3, 2019



A delegation from Danish Patent and Trademark office visited FITT on November 25, 2019

- The Ministry of Skill Development and Entrepreneurship (MoSDE) have instituted the National Entrepreneurship Awards Scheme (NEAS) in association with FITT & IIT Delhi as one of its implementing partners to recognise the efforts and achievements of exceptional entrepreneurs and those individuals and organisations who are working in the field of entrepreneurship development.
- 3. Power System Operations Corporation Ltd. (POSOCO), a Government of India enterprise, in association with FITT has been implementing the POSOCO Power System Awards (PPSA) since 2013. PPSA is a part of the CSR initiatives of POSOCO, which aims to reward excellence in the area of power system and its related fields. During the 8th edition of this award, 15 awardees were shortlisted in Doctoral category and 15 candidates in the Master's category. The Doctoral awardees received a cash prize of Rs. 1,00,000/- each and the Master awardees received a cash prize of Rs. 40,000/- each.

Felicitation Ceremony of Awardees at the Senate Room



Awardees of PPSA- 2020 were felicitated by Mr. Sanjay Malhotra, Additional Secretary, Ministry of Power, Gol, at Senate Room on March 13, 2020

- 4. FITT has been promoting the Women Entrepreneurship and Empowerment (WEE) program supported by the Department of Science and Technology (DST) at IIT Delhi. WEE classes were conducted during the weekends at IIT Delhi with the global industry experts mentoring the woman entrepreneurs. During the 4th phase of this WEE program 14 women were shortlisted for the award.
- 5. FITT in association with Pfizer India, implements the Pfizer IIT Delhi Innovation and IP Program, which provides support upto Rs. 50 lakhs to healthcare based innovators / start-ups for incubation and Rs. 3 lakhs for IP protection.
- 6. The biannual FITT Newsletters FITT Forum and FITT Technopreneurship Bulletin serve as information diffusion channels addressing inter alia, contemporary technical issues, new developments and available opportunities for collaboration, and support for entrepreneurship. The information reaches a wide spectrum of several hundred industrial units, R&D organizations, government agencies, academic institutions and others.
- 7. FITT has registered as a CSR Implementing Agency Hub with National Foundation for Corporate Social Responsibility, IICA, under the Ministry of Corporate Affairs. As part of the CSR mandate under Section 135 of the Companies Act 2013, Corporates can associate with FITT to implement projects in relevant technology area and / or fund the technology incubation program at IIT Delhi.

- 8. A Research & Innovation Park has been planned on the campus by IITD with FITT providing the anchor role in conceiving / enabling the creation of an appropriate infrastructure and operationalizing the system within a framework to be adopted by the institute. IIT Delhi Technopark Sonipat (ITEC-Sonipat) has started it operation with facilities of residential incubation. Interested start-ups can contact FITT for availing incubation.
- 9. FITT has collaborated with Boeing India for Boeing University Innovation Leadership Development Program (BUILD) -2019. The program aims at identifying student innovators and budding start-ups and transform their ideas into sellable value propositions in the Northern region.



Pi Drones and PS-1925, two start-ups mentored at FITT, were among the Top 6 teams selected in BUILD-2019

10. The Defence Innovation Organisation has signed an MOU with FITT to foster innovation & technology development in Defence and Aerospace. Nominated as an iDEX partner incubator, FITT is to mentor entrepreneurs and MSMEs to create, deploy and commercialise technologies and products for the Indian military and defence PSUs.



FITT organised an iDEX Awareness Session at IIT Delhi on December 4, 2019

Technology Development and Consultancy

Scientific and technological advancement is an important catalytic factor in industrial development and economic progress. An indicator of such programs is the creation of intellectual property and the IPRs. The Institute encourages protection of intellectual assets to foster innovation and create opportunities for wealth creation. FITT facilitates and manages the Institute's IPR activities. It receives information, carries out analysis and due diligence and processes the invention disclosures for formal registration as patents, designs etc. Bulk of actual filings, though are outsourced to the professional attorney firms. However, of late, select IP registrations or IP investments has been taken up in association with specialist firms like Intellectual Ventures. The list of IPR applications approved for filing during 2019-2020 is given in Appendix-I (Page 16) 172 IP cases were filed during this period.

FITT is mandated to transfer technologies developed at IITD for commercialization. During 2019- 20, 8 IP licenses were executed (as given in Appendix-II- Page 22).

It is an accepted fact that technology development and its subsequent transfer to industry from an academic institute are often best accomplished through pursuance of short to medium term problem solving investigative projects. Such projects help in establishing mutual confidence and working relationships. A lot of thrust has been put on such projects by IIT Delhi faculty and FITT has facilitated in their effective execution. This activity has been growing over the years. During the financial year 2019-2020, 67 technology development and transfer projects worth 16.93 crores have been contracted at FITT. Some of the development projects undertaken during 2019-2020 are mentioned in Appendix III (Page 23).

Innovation and Enterprise

a. FITT is responsible for operating the Technology Business Incubation Unit (TBIU) at the Institute Campus.

TBIU primarily aims to promote partnerships with new technology entrepreneurs and start-up companies. As part of the TBIU program, subsidized modular space is provided to new entrepreneurs, first generation start-up companies or technology based organizations for setting up an office or work station or a prototype laboratory within the campus, with the purpose of:

- Promoting interaction with, and technology/ expertise resourcing from the members of academic staff and research scholars of the Institute, and
- ii) Incubating novel technology and business ideas into viable commercial products or services.

Permitted activities in the TBIU include product development, product innovations, software testing simulation and prototyping, pilot experimentation, training and similar other technology related work, in which there exists homology with the Institute.

The Biotechnology Business Incubator Facility (BBIF) established by FITT, facilitates specialized equipments, experimental facilities, IP guidance, market linkages etc to the bio-tech start-ups.

To help entrepreneurs working in deep technology domains and further commercialization, FITT has launched the Platform for Harnessing Deep Technologies (PHD) Incubator Program. The idea is to support innovators and entrepreneurs to carry forward a promising deep technology idea and generate proof of concept to validate the idea. Further details on application available on: fitt-iitd.in

FITT has been implementing BIRAC's SPARSHthe Social Innovation programme for Products: Affordable and Relevant to Societal Health. This program is aimed at the promotion and development of innovative solutions to society's most pressing social problems. Under this program, shortlisted innovators are provided with a mini kick start grant of Rs 5 lakhs and a monthly fellowship of Rs. 50,000/- along with technical support.

The AIC IIT Delhi Sonipat Innovation Foundation, a Section 8 company, created by FITT and IIT Delhi at the IIT Delhi Sonipat Campus under the Atal Innovation Mission (AIM) of the NITI AAYOG, is ready to take off, following the receipt of the first tranche of funding from the AIM. AIM is supporting the AIC for creating world-class incubation facility with over 10,000 sqft of space and state-of-theart physical infrastructure, in terms of capital equipment and operating facilities for incubatee start-ups. Apart from this, business-planning support, access to sectoral experts for mentoring and seed capital, industry partnerships, training and other relevant components required for supporting innovative start-ups will be provided. FITT takes pride in offering to the budding technoentrepreneurs an ambient ecosystem that nurtures new age businesses. Hand-holding, networking, managerial and material support etc are easily forthcoming for the truly innovative forays. The administration and management of the incubation units is vested with FITT, yet, an institute level empowered committee (known as TBIU Board) overseas the programme. The Board as on March 31, 2020, comprised of:

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TBIU Board

Prof. V. Ramgopal Rao, Director, IIT Delhi	Chairman
Prof. T. C. Kandpal, DD(O), IIT Delhi	Member
Prof. M. Balakrishnan, DD (S&P), IIT Delhi	Member
Prof. B. R. Mehta, Dean (R&D), IITD	Member
Shri Y. Andlay, MD, Nucleus Software Pvt. Ltd.	Member
Dr. S. Bajaj, Founder Director, Cygnus Hospitals	Member
Shri P. Sharma, Industry Leader (Business & Strategy)	Member
Dr. A. Wali, MD, FITT	Convenor

Another high level committee, the Standing Screening Committee screens and evaluates the incubation proposals from innovators / start-ups for admission to the TBIU. This committee comprises both senior faculty scientists and industry experts to ensure due diligence of the technology business incubation proposals.

b. Here are some of our start-ups (Promoters / Faculty) and innovators resident at our incubators during FY 2019-2020:

1. Anaavaran Technologies (Prof. M. Balakrishnan, CSE; Ms. A. Gulati)

This start-up is resident in the TBIU since May 2018. Under the mentorship of Prof M Balakrishnan, CSE, Anavaran is working on a multisensory kit that augments audio with tactile diagram to enhance understanding for children with visual impairment. Founder, Ms Ankita, has won accolades such as the GYTI, IIGP and 3M CII young innovators challenge.

2. Flexmotiv Technologies Pvt. Ltd. (Prof. S. Mukherjee, Dept of ME, Mr. S. Adepu and Mr. Arvind SR)

Under the mentoring of Prof S. Mukherjee, ME, IIT Delhi this start-ups has developed Flexcrutch-a novel under-arm axillary crutch. Flexmotiv is resident at TBIU from March, 2018 and have launched Flexmo a self-standing axillary crutch that reduces jarring forces while walking and improves the user performance by 10%-20% as compared to traditional crutches as it improves the surface adaptability of traditional crutches.

3. Clensta International (Prof. A. S. Rathore, CHEME; Dr. P. Gupta)

Clensta is addressing accessible hygiene concerns whilst contributing in resolving global water crisis as well. They have created innovative healthcare solutions: Clensta Waterless Shampoo & Body Bath; accessible for anyone, anytime and anywhere. With the ongoing pandemic, Clensta has come up with body and hand sanitizers as well. Dr. P. Gupta had also received the National Entrepreneurship Awards 2019 during November 2019.

4. Luminasic Pvt. Ltd. (Prof. M. Sarkar, EE)

Luminasic is into development of ASICs for CMOS image sensors. The company was incubated in the TBIU from January, 2017 and successfully exited in December, 2019.

