



ANNUAL REPORT 2015-16



TECHNOLOGY INFORMATION, FORECASTING AND ASSESSMENT COUNCIL (TIFAC)
(An Autonomous Body of Department of Science & Technology, Govt. of India)
'A' Wing, Vishwakarma Bhavan, Shaheed Jeet Singh Marg, New Delhi-110 016
www.tifac.org.in

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The Governing Council (2015-2016)
(till December 3, 2015)

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Dr. Anil Kakodkar
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- Executive Director, TIFAC (Member- Secretary)

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(since December 4, 2015)

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- Secretary, Department of Science & Technology
- Secretary, NITI Aayog
- Director General, CSIR & Secretary, DSIR
- Secretary, Department of Electronics and Information Technology
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- Secretary, Department of Economic Affairs (Ministry of Finance)
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- Dr. Rajeeva L. Karandikar, Director, Chennai Mathematical Institute, Chennai
- Professor Bharat Ramaswami, Head- Economics & Planning Unit, Indian Statistical Institute, New Delhi
- Professor Sibaji Raha, Director, Bose Institute, Kolkata
- Executive Director, TIFAC (Member-Secretary)

EXECUTIVE SUMMARY

TIFAC established in 1988 as technology think tank is mandated to watch out, foresee and assess technologies and set directions for development of technologies for socio-economic sectors of importance to India. In around three decades of its existence as a forward looking organization, TIFAC has realized many milestones most notable being the Technology Vision 2020 documents.

Continuing on its way forward, during the year 2015-16 TIFAC brought out Technology Vision 2035 document for the nation with a fresh perspective on technology imperatives for India in response to the major changes in social, economical and technological scenarios at a global level in the last