Botlab Corporation Pvt. Ltd. (Mr. T. Bunkar, Prof. R. Chatterjee, PHY)

Botlab is into development of Unmanned Aerial Vehicles (UAVs) for aerial inspection and temperature profiling. The company is resident in the TBIU since July, 2016. While focusing on industry grade UAVs having sensing and imaging capabilities for various applications across industries, the start-up is working on three features - stability, endurance and networking of multiple UAVs.

6. Vizara Technologies Pvt. Ltd. (Prof. S. Roy, EE ; Dr. A. Mallik and Dr. G. Sharma)

Vizara Technologies has been resident in the TBIU since October, 2016. The company is providing knowledgebased Virtual Reality and Augmented Reality solutions in various domains such as heritage preservation, tourism, real-estate, security and smart city governance. Vizara exited in December, 2019.

7. Vecmocon Technologies Pvt. Ltd. (Prof. A. K. Jain, EE and Mr. A. Bansal)

This start-up is engaged in designing and development of Electric Smart Vehicles and battery management. Vecmocon has designed Al electric vehicle components for Original Equipment Manufacturers (OEMs). This start-up was resident at the TBIU from August 2016 to October, 2019 and has filed two patents so far.

Aquasense Global Pvt. Ltd. (Prof. A. K. Gosain, CE; Mr. S. Lahari & Mr. A. Singhal)

Aquasense is working to find pragmatic solution for water measuring devices. The start-up was incubated at the TBIU from February, 2017 and exited in July, 2019.

9. Ariant Technologies and Research Pvt. Ltd. (Prof. S. Jha, ME; Mr. K. Kohli)

Ariant entered the incubator program in November, 2017 and was working on electric fuzes for ammunition to be used by Army, Navy and Ordnance factories. The company successfully exited in November, 2019.

10. Matisoft Cyber Security Labs Pvt. Ltd. (Prof. B. Lall, EE; Mr. V. Seth)

This start-up is into developing intelligent security software. Matisoft is incubated at the Sonipat Residential Incubator (SRI) effective from March, 2018.

11. Kriya Labs Pvt. Ltd. (Prof. N. Singh, CBME ; Mr. A. Kumar)

Kriya Labs is developing products and processes to produce affordable, high-quality and ecofriendly value added products from waste natural materials/ fibres. This start-up is resident at the incubator from December, 2017.

Virmat Pvt. Ltd. (Prof. D. Joshi, CBME; Mr. R. Singh)

The start-up is working on development of physical simulator for Endoscopic Third Ventriculostomy (ETV) and ventricular shunt placement. Virmat was operating at BBIF as a part of the Pfizer – IIT

Delhi Innovation & IP program from May, 2017 to June, 2019.

Phase Laboratories Pvt. Ltd. (Prof. K. Khare, Physics; Dr. S. Ahlawat)

Phase lab has been incubating at the TBIU since July 2017 and is working on diagnostic application development using novel High Resolution Digital Holographic (DHM) technology.

14. CYRAN AI Solutions Pvt. Ltd. (Prof. M. Suri, EE)

CYRAN aims to build advanced hardware-software technology solutions in the domains of AI based Cyber Physical Security. CYRAN have launched a BUDDHI kit a Do It Yourself kit for school students to easily learn the basics of AI and build AI-based solutions for real-world problems.

Raised Lines Foundation (Prof. M. Balakrishnan, CSE; Mr. P. Sapra, Mr. K. Kwatra & Mr. P. Chanana)

Raised Lines Foundation (RLF) at IIT Delhi has developed a technology that uses 3D printing to produce high-quality yet affordable tactile diagrams on a large scale for books and other printable in Braille. This start-up is resident at our Sonipat Residential Incubator (SRI) since June, 2018 and currently working on developing affordable tactile graphics for persons with visual impairment.

Redroom Technology Pvt. Ltd. (Prof. V. Srinivasan, DoD & Mr. H. Sahrawat, Mr. A. Agarwal)

This start-up is working in the area of female hygiene products. Redroom was resident at the incubator from May, 2018 to September, 2019 and launched several products in the market.

Stellargene Technologies Pvt. Ltd. (Prof. S. Sapra, Chemistry & Dr. A. K. Sapra)

Stellargene is working on a novel, cost effective diagnostic test for non-invasive prenatal testing. This start-up has been resident at the TBIU from March, 2019.

Ramja Technologies (Prof. H. Singh, CBME Dr. P. Goswami)

This start-up is working on a novel device to detect gram-negative bacterial infection and antibiotic resistance in patients with acute leukemia. Ramja is incubated at the BBIF from February, 2019.

Nanosafe Solutions (Prof. M. Joshi, TFE; Dr. A. Roy)

This start-up has entered the incubator from January, 2019 and working on nanotechnology based products for improving quality of human life. Founded by Dr. Anasuya Roy and Prof. Mangala Joshi Nanosafe has successfully engineered "Aqcure" brand within 3 months of its incorporation. During the panedemic, this startp have come up with NSafe+ mask, a premium mask which is antiviral and reusable upto 50 washes.

20. Nable IT Consultancy Services Pvt. Ltd. (Prof. T. Gandhi and Mr. R. Sodhi):

This start-up is incubated at the TBIU since October 2019 and is currently working on machine learning, artificial intelligence and IT consulting services.

21. Aerogram (Prof. R. Sen, CSE and Dr. S. Ahlawat)

Aerogram, is incubated since August 2019 and is devising a network to predict real time air quality in a local mapped area. The designed device is equipped to monitor multiple pollutants.

22. Quanteon Powertrain Pvt. Ltd. (Prof. B. Singh, EE ; Commander Ramesh Lakra (Retd) and Commander K. V. Narsimham (Retd):

This start-up is currently into designing of axial-flux motors including with high-regenerative braking capability for electric vehicles. They are resident at the TBIU since November 2019.

23. Trydan Clean Tech Pvt. Ltd. (Prof. B. K. Panigrahi, EE ; S. Jain and M. Kansal)

Trydan has been residing at our incubator since November 2019. This start-up is into designing of dashboard integrated with powertrain electronics for electric vehicles.

24. Tinkertech Laboratories Pvt. Ltd. (Prof. P.V.M. Rao, DoD; M.A. Lavakare and S. Kumar):

Tinkertech is incubated from Novemebr 2019 and is currently working for TranscribeGlass: Affordable Head-Up Cautioning for the Deaf and Hard-of-Hearing

25. Vecros Technologies Pvt. Ltd. (Prof. S. Bhasin, EE; Mr. B. P. Sai)

Incubated at the TBIU since January 2020, Vecros is a robotics company, venturing into new market of providing software management solutions to fleet of robots for inspection and other applications.

26. AINS PeopleTech Pvt. Ltd. (Prof. S. K. Saha, ME ; Prof. N. Chatterjee, Mathematics; A. Mukherjee and S. Goel):

AINS is currently incubated with TBIU from January, 2020 working in DAMLAIB – Data Analytics, Machine Learning, Artificial Intelligence along with block chain technology that are expected to be used to develop the technology further.

27. DV2JS Innovations (Prof. M. Sarkar, EE; Mr. V. Dalimia)

This start-up is working on remotely piloted airborne vehicles under the mentorship of Prof Sarkar since January, 2020.

28. Reconstructive Healthcare Solutions Pvt. Ltd. (Prof. P. M. Pandey, ME; Dr. R. Pathak)

Resident at the BBIF since December 2019, this start-ups is in the area of fabrication of patients specific facial rehabilitation system with regenerative capability.

29. Machy Solutions Pvt. Ltd. (Prof. R. Ramswamy, Chy; Mr. P. Rout)

Macphy is resident in the TBIU from April, 2019 and is working on development of cryo-cool for biotech cold chain.

30. Gitan Biocare Pvt. Ltd. (Prof. S. Neelkanth, DMSE; Mr. R. Khanna)

Gitan Biocare is incubated at the BBIF since November 2019 and is into development of a new generation of wear resistant and reliable artificial joints using proprietary processing methods. They are focused on products for interdisciplinary medical and defense applications.

31. Betterhealth Technologies (Prof. N. Chaterjee, Maths; Mr. Vikas Soni):

This company is in democratizing the healthcare products through tech and AI enabled dispensers. Incubated since April, 2019 this start-up is designing and marketing AI/tech enabled dispensers that will dispense medicinal products and cater to corporate, NGO, cinemas, hotels, institutions segments.

Individual innovators resident at the Incubator are as mentioned below:

- i) Dr. T. Gupta
- ii) Prof. B. Kundu
- iii) Dr. S. Dhanekar
- iv) Dr. R. Chaturvedi



c. Towards leveraging the Institute's forward looking agenda, FITT has adopted several programmes to enrich the entrepreneurial ecosystem and technology commercialization efforts at the Institute. Seed support in the broad area of IT is also forthcoming under the Department of Information Technology (DIT) programme – "Technology Incubation and Development of Entrepreneurs" (TIDE) scheme in operation with FITT. Towards accomplishment of the programme objectives, FITT organized several awareness workshops disseminated promotional material and processed application proposals.

FITT and NS Raghavan Centre for Entrepreneurial Learning (NSRCEL), IIM Bangalore has instituted a joint mentoring program for start-ups at their respective incubators. Both the parties have agreed that a team of mentors from the alumni community of both the institutes will help in mentoring start-ups in the domains of technology and management.



Joint Mentoring Session by IITD & IIMB alumni is held at FITT on the 4th Saturday of each calendar month

- d. The Department of Biotechnology, Government of India has selected FITT as one of the five BIG Partners in the country under a novel program called Biotechnology Ignition Grant (BIG) Scheme to support startups and scientist entrepreneurs from research institutions towards commercialization of research resultants by providing early stage grants for development and maturation of their discoveries/inventions into marketable products. The BIG scheme is designed to establish and validate proof-of-concept and enable creation of spin-offs. During the last financial year the 15th call for proposal commenced from July 1, 2019 and ended on August 16, 2019 and the 16th call started from January 1, 2020 and closed on February 15, 2020.
- e. Under the NIDHI-Seed Support System (NIDHI-SSS) program of DST, introduced in the year 2017, FITT provides funding to incubatee start-ups upto Rs. 1 crore. So far 11 incubatees have been supported by seed funding to the tune of Rs. Rs.2,70,00,000/-.

- f. The Deferred Placement Policy (DPP) offered by IIT Delhi is being implemented by FITT for students who opt out of placement in order to inculcate their start-up idea. A student must opt for deferred placement in the final semester of the pre-final year and is eligible to sit for placement after two years if their start-up is not successful. Selected innovative ideas are eligible for incubation at the TBIU. In the year 2019-2020, five applicants have been shortlisted under DPP.
- Towards commercialization of the q. technologies, Faculty Innovation and Research-driven Entrepreneurship (FIRE) program has been launched on September, 2019. This program envisions commercialisation of technologies developed at IIT Delhi through creation of Faculty-led Enterprises. Technologies and concepts backed by strong scientific evidence that may lead to a commercially viable solution shall be supported under this program. The program has two major components, one is the preincubation prototype development stage

and the other is the incubation and business mentoring to facilitate commercialization.

Professional Development Programmes

Professional Candidate Registration (PCR) program has been adopted towards extending the academic courses at the Institute, amongst the targeted segments of industry, research and academic establishments. Through this unique program, suitably qualified professionals can undertake relevant semester-long course modules here at IIT Delhi, to augment their knowledgebase and skill set. During the academic year 2019-2020, 50 candidates participated in this program. PCR program promises good capacity building potential in the targeted Delhi NCR region.

Global Internship Program

Since 2012, FITT has been offering a Global Internship Program in Engineering Design and Innovation to students and professionally qualified engineers. The program runs throughout the year and provides training in project planning, requirements analysis, specification generation, design iteration management, team work and ethics, behaviour management, team building, group etiquette and communication skills. Apart from a full set of technology modules, it also uses specially designed training modules in ethics, history through heritage sensitization / heritage walks and lessons from mythology to teach culturally conscious and effective engineering practices.

Corporate Membership

The key endeavour of FITT is to have a formal and effective relationship with its industry partners on a mutually supportive basis. As a mechanism to formalize this relationship, FITT offers corporate membership to industry, industry associations and industrial research institutions on the payment of nominal annual fees. Corporate members receive information about Institute programmes and other opportunities for collaboration regularly. In addition, they enjoy a variety of complimentary services and opportunities for partnership. Appendix-IV (Page 26) lists some of our corporate members.

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FITT Awards

Foundation for Innovation and Technology Transfer (FITT) has instituted FITT awards, one each for Ph.D. and M.Tech. /M.S. project adjudged as the best Industry Relevant Projects.

Recognition

FITT is recognized (by DSIR) as Scientific and Industrial Research Organization (SIRO). As a SIRO, FITT is eligible for full custom duty exemption for import of capital goods, raw materials and technology know-how that are required for execution of R&D programmes. FITT also functions as the recognized Outreach Centre of DSIR for its innovative programmes.

MOUs signed with FITT



FITT, AIC- BIMTECH and Huddle Incubator launched a sector agnostic program, tailor-made for the start- up founders of Young India on February 10, 2020



FITT signed MoU with Power Finance Company on October 3, 2019

Organization

Organization Structure

The Management of FITT is vested with a full-time Managing Director. The policy guidelines for operations are provided and overall control is exercised by the FITT Governing Council. The broad organization structure is given in the organizational chart in this section.

FITT Organization Chart



COO : Chief Operating Officer | GM : General Manager CM : Chief Manager | SM : Sr. Manager iTTO : Innovation Technology Transfer Office

Governing Council

The Governing Council of FITT comprises representatives from Industry Associations / Industries, nominees of IIT Delhi Senate and Board of Governors. In addition, there is one nominee of the Ministry of Human Resources Development. The corporate members of FITT elect one member each from three categories (A, B & C) respectively. The Director of IIT Delhi is the Ex-officio Chairman of the FITT Governing Council, and the Dean, IRD, IIT Delhi is an ex-officio member. The Managing Director is the ex-officio Member-Secretary.

Governing Council of FITT (as on 31st March, 2020)

•	Prof. V. Ramgopal Rao, Director, IITD	Chairman (Ex-officio)
•	Mr. Sumant Sinha, Member, BOG, IITD	Member
•	Prof. S.K. Khare, Dean (R&D), IIT Delhi	Member (Ex-officio)
•	Prof. Jayadeva, Elect. Engg., IIT Delhi	Member
•	Prof. V. K. Vijay, C.R.D.T., IIT Delhi	Member
•	Prof. N. Bhatnagar, Mech. Engg, IIT Delhi	Member
•	Dr. M. Lakshmikumaran, Exe. Director, LKS	Member
•	Prof. L. Bhattacharya, CEo, GLF Business School, Kolkata	Member
•	Mr. Anshuman Panwar, CEO, Creditas Solutions Pvt. Ltd.	Member
•	Mr. Munish Dayal, Sr. Partner, Baring Pvt. Equity	Member
•	Ms. Paula Mariwala, Founder, Stanford Angles & Entrepreneurs	Member
•	Mr. Vinnie Mehta, DG, ACMA	Member
•	Mr. Prashant Agarwal, Director (IITs), MHRD	Member
•	Mr. Nirankar Saxena, Dy. Secy. Gen., FICCI	Member
•	Mr. Naveen Kumar, CEO, Napino Auto and Electronics	Member
•	Dr. Anil Wali, MD, FITT	Member-Secretary (Ex-officio)

Research Council

•	Dr. A. Wali, MD, FITT	Chairman (ex-officio)
•	Prof. R. Khosa, CE, IIT Delhi	Member
•	Prof. A.N. Bhaskarwar, CHEME, IIT Delhi	Member
•	Prof. A.K. Ghosh, DMSE, IIT Delhi	Member
•	Prof. K. Khare, Physics, IIT Delhi	Member
•	Prof. A. Kumar, CARE, IIT Delhi	Member
•	Dr. K. Saha, CTO, Samsung Research Institute	Member
•	Mr. S. Banerjee, MD, UOP India Pvt. Ltd.	Member
•	Mr. D. Sekhon, CEO, KritiKal Solutions Pvt. Ltd.	Member
•	Mr. S.K. Varshney, CEO, AIM	Member
•	Mr. A. Das, Executive Director, CII	Member
•	Mr. N. Saxena, Dy Secretary General, FICCI	Member
•	President, IITD Alumni Association	Ex-officio
•	Secretary, IITD Alumni Association	Ex-officio
•	Mr. K.K. Roy, COO, FITT	Member-Secretary

Financial Highlights

				Figure in L	akhs of Rupees
	2015-16	2016-17	2017-18	2018-19	2019-20
Investments					
Bank deposits and Bonds	3,621.50	4,241.50	4,053.00	5,203.00	3,940.12
Earnings					
(i) Interest	246.97	431.12	294.17	383.73	427.73
(ii) Projects / Other Activities	107.61	116.28	175.75	173.28	160.68
(iii) Corporate Membership Fees	5.10	5.55	2.01	0.30	0.64
(iv) I-TEC Sonipat operating Income	0	0	0	0	256.13
Expenditures					
(i) Capital	0.50	0.14	3.90	9.22	28.10
(ii) Operational / Promotional / Administrative	168.37	185.89	257.61	353.34	318.75
(iii) Rent for Office Premises (Payable to IIT Delhi)	2.63	7.90	5.40	5.27	5.27
(iv) I-TEC Operational / Promotional	0	0	0	0	239.52
Fund for Transfer to IIT Delhi (Project Activities)	53.03	90.64	55.44	66.80	96.90
Assets Generated for IIT Delhi out of project activities administered by FITT	214.85	75.21	151.62	81.81	109.96
Value of Projects Contracted / Other Activities at FITT	1,606.40	1,602.30	1,208.00	1,821.54	1,693.00



Value of Major Activities undertaken by FITT



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Income Profit of FITT

Rescue Generation for FITT & IIT DELHI





List of IPR Applications filed during FY - 2019-2020

SI. No.	Title	Ы	Dept / Center
1.	An islanded single-stage solar photovoltaic- battery system with grid synchronization capability	Prof. B. Singh	EE
2.	Method to simultaneously enhance signal detector frequency and sensitivity using voltage controlled anisotropy	Prof. P.K. Muduli	РНҮ
3.	Self-lubricating composite bearing and method for preparation thereof	Prof. J. Bijwe	ITMMEC
4.	Method for fabrication of MEMS integrated sensor and sensor thereof	Prof. S. Dhanekar	CARE
5.	Smart bulletproof clothing capable of transmitting signal to a control room	Prof. A. Majumdar	TFE
б.	Channelized pneumatic controlled, grouped cushion cum mattress for prevention of bed sores	Prof. S.N. Singh	AM
7.	A pateint bed arrangement	Prof. S.N. Singh	AM
8.	Tuning shear thickening behaviour by controlling degree of functionalization via synthesis of organically modified silica	Prof. L. Nebhani	DMSE
9.	Brushless DC motor drive with robust position sensorless	Prof. B. Singh	EE
10.	A formulation for stabilizing bio-therapeutics	Prof. A.S. Rathore	CHEME
11.	Multi-winding transformer based high resolution power	Prof. S.K. Chattopadhyay	CES
12.	A system and method for tapping electric power from a high-voltage direct-current transmission line	Prof. A. Das	EE
13.	Antimicrobial non-woven fabric for safe water filteration	Prof. M. Joshi TFE	
14.	Image Sensor	Prof. M. Suri	EE
15.	Field-portable smart phone based auto-fluorescene and fluorescence imaging, spectroscopy and fluorescence micro-endoscopic system	Prof. D.S. Mehta	РНҮ
16.	A novel process of arsenic bioremediation for potable water	Prof. G.P. Agarwal	DBED
17.	A recombinant stationary phase auto-inducible promoter, and implementations thereof	Prof. P. Srivastava	DBEB
18.	Software for diagnosis of cancer	Prof. M. Suri	EE
19.	Software for point of care diagnostics with microscopy	Prof. M. Suri	EE
20.	Apparatus and a method for poling lead free piezoelectric ceramics enhanced piezoelectricity	Prof. R. Chatterjee	РНҮ
21.	Method for sequestering carbon dioxide by enhancing algal growth, and applications thereof	Prof. V. Singh	CHEME
22.	A self-regenerated catalyst	Prof. N. Khare	PHY
23.	Device for exerting axial load on load bearing joint of human being during scanning	Prof. A. Mehndiratta	CBME
24.	An improved accelerometer	Prof. P.R. Panda	CSE
25.	Non-invasive handheld optical sensor for multi-analyte detection in saliva	Prof. S.K. JHA	CBME

SI. No.	Title	PI	Dept / Center
26.	Horizontal air filtration chamber	Prof. S.H. Kota	CE
27.	Indoor air pollution mitigator	Prof. S.H. Kota	CE
28.	Vertical air filtration chamber	Prof. S.H. Kota	CE
29.	Method in blockchain systems for fast stabilization and increased responsiveness using links	Prof. V.J. Ribeiro	CSE
30.	A single stage solar PV array fed induction motor drive water pumping system	Prof. B. Singh	EE
31.	Composition containing functionalized chitosan, and implementations thereof	Prof. V. Koul	CBME
32.	Actuation platform	Prof. J.P. Khatait	ME
33.	Process for producing recombinant peptides	Prof. A.S. Rathore	CHEME
34.	Ride-through operation of grid interfaced solar PV system under grid side abnormalities	Prof. B. Singh	EE
35.	A process for preparation of a peptide	Prof. S. Upadhyayula	CHEME
36.	Ionic liquid based support for manufacture of peptides	Prof. S. Upadhyayula	CHEME
37.	Process for preparing a porous, biodegradable metal scaffold	Prof PM Pandey	ME
38.	System for rehabilitation of a limb of a patient	Prof. A. Mehndiratta	CBME
39.	SYRG-PV-BES based standalone micro grid for power management	Prof. B. Singh	EE
40.	A chemically modified dye, its process of preparation and application	Prof. B.S. Butola	TFE
41.	High voltage gain switching-capacitor based boost converter	Prof. M. Veerachary	EE
42.	Molybdenum trioxide and nano silicon chips for acetone detection	Prof. S. Dhanekar	CARE
43.	A process of producing fuel and recovering metals from waste electrical and electronic equipment	Prof. K.K. Pant	CHEME
44.	Volume Phase Holographic Optical Element based Digital Holographic Interferometer for Cell Imaging	Prof. C. Shakher	CARE
45.	Tunable substrate integrated waveguide filters	Prof. S.K. Koul	CARE
46.	Method for increasing battery lifetime of surveillance monitor using wireless energy harvesting	Prof. S. Prakriya	EE
47.	Process for producing mature serratiopeptidase	Prof. T.K. Chaudhuri	KSBS
48.	An automatic tri-axial rotary ultrasonic bone drilling machine	Prof. P.M. Pandey	ME
49.	Three Dimensional Imaging Sonar with Linear Transmitter and Receiver Array	Prof. A. Kumar	CARE
50.	System for self-interference fluorescence microscopy	Prof. K. Khare	PHY
51.	Process for recombinant zymogenic serratiopeptidase processing and producing recombinant mature serratiopeptidase	Prof. T.K. Chaudhuri	KSBS
52.	Process and apparatus for preparing monodispersed nanoparticles	Prof. V. Singh	CHEME
53.	Fingerprinting bio therapeutics with FTIR spectroscopy	Prof. A.S. Rathore	CHEME
54.	Synthesis of Controlled Phase VmOn in Differing Oxidation States Using Simplified Formic Acid-Based Process	Prof. M. Singh	EE
55.	Elbow implant	Prof. D. Kalyansundaram	CBME

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SI. No.	Title	Ы	Dept / Center
56.	Compact coiled flow inverters as in-line mixers	Prof. K.D.P. Nigam	CHEME
57.	Bioprocess Performance Enhancing Strains Of Escherichia Coli	Prof. A.S. Rathore	CHEME
58.	Decoupled Adaptive vectorial filter based grid voltage sensorless topology for 3-phase 2-stage grid integrated solar PV energy conversion system	Prof. B. Singh	EE
59.	Wind-hydro renewable microgrid	Prof. B. Singh	EE
60.	Copper and silver immobilized nano-sized montmorillonite clay with antimicrobial properties	Prof. M. Joshi	TFE
61.	Insole-based foot pressure measurement system	Prof. D. Joshi	CBME
62.	A process and two-step catalytic reactor system for the production of liquid hydrocarbons from plastic waste	Prof. K.K. Pant	CHEME
63.	An Intra-Vitreal Injection Delivery Device	Prof. T.K. Gandhi	EE
64.	Bi-stable Microelectromechanical System (MEMS) based non-volatile memory cell with piezoelectric reset	Prof. P. Singh	CARE
65.	Integrated process for conversion of E-waste plastic into fuel and metal recovery using the low-temperature roasting technique	Prof. K.K. Pant	CHEME
66.	Damped fifth-order generalized integrator based PCC voltage sensor less topology for 1-Phase 1-stage grid integrated solar PV array	Prof. B. Singh	EE
67.	DC synchronized optimal regulator for hybrid PV-battery-diesel- generator	Prof. S. Mishra	EE
68.	Improving efficiency and power quality of a 36-pulse AC-DC converter fed 9-level CHB-inverter based induction motor drive for medium voltage application	Prof. B. Singh	EE
69.	EdgeEGG - A system and method for hand-held electrode free electroglottograph using neural networks on programmable controllers	Prof. Pratosh AP	EE
70.	A process for preparing grafted nano-cellulosic fibre and implementations thereof	Prof. A.K. Ghosh	DMSE
71.	Wearable gait analysis system	Prof. D. Joshi	CBME
72.	A process of decolourizing textile dye effluent by microbial consortium	Prof. A. Mallik	CBME
73.	Current sensing device based on rogowski coil for measuring current of a current carrying conductor	Prof. R. Maheshwari	EE
74.	A process for synthesis of an iminodiacetate styrene resin	Prof. J. Jacob	DMSE
75.	A cellular artificial skin substitute & method of preparation thereof	Prof. V. Koul	CBME
76.	A bioresorbable radiopaque stent and a method for preparation thereof	Prof. N. Bhatnagar	ME
77.	Green manufacturing process of nanolignin	Prof. A.K. Ghosh	DMSE
78.	Method and apparatus for uplink timing synchronization in wireless communication system	Prof. S.K. Mohammad	EE
79.	Transmission microscopy	Prof. J. Joseph	
80.	Tunable shock absorbing passive control device for vibration and shock response control of structures	Prof. V. Matsagar	CE
81.	Development of MG-based biomaterial	Prof. P.M. Pandey	ME

SI. No.	Title	PI	Dept / Center
82.	Agrobacterium derived cell penetrating peptides as nanocarriers	Prof. A. Chugh	KSBS
83.	Thermally stable bio-based polybenzoxazine and their process for Prof. L. Nebhani preparation thereof		DMSE
84.	Method for diffraction based pre-processing of cryo-electron microscopy image data for superior 3D structure determination	Prof. K. Khare	PHY
85.	Steerable plasmonic nanoantennas: in-plane active steering of radiation patterns using phase change materials	Prof. A. Dhawan	EE
86.	Predictive optimal-switching vector based virtual synchronous generator without any PID regulators	Prof. S. Mishra	EE
87.	A microemulsion fuel composition and method for preparation thereof	Prof. A.N. Bhaskarwar	CHEME
88.	A method for preparing the polymer composite ink and an oriented polymeric composite thereof	Prof. P.M. Pandey	ME
89.	A medicament for the treatment of diseases by biofilm forming microorganisms	Prof. S.E. Hasnain	DBEB
90.	Transmission method for a wireless communication system and apparatus thereof	Prof. S.K. Mohammad	EE
91.	A photocatalytic reactor and method for producing visible light active Prof. N. Khare nanocomposites		PHY
92.	Chemoport Prof. D. Kalyansundaram		CBME
93.	A medicament for the treatment of diseases by biofilm forming Prof. S.E. Hasnain microorganisms		DBEB
94.	Python for Glass genomics (PyGGi)	Prof. N.M.A. Krishnan	CE
95.	A medicament for the treatment of diseases by biofilm forming microorganisms	nent for the treatment of diseases by biofilm forming Prof. S.E. Hasnain I nisms	
96.	Development of Zinc-Hydroxyapatite-Fe degradable composite material and processing route for biomedical applications	Prof. P.M. Pandey	ME
97.	A system and method for providng co-channel transmission in digital television bands	Prof. S. De	EE
98.	Interleaved switching high voltage gain boost converter	Prof. M. Veerachary	EE
99.	Electrodialytic purification and recovery of fermentation derived cyclic esters for catalytic upgrading	Prof. M.A. Haider	CHEME
100.	Multivariate data compression system and method thereof	Prof. S. De	EE
101.	Transition metal oxide nanowires and preparation thereof	Prof. A.N. Bhaskarwar	CHEME
102.	3D printed construct for correcting bone defects and stem cell delivery	Prof. S. Ghosh	TFE
103.	A method for gain and aperture efficiency enhancement of a linearly polarized antenna and system thereof	Prof. S.K. Koul	CARE
104.	A water-in-diesel micro emulsions obtained from bi-liquid foams and method of making the same	Prof. A.N. Bhaskwarwa	CHEME
105.	A recombinant construct, and implementations thereof	Prof. A.S. Rathore	CHEME
106.	Direct printing of vascular stent by solvent casting 3d printing technique	Prof. P.M. Pandey	ME

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SI. No.	Title	PI	Dept / Center
107.	A wireless system for improving performance and prolonging battery lifetime of node by energy harvesting	rolonging battery Prof. S. Prakriya EE	
108.	A wireless system for improving performance and prolonging battery lifetime of node by energy harvesting	Prof. S. Prakriya	EE
109.	Mdulating immune cells for diabetic wound healing	Prof. N. Singh	CBME
110.	Orthopaedic screw	Prof. D. Kalyansundaram	CBME
111.	Power efficient photonic network-on-chip for a scalable GPU	Prof. S.R. Sarangi	CSE
112.	Solar-powered water pumping system	Prof. B. Singh	EE
113.	Measuring effectiveness of informative content (video & or any form) on public health engagement	Prof. A. Mehndiratta	CBME
114.	A magnetic nano-photocatalyst and a method of preparation thereof	Prof. S.W. Ali	TFE
115.	A chair with self-assisting mechanism for elderly and users with inadequate muscular strength	Prof. P.V.M. Rao	ME
116.	Method of preserving raw milk	Prof. A.S. Rathore	CHEME
117.	117. Organic and organometallic water soluble redox-active polymers for prof. B.P. Tripathi DMS neutral ph aqueous redox flow batteries		DMSE
118.	A short and medium wave infrared nano-antenna array for sensing particles in an air column	no-antenna array for sensing Prof. M. Singh EE	
119.	Nano heterostructures of transition metal dichalcogenide sensing film based extended gate field-effect transistor for the sensing of heavey metals		EE
120.	Electric field induced annealing of inorganic thin films for densification	Prof. M. Singh EE	
121.	Polymer nanocomposite formulation loaded with metal nanoclay complex	Prof. M. Joshi TFE	
122.	A novel process for preparation of pegylated recombinant therapeutic products	Prof. A.S. Rathore CHEME	
123.	Ultra-battery energy storage system for load frequency control in a multi-area power network	a Prof. B. Singh EE	
124.	Person identification and imposter detection using footfall generated seismic signals	Prof. S. Kar	EE
125.	An Antenna Module	Prof. S.K. Koul	CARE
126.	Path loss compensated mm wave 5g antenna module with 3D-printed radome	Prof. S.K. Koul	CARE
127.	Cup-shaped tool component	Prof. S. Jha	ME
128.	A time and resource effective process to produce warfarin using heterogeneous catalysts	Prof. M.A. Haider	CHEME
129.	Chitosan-onion shell composite and preparation thereof	Dr. B.S. Butola	TFE
130.	Efficient liquid phase exfoliation route to few layer transition metal dichalcogenides	Prof. A.K. Ganguli	CHY
131.	System and method for identifying passive optical identifier tag	Prof. A. Dixit	EE
132.	Shear Thickening behavior of hybrid mesoporous silica	Prof. L. Nebhani	DMSE

SI. No.	Title	PI	Dept / Center
133.	Hydrophilic polymeric composition, method of preparation and its coating on fabric	Prof. A.K. Agarwal	TFE
134.	A process for producing trimellitic acid from biomass	Prof. M.A. Haider	CHEME
135.	Ejector-diffuser for gas turbine engine	Prof. S.N. Singh	AM
136.	Compressed binary search tree for K-NN searches in hamming space	Prof. Jayadeva	EE
137.	Silicone based novel finish for multifunctional finishing of textile	Prof. J.N. Sheikh	TFE
138.	Mamapod	Prof. D. Gupta	TFE
139.	Power factor correction converter based charger	Prof. B. Singh	EE
140.	Agro residue derived biodegradable bio-composites and their application in cultivation of transplantable horticultural crops	Prof. H. Kodamana	CHEME
141.	Nano encapsulated phase change materials for thermal regulation and energy storage	Prof. B.P. Tripathi	DMSE
142.	Electrically Conductive Aerated Concrete (ECAC) Blocks	Prof. A.N. Bhaskarwar	CHEME
143.	Nano-size abrasive and method of preparing the same	Prof. S.W. Ali	TFE
144.	An electrode and a process for preparation thereof	Prof. P.P. Ingole	CHY
145.	Biomarkers, kit and applications thereof	Prof. B. Kundu	KSBS
146.	MOF functional textiles and process of fabrication thereof	Prof. A.K. Agarwal TFE	
147.	Aerodynamic journal bearing	Prof. R.K. Pandey ME	
148.	Process and system for using unused optical power in photonic on- chip networks	photonic on- Prof. S.R. Sarangi CSE	
149.	A Process for producing trimellitic acid from biomass	Prof. M.A. Haider	CHEME
150.	Path loss compensated mm wave 5G antenna module with 3D-printed radome	Prof. S.K. Koul	CARE
151.	Jewellery	Prof. S. Singh	DOD
152.	A process for producing trimellitic acid from biomass	Prof. M.A. Haider	CHEME
153.	A system and a method for material characterization	Prof. S.K. Koul	CARE
154.	A novel power factor correction converter	Prof. B. Singh	EE
155.	A Method for mode switching and power allocation in Device to Device communication	Prof. S. Prakriya	EE
156.	Fluid flow measuring apparatus	Prof. S.N. Singh	AM
157.	Hypersensitive load cell	Prof. S. Mukherjee	ME
158.	A novel green micro-emulsion for controlling fungal wilt diseases	Prof. S. Sharma	CRDT
159.	Method, system and apparatus for multilingual and multimodal keyword search in a mixlingual speech corpus	Prof. A. Kumar	CARE
160.	Monitoring system for a flow battery	Prof. A. Verma	CHEME
161.	A system for monitoring and control of chromatography	Prof A.S. Rathore	CHEME
162.	A novel green micro-emulsion for controlling fungal wilt diseases	Prof. S. Sharma	CRDT
163.	Precision nano-imprinting machine	Prof. J.P. Khatait	ME

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Technology licenses executed during FY - 2019-2020

SI. No.	Title	PI	Dept / Center / School	Company Name
1.	Women's Safety Device	Prof. A. Chawla	ME	Designiinova
2.	Development of biocompatible surfactant system for fluoropolymers	Prof. B. Gupta	TFE	Gujarat Fluorochemicals
3.	A process for fractionating components of biomass	Prof. N. Singh	CBME	Kriya Lab
4.	A device for providing assistance to visually impaired for boarding of public buses	Prof. M. Balakrishnan	CSE	Kritikal Solutions
5.	A control apparatus for controlling operation of a heating, ventilating and air-conditioning (HVAC) system and a process therefor	Prof. I.N. Kar	EE	Moden Coach Factory, Ministry of Railway
б.	Python for Glass Genomics (Pyggi)	Prof. N.A. Krishnan	CE	CGCRI
7.	Ripstop weave for enhanced tearing strength and breathability	Prof. D. Gupta	TFE	Shingora Textile
8.	Process and composition imparting multifunctional properties to fabrics	Prof. S. Mukhopaddhyay	TFE	Navork Innovations

Abbreviations

AM : Department of Applied Mechanics
BSTTM : Bharti School of Telecommunication Technology and Management
CARE : Centre for Applied Research in Electronics
CAS : Centre for Atmospheric Sciences
CART: Centre for Automotive Research and Tribology
CBME : Centre for Biomedical Engineering
CE : Department of Civil Engineering
CES : Centre for Energy Studies
CHEME : Department of Chemical Engineering
CHY : Department of Chemistry
CRDT : Centre for Rural Development and Technology
CSE : Department of Computer Science and Engineering
DBEB : Department of Biochemical Engineering and Biotechnology

DMS : Department of Management Studies
DMSE : Department of Material Science & Engineering
DOD : Department of Design
EE: Department of Electrical Engineering
HUSS : Department of Humanities and Social Sciences
KSBS : Kusuma School of Biological Sciences
MATHS: Department of Mathematics
ME : Department of Mechanical Engineering
PHY : Department of Physics
TFE : Department of Textile and Fiber Engineering
and many more

Appendix-III

Some Investigative / Development Projects undertaken during the FY - 2019 - 2020

SI. No.	Title	Faculty Dept / Cer	
1.	Centre for Promotion of Computational Fluid Dynamics	Prof. V.V. Bhuwa	CHEME
2.	Machine Learning Models for Quick Service Restaurant (QSR) Prof. Jayadeva		EE
3.	Photovoltaic Systems for African Countries (Sierra Leone and Togo)	Prof. V. Dutta	CES
4.	Research to use AI/ML Geospatial & Aerial Analytics	Prof. Prathosh A	EE
5.	Opinion on Function of Spring	Prof. J. Jain	DMSE
6.	Non Contract CardioPulmonary Assessment in the wild using imaging techniques	Prof. Prathosh A	EE
7.	Consortium project-GCRF Water Security and Sustainable Development Hub	Prof. C.T. Dhanya Prof. A.K. Gosain Prof. R. Khosa	CE
8.	Modelling of tensile behavior of absorptive glass mat (AGM) Prof. A. Rawal separators		TFE
9.	Investigation of porositics in membranes Prof. J. Jain		DMSE
10.	Verification of deflection of flux panel using finite element Prof. P. Mahajan		AM
11.	Impact Assessment of Digital Villages Prof. J. Kumar		DOD
12.	Automated Solutions for the Metal Scrap handling Process Prof. V. Rama		ME
13.	802.11n Baseband Receiver Development Prof. B. Lall		EE
14.	Process development for welded joints	Prof. S. Aravindan	ME
15.	Study of Community Design for Traffic Safety in India= Phase-VI Prof. G. Tiwari Prof. S. Mukherjee Prof. D Mohan		TRIPP
16.	Processing & Optimization of Polymer Toe Cap for Safety Shoes	Prof. A.K. Ghosh	DMSE
17.	. Fail Safety Validation of Led Signal Lighting Units for Railway Prof. A. Dixit Signalling		EE
18.	Impact Assessment of Digitize India Platform	Prof. J. Kumar	DOD
19.	Management and Analysis of Effectiveness of Acoustic Barrier at the IGI Airport	Prof. A.K. Darpe Prof. V. Matsagar	ME
20.	Optimal allocation of drivers for the food delivery problem	Prof. S. Ranu	CSE
21.	Learned Index Structures	Prof. A. Bagchi, Prof. S. Badathur	CSE

SI. No.	tle Faculty Dept / C		Dept / Centre
22.	Network Efficient VM Scheduling Prof. A. Kumar Sanjiva Prasad Sayan Ranu		CSE
23.	Automated Intra-day solar power generation forecasting system for NTPC:Development, implementation and capacity building	Prof. S.B. Roy	CAS
24.	Algorithms and Architectures for Machine Learning and Computing on the Edge	Prof. B. Lall	EE
25.	Chemical Analysis and Coating Characterization of small scale components	Prof. J. Jain	MSE
26.	Endurance/Fatique testing & analysis in Track Pin Material	Prof. P. Mahajan	AM
27.	Computer Simulation of Fire in Mandideep Factory Daawat Foods Ltd	Prof. R. Khanna	CHEME
28.	Development of technology and processes for marketing automation	Prof. B. Lall	EE
29.	Process Design for AN MBR System for Wastewater Treatment	Prof. T.R. Sreekrishnan	DBEB
30.	30. Consultancy for specification and scope definition of –(E55735- HUAWE1, MF90-ZTE, WD670-HU AWEI, B3105-927-ZTE)" Prof. B. Lall EE		EE
31.	. Development in Traffic Management Through Vehicle Speed Prof. R. Sen Estimation and other Techniques Prof. C. Arora		CSE
32.	2. Opinion on Telecommunication Goods Prof. R.K. Varshney		PHY
33.	3.2D to 3D AudioProf. A.P. PrathoshE		EE
34.	Simulation and Experimental Validation of the Closed Loop I-S Prof. S. Upadhyayula process		CHEME
35.	Storage and stability characteristics of Hydrogen Colloidal Gas Aphrons (CGAs) loaded with treated metal hydrides	Prof. A.N. Bhaskarwar Prof. S. Upadhyayula	CHEME
36.	5. Effect of Oxygen Functionality and partial exfoliation on activity of Carbon Electrode for Electrooxidation of Sulfur Dioxide in Sulfuric Prof. A. Shukla Prof. S. Upadhyayula Acid		CHEME
37.	Barrier-Additives and functional Nano-filled composite master batches for packaging of food and agro products	Prof. B.K. Satapathy Prof. J. Jacob	DMSE
38.	Development of Simulation model for CDI water purification module	Prof. A. Verma Prof. A. Shukla	CHEME
39.	9. Predictive maintenance models for industrial chillers and lifts in large Prof. V. Ramamohan ME buildings		ME
40.	Joint software development for traction motor control module by IIT Delhi and Authometers Alliance Ltd	Prof. A. Das	EE
41.	Technical Opinion on Samples obtained from Plastic Burning	Prof. K.K. Pant	CHEME
42.	Surge Tank Management for Continuous Processing	Prof. A.S. Rathore	CHEME
43.	3. Managing Charge Variant Profile in Continuous Processing Prof. A.S. Rathore CHEMI		CHEME

SI. No.	Title	Faculty	Dept / Centre
44.	Development of Numerical model for Leakage Rate Modeling under Prof. P. Mahajan Dynamic conditions of Barriers/Configurations"		AM
45.	Deep learning methodologies to develop novel pre-or early cancer detection technology for patients diagnosed with pancreatic cancer	Prof. A.S. Rathore	CHEME
46.	Development of compressor oil suspension using non-particles	Prof. D. Kumar	CART
47.	Identifying Scope for technological intervention to India's air quality problem	Prof. S. Dey	CAS
48.	Phase analysis of API 5L X80M PSL2 Grade Line Pipe Steel Prof. J. Jain		DMSE
49.	Design and Development of high dynamic range CMOS image sensor Prof. M. Sarkar for low light applications		EE
50.	Development & Support for Motor Solutions by Mathworks	Prof. V. Kumar	CRDT
51.	Endurance/Fatigue testing & analysis in Track Pin	Prof. P. Mahajan	AM
52.	Curriculum development and implementation for BTech Programme	Prof. S.R. Kale	ME
53.	Concept Design for Home Appliances for LG, considering users Prof. S. aspirations and need		DOD
54.	Investigation on failure of pressure switch electrical contacts and development of new contact materials for higher current rating design up to 60Amps. and integration of pressure switch with starter		DMSE
55.	Investigation on the surface finish and mechanical endurance test Prof. J. Jain failure of the 304L and 316L stainless steel bellows		DMSE
56.	Fatigue test and analysis of pin for munish forge	Prof. P. Mahajan	AM
57.	Application of Machine Learning & Artificial Intelligence in Cancer genomics	Prof. A.P. Prathosh	EE

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Appendix-IV

Some of our Corporate Members

٠	Autolek
•	Dabur India
•	SRF
•	Creditas
•	Rico Auto
•	Havells India
•	BSES Yamuna Power
٠	JBM Group
•	Maruti Suzuki India
•	Minda Corporation
•	Munjal Showa
٠	SP Singla Constructions
٠	Sona Koyo Steering
٠	Vardhman Textile
٠	Bihani Manufacturing
•	Ornate Solar
•	GLF Business School
•	Wonder Polymers
•	Fresenius Kabi Oncology
•	Bonanza Consultants
•	Campusknot
•	Kritikal Solutions
•	Lakshmikumaran & Sridharan
•	New Life Pharmaceuticals
•	Shubhkarma Udyog
•	Sri Sarvana Fabs
٠	Nable IT Consultancy
•	Cosmos Advanced Diagnostics
•	Pluss Advanced Technologies
•	Napino Auto and Electronics
٠	Applied Research International
٠	Academy of Industrial Management
٠	Security Printing and Minting Corporation of India
•	Waterneer Biokube Technologies

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Foundation for Innovation and Technology Transfer

Balance Sheet as at 31st March, 2020

Pa	rticulars	SCHEDULE	31.03.2020		HEDULE 31.03.2020		31.03	.2019
		No.	Rs.	Rs.	Rs.	Rs.		
SO	URCE OF FUNDS							
1.	CORPUS FUNDS							
	SEED MONEY			16,200,000		16,200,000		
2.	RESERVES AND SURPLUS	1		278,058,379		249,893,993		
3.	RESEARCH AND DEVELOPMENT FUND	2		85,642,985		70,821,570		
4.	OTHER FUND	3		112,806,608		111,046,047		
				492,707,972		447,961,611		
AP	PLICATION OF FUNDS							
1.	FIXED ASSETS	4						
	(A) GROSS BLOCK		10,552,349		8,664,169			
	(B) LESS: DEPRECIATION		1,297,020		922,165			
	(C) NET BLOCK			9,255,329		7,742,004		
2.	INVESTMENTS	5		394,012,308		520,300,000		
3.	CURRENT ASSETS LOAN& ADVANCES	6	537,621,650		297,422,240			
LES	SS : CURRENT LIABILITIES	7	448,181,315		377,502,633			
NE	T CURRENT ASSETS			89,440,335		(80,080,393)		
				492,707,972		447,961,611		

NOTES TO THE FINANCIAL STATEMENTS 13 THE SCHEDULE REFERRED TO ABOVE FORM AN INTEGRAL PART OF THE ACCOUNTS

AS PER OUR ATTACHED REPORT OF EVEN DATE

FOR M/s SRGA & Co. CHARTERED ACCOUNTANTS FRN: 011984N	FOR FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSF	
FCA SANDEEP GUPTA	ASHUTOSH PASTOR	ANIL WALI
PARTNER	(MANAGER)	(MANAGING DIRECTOR)

PLACE: NEW DELHI DATE: 20.11.2020

M. No. 090039

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Foundation for Innovation and Technology Transfer

Income and Expenditure Account for the Year Ended 31st March, 2020

PARTICULARS	SCHEDULE	31.03.2020	31.03.2019
	No.	Rs.	Rs.
INCOME			
PROJECT DEVELOPMENT & TECHNOLOGY RECEIPTS	8	249,356,933	220,561,835
OTHER INCOME	9	72,450,598	42,917,819
		321,807,531	263,479,654
EXPENDITURE			
PROJECT RESEARCH & DEVELOPMENT EXPENSES	10	237,288,075	207,646,221
ESTABLISHMENT EXPENSES	11	19,667,437	23,493,898
INFORMATION SUPPORT SERVICES		464,186	229,175
AWARD / SCHOLARSHIP		200,000	200,000
DEPRECIATION	4	12,97,020	922,165
ADMINISTRATIVE EXPENSES	12	34,726,428	12,040,527
		293,643,146	244,531,986
EXCESS OF INCOME OVER EXPENDITURE		28,164,385	18,947,668

NOTES TO THE FINANCIAL STATEMENTS13THE SCHEDULE REFERRED TO ABOVE FORM AN INTEGRAL PART OF THE ACCOUNTSAS PER OUR ATTACHED REPORT OF EVEN DATE

FOR M/s SRGA & Co. CHARTERED ACCOUNTANTS FRN: 011984N	FOR FOUNDATION FOR INNOVATION AND TECHN	IOLOGY TRANSFER

FCA SANDEEP GUPTA PARTNER M. No. 090039 ASHUTOSH PASTOR (MANAGER) ANIL WALI (MANAGING DIRECTOR)

PLACE: NEW DELHI DATE: 20.11.2020



PARTIC	CULARS	Rs.	31.03.2020	Rs.	31.03.2019
			Rs.		Rs.
1	RESERVES & SURPLUS				
	CAPITAL RESERVE		2,555,812		2,555,812
	GENERAL RESERVE		247,338,181		228,390,514
	EXCESS OF INCOME OVER EXPENDITURE		28,164,385		18,947,668
			278,058,379		249,893,993
2	RESEARCH & DEVELOPMENT FUNDS				
2(i)	FITT PROJECT PROMOTION FUND				
	OPENING BALANCE	12,746,037		12,346,037	
	ADD : ADDITIONS DURING THE YEAR	-		400,000	
		12,746,037		12,746,037	
	LESS : UTILISED DURING THE YEAR	-	12,746,037	-	12,746,037
2(ii)	FITT CONSULTANT FUND				
	OPENING BALANCE	24,280,275		21,401,480	
	ADD : ADDITIONS DURING THE YEAR	10,924,990		6,167,437	
		35,205,265		27,568,917	
	LESS : UTILISED DURING THE YEAR	2,388,285	32,816,980	3,288,642	24,280,275
2(iii)	FITT DEPARTMENT DEVELOPMENT FUND				
	OPENING BALANCE	29,215,461		26,088,398	
	ADD : ADDITIONS DURING THE YEAR	6,046,082		3,789,479	
		35,261,543		29,877,877	
	LESS : UTILISED DURING THE YEAR	471,561	34,789,982	662,416	29,215,461
2(iv)	CENTRAL ADMINISTRATIVE FUND				
	OPENING BALANCE	34,163		48,790	
	DD : ADDITIONS DURING THE YEAR	666,068	-	730,109	
		700,231		778,899	
	LESS : UTILISED DURING THE YEAR	666,068	34,163	744,736	34,163
2(v)	IIT STUDENT WELFARE FUND				
_	OPENING BALANCE	94,000		94,000	
	ADD : ADDITIONS DURING THE YEAR	-	_	-	
_		94,000		94,000	
	LESS : UTILISED DURING THE YEAR	-	94,000		94,000
2(vi)	FITT ADMINISTRATIVE FUND				
_	OPENING BALANCE	4,451,634		3,993,625	
	ADD : ADDITIONS DURING THE YEAR	814,022		620,252	
		5,265,656		4,613,877	
	LESS : UTILISED DURING THE YEAR	103,833	5,161,823	162,243	4,451,634
•			85,642,985		70,821,570
3					
3(1)	TBIU - TIDE SEED FUND REPAYMENT	0460475		4470.045	
		8,162,175		4,170,015	
	ADD . ADDITIONS DURING THE YEAK	910,189		5,792,160	
		9,072,364	0.070.064	9,962,175	0 160 175
0(::)		-	9,072,364	1,800,000	8,162,175
3(11)	TBIU - MICH SEED FUND REPAYMENT	4100 (01		1000 (01	
		4,193,601		4,393,001	
		4 102 601		4 202 601	
		4,193,001	4 102 601	4,393,001	1 102 601
3(iii)		-	4,193,001	200,000	4,193,001
3(III)	DIV DACK / DEEDED LOAN)				
		7 201 057		7010000	
		7,291,007		1,240,309 107710	
	ADD ADDITIONS DOMING THE LAN	7 367 876		7 201 057	
	LESS · LITH ISED DUDING THE VEAD	7,307,870	7 367 976	7,291,007	7 201 057
	LLOG. UTILIGED DUIVING THE TEAK		7,307,070	-	7,291,007

PARTIC	ULARS	Rs.	31.03.2020	Rs.	31.03.2019
			Rs.		Rs.
3(iv)	TDB - SEED FUND REPAYMENT				
	OPENING BALANCE	3,034,570		2,925,152	
	ADD : ADDITIONS DURING THE YEAR	346,287		109,418	
		3,380,857		3,034,570	
	LESS : UTILISED DURING THE YEAR	-	3,380,857	-	3,034,570
3(v)	BIRAC- BIG A/C				
	OPENING BALANCE	34,948,987		30,373,905	
	ADD : ADDITIONS DURING THE YEAR	41,045,768	_	45,266,373	
		75,994,755		75,640,278	
	LESS : UTILISED DURING THE YEAR	44,551,435	31,443,320	40,691,290	34,948,987
3(vi)	BIRAC-BBIF-A/C				
	OPENING BALANCE	1,781,002		1,689,687	
	ADD : ADDITIONS DURING THE YEAR	-		96,232	
		1,781,002		1,785,919	
	LESS : UTILISED DURING THE YEAR	-	1,781,002	4,917	1,781,002
3(vii)	DST-NIDHI A/C				
	OPENING BALANCE	24,296,305		31,150,455	
	ADD : ADDITIONS DURING THE YEAR	2,968,562		5,724,200	
		27,264,867		36,874,655	
	LESS : UTILISED DURING THE YEAR	23,414	27,241,453	12,578,350	24,296,305
3(viii)	BIRAC SEED FUND A/C				
	OPENING BALANCE	6,700,463		5,000,000	
	ADD : ADDITIONS DURING THE YEAR	5,748,797		6,206,661	
		12,449,260		11,206,661	
	LESS : UTILISED DURING THE YEAR	7,825,640	4,623,620	4,506,198	6,700,463
3(viii)	GST NETWORK-CSRFUND				
	OPENING BALANCE	637,887		-	
	ADD · ADDITIONS DURING THE YEAR	_		637 887	
		637.887		637,887	
	LESS UTILISED DURING THE YEAR		637 887		637 887
3(ix)	EITT- BIRAC LEAP FUND				
U(III)		20,000,000		_	
	ADD · ADDITIONS DURING THE YEAR	- 20,000,000		20,000,000	
		20,000,000		20,000,000	
	LESS · LITILISED DURING THE YEAR	4 000 000	16 000 000		20 000 000
3(x)	FITT SPARSH	1,000,000	,		_0,000,000
-()	OPENING BALANCE	_		_	
	ADD · ADDITIONS DURING THE YEAR	1 000 000		_	
		1 000 000		-	
	LESS UTH ISED DURING THE YEAR	-	1.000 000	_	-
3(xi)	FITT TIDE 2.0		.,,		
• (,)	OPENING BALANCE	-		_	
	ADD · ADDITIONS DURING THE YEAR	5 080 000		_	
		5,080,000		_	
	LESS UTH ISED DURING THE YEAR	1 416	5 078 584	_	-
3(xii)	INNOVATIONS FOR DEFENCE	1,110	0,004		
2 (111)	EXCELLENCE (IDEX)				
	OPENING BALANCE	-		_	
	ADD · ADDITIONS DURING THE YEAR	1 000 000		_	
		1,000,000		_	
	LESS : UTILISED DURING THE YEAR	13,956	986.044	_	-
		. 0,5 0 0	112,806,608		111,046,047

Sheet
Balance
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Forming
Schedules

SCHEDULE No. 4 FIXED ASSETS BLOCK OF ASSETS AS PER THE INCOME TAX ACT, 1961

SI. No	PARTICULARS	RATE			GROSS BLOCK			NET B	LOCK
			WDV as on 01- 04-2019	Deletion of assets	Addition of assets > 180 Days	Addition of assets < 180 Days	Total as on 31-03-2020	During the Year 2019-20	WDV as on 31-03-2020
FITT									
	COMPUTERS	40%	159,073		318,106		477,179	190,871	286,308
2	FURNITURE & FIXTURES	10%	1,194,728				1,194,728	119,473	1,075,255
ო	PRINTER	40%	6,599				6,599	2,640	3,959
4	INVERTER	15%	40,460				40,460	6,069	34,391
5	AIR CONDITIONERS	15%	144,224				144,224	21,634	122,590
9	PHOTOCOPIER	15%	51,938				51,938	7,791	44,147
7	PROJECTOR	15%	76				76	1-	65
ω	OFFICE EQUIPMENTS	15%	173,632	50,781	110,345	63,376	296,572	39,733	256,839
6	FITT EXTN. OFFICE	10%	43,350				43,350	4,335	39,015
10	TBIU OFFICE MODULE	10%	115,846				115,846	11,585	104,261
11	TBIU - SYNERGY BLDG	10%	5,796,329				5,796,329	579,633	5,216,696
12	SOFTWARE	25%	15,750			15,800	31,550	5,913	25,637
	TOTAL		7,742,004	50,781	428,451	79,176	8,198,850	989,688	7,209,162
ITECH									
13	ITEC-FURNITURE & FIXTURES	10%	I		891,375		891,375	89,138	802,237
14	ITEC - OFFICE EQUIPMENTS	15%	1		1,447,124	15,000	1,462,124	218,194	1,243,930
	TOTAL			ı	2,338,499	15,000	2,353,499	307,332	2,046,167
	GRAND TOTAL		7,742,004	50,781	2,766,950	94,176	10,552,349	1,297,020	9,255,329



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PARTIC	CULARS	Rs.	31.03.2020 Rs.	Rs.	31.03.2019 Rs.
5	INVESTMENTS				
	DEPOSITS WITH SCHEDULED BANK		394,012,308		520,300,000
			394,012,308		520,300,000
6	CURRENT ASSETS, LOANS AND				
	ADVANCES				
	BALANCE WITH SCHEDULED BANK				
	- CANARA BANK	36,264,420		20,573,642	
	- SBI -1968	237,601,172		79,271,890	
	- SBI FCRA ACCOUNT	42,249,936		28,746,008	
	- SBI - DBT-1376	16,302,559		16,092,172	
	- SBI-BIGS	44,849,040		44,506,544	
	- HDFC BANK	48,812,868		47,643,101	
	-HDFC BANK -BIRAC SEED FUND	28,646,219		26,897,422	
	- SBI BBIF-1330903	2,809,893		2,809,893	
	-CANARA BANK-1671 (SPARSH)	999,882		-	
	-CANARA BANK-1675 (ITTO)	35,143,933		-	
	-HDFC BANK - I- TECH SONIPAT	4,265,811			
			497,945,732		266,540,671
	TAX DEDUCTED AT SOURCE		37,828,117		29,890,630
	(RECEIVABLE)				
	DEVELOPMENT SUPPORT		412,670		412,670
	SECURITY DEPOSIT		219,087		4,087
	STAFF ADVANCE		592,830		468,821
	GST TDS RECEIVABLE		623,214		105,360
			537,621,650		297,422,240
7	CURRENT LIABILITIES				
7(i)	PROJECT ACCOUNT				
7(ia)	OPENING BALANCE ONGOING PROJECTS	204,674,484		165,892,750	
	ADD : TRANSFERRED FROM HOLD	12,428,128		13,277,267	
	PROJECT				
	ADD : RECEIPTS DURING THE YEAR	327,976,311		268,002,464	
		545,078,923		447,172,480	
	LESS : UTILISED DURING THE YEAR	237,288,075		207,646,221	
	LESS : TRANSFERRED TO INCOME &	12,068,858		12,915,614	
	EXPENDITURE A/C				
	LESS: TRANSFERRED TO HOLD PROJECT	9,938,062		21,936,161	
	CLOSING BALANCE ONGOING PROJECTS		285,783,929		204,674,484
7(ib)	OPENING BALANCE PROJECT ADVANCE	(8,070,395)		(5,954,720)	
	ADD : INCREASE IN PROJECT ADVANCE	(12,024,141)		(6,272,507)	
		(20,094,536)		(12,227,227)	
	LESS: DECREASE IN PROJECT ADVANCE	(9,274,821)		(4,156,832)	
	CLOSING BALANCE OF PROJECTS		(10,819,715)		(8,070,395)
	ADVANCE				
7(ic)	OPENING BALANCE OF PROJECTS ON HOLD	88,472,374		79,813,479	
	ADD : INCREASE IN PROJECTS ON HOLD	9.938.062		21.936 161	
		98,410,435		101.749.641	
	LESS : DECREASE IN PROJECTS ON	12 428 128		13.277.267	
	HOLD	,0,0			
	CLOSING BALANCE OF PROJECTS ON HOLD		85,982,307		88,472,374
			360,946,521		285,076,463



PARTICULARS		Rs.	31.03.2020	Rs.	31.03.2019
			Rs.		Rs.
7(ii)	OTHER CURRENT LIABILITIES				
	OPENING BALANCE OTHER CURRENT LIABILITIES	92,426,170		107,396,251	
	ADD : INCREASE IN OTHER CURRENT LIABILITIES	320,449,213		159,347,972	
		412,875,384		266,744,224	
	LESS : DECREASE IN OTHER CURRENT LIABILITIES	325,640,590		174,318,054	
	CLOSING BALANCE OTHER CURRENT LIABILITIES		87,234,794		92,426,170
	TOTAL [7(ia)+7(ib)+7(ic)+7(ii)]		448,181,315		377,502,633
8	PROJECT DEVELOPMENT & TECHNOLOGY RECEIPTS				
8(i)	PROJECTS AND DEVELOPMENT FUNDS		237,288,075		207,646,221
			237,288,075		207,646,221
8(ii)	SERVICE INCOME FROM PROJECT & DEVELOPMENT FUNDS				
	FITT OVERHEAD CHARGES FROM PROJECTS		8,729,542		11,518,367
	SEMINAR/WORKSHOPS / HRD PROG		1,481,134		1,022,745
	ROYALTY INCOME		1,858,182		374,502
			12,068,858		12,915,614
	TOTAL [8(i)+8(ii)]		249,356,933		220,561,835
9	OTHER INCOME				
	CORPORATE MEMBERSHIP FEE		64,000		30,000
	INEREST ON INCOME TAX REFUND		141,948		578,564
	INTEREST ON BANKS DEPOSITS / BONDS		36,281,728		30,092,993
	INTEREST ON SAVINGS ACCOUNT		6,350,175		7,701,388
	FITT BBIF & TBIU OPERATING INCOME		3,130,646		4,473,689
	FITT I-TEC-SONEPAT OPERATING INCOME		25,613,547		
	I-TEC-INCUBATION OPERATING INCOME		867,346		23,303
	MISC. INCOME		1,208		17,882
			72,450,598		42,917,819
10	PROJECT RESEARCH & DEVELOPMENT EXPENSES				
	PROJECT RESEARCH & DEVELPOMENT EXPENSE		218,836,913		195,938,944
	TRANSFERRED TO PROJECT & DEVELOPMENT AT SOURCE		18,451,162		11,707,277
			237,288,075		207,646,221

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PARTICULARS		Rs.	31.03.2020	Rs.	31.03.2019
			Rs.		Rs.
11	ESTABLISHMENT EXPENSES				
	EMPLOYEE PROVIDENT FUND EXPENSES		1,848,373		1,659,444
	GRATUITY ACCOUNT		-		2,000,000
	HONORARIUM / OTA		41,648		46,900
	HOUSE LEASE RENT		978,160		821,700
	MEDICAL EXPENSES		251,512		287,722
	MEDICAL INSURANCE		49,896		153,573
	PAY & ALLOWANCES		16,497,848		18,524,559
			19,667,437		23,493,898
12	ADMINISTRATIVE EXPENSES				
	AUDIT FEES		205,000		44,000
	BANK CHARGES		26,822		9,247
	BOOKS & PERIODICALS		8,972		10,967
	COMMUNICATION EXPENSE		72,469		187,653
	CONTINGENT EXPENSES		14,200		23,329
	CONVEYANCE EXPENSE		539,199		475,027
	ELECTRICITY CHARGES		253,086		621,402
	FITT BBIF OPERATING EXPENSES		2,673,929		1,794,333
	FITT TBIU OPERATING EXPENSES		1,190,146		2,837,025
	FITT I-TEC-SONIPAT OPERATING EXPENSES		23,645,277		-
	MEMBERSHIP & SUBSCRIPTION		15,000		15,000
	PRINTING & STATIONERY		106,825		118,588
	PROFESSIONAL FEES		686,923		815,000
	RECRUITMENT EXPENSES		151,658		426,106
	RENT EXPENSE		526,848		526,848
	REPAIR & MAINTENANCE		953,098		3,058,108
	SEMINAR & MEETING EXPENSES		254,688		86,533
	TRAVELLING EXPENSES		158,216		117,908
	INTEREST ON TAX		553		4,517
	OFFICE EXPENSE		219,670		133,871
	INTEREST EXPENSE		190,594		78,300
	PENALTY (TAXES)		18,670		38,585
	ADVT. / PUBLICITY		100,446		12,020
	ATAL INCUBATION CENTRE		2,568,490		185,183
	FITT - NSRCEL JOINT MENTORING		59,649		61,243
	FITT SILVER JUBILEE		86,000		359,734
			34,726,428		12,040,527



13. NOTES TO THE FINANCIAL STATEMENTS

1. SIGNIFICANT ACCOUNTING POLICIES

i) Accounting Convention

The Financial Statements of Society has been prepared under the Historical Cost Conventional methods. Society has been maintained accounts under cash system rather than accrual basis but some statutory accounts has been maintained under accrual basis.

ii) Fixed Assets and Depreciation

Fixed assets are valued at cost and Depreciation on fixed assets is provided on Written Down Value method in accordance with the rates and provisions of the Income Tax, 1961.

iii) Revenue Recognition

During the year, the Society recognises applied fund towards expense and transfer to its development funds and project as income of Society.

Income from Consultancy, Seminars, Retainer ships etc. is recognised on rendering of the service and receipt of the fees and FITT services charges, HRD/WORK SHOP, Royalty income which are transfer from various project funds has been treated as income of trust.

Interest income on deposit is accounted for on receipt basis consistently.

iv) Investments

Investments are valued at cost.

- 2. Equipment purchased for the project becomes the property of the IIT(D) on the conclusion of the project as per FITT's "Guidelines for handling consultancy proposals".
- 3. Goods and service Tax has been paid to the credit of Government as per invoice raised by FITT.
- 4 Previous year's figures have been regrouped/reclassified wherever considered necessary to make them comparable with those of the current year.

FOR M/s SRGA & Co. CHARTERED ACCOUNTANTS FRN: 011984N FOR FOUNDATION FOR INNOVATION AND TECHNOLOGY TRANSFER

FCA SANDEEP GUPTA PARTNER M. No. 090039 ASHUTOSH PASTOR (MANAGER) ANIL WALI (MANAGING DIRECTOR)

PLACE: NEW DELHI DATE: 20.11.2020

Glimpses of Our Activities During 2019–2020





FITT organised a lecture on "Industry 4.0 – India Inc Gearing-Up for the Change" for delegates from Samsung STI, South Korea June 19, 2019



Start-ups and Innovators in the area of Life Science met on July 12, 2019 for a networking session at the Bharti School, IIT Delhi



FITT in association with Gopalakrishnan - Deshpande Centre for Innovation & Entrepreneurship, IIT Madras organized the 9th Cohort over two weekends in February on Feb 15-16; Feb 21-22, 2020



Bio-tech Innovators meet on October 25, 2019 at IIT Delhi





Python for Glass Genomics (PyGGi)"-an indigenous software package was launched at the Senate Room, IIT Delhi on August 2, 2019



FITT in association with Samsung organised 5G Tech Workshop on October 17, 2019



Seminar on "AI in Healthcare" held on July 6, 2019 at the Seminar Hall, IITD



Prof. V. Ramgopal Rao, Director IIT Delhi presided over the 25th AGM of FITT - December 18, 2019

Visits 2019-2020



Vinod Khosla, alumnus IIT Delhi, co-founder, Sun Microsystems is discussion with start-ups at the Technology Business Incubator during his visit to IITD on August 9, 2019



Union Minister of State for Commerce and Industry, Shri Som Parkash, Gol visited FITT's Incubation centre on November 13, 2019



Foundation for Innovation and Technology Transfer Indian Institute of Technology, Delhi

Hauz Khas, New Delhi-110016 Web: Details: www.fitt-iitd.in / www.fitt-iitd.org E-mail: anilwali@fitt.iitd.ac.in, mdfitt@gmail.com Phone:+ 91 11 - 26597167, 26597289/ 26597153/ 26597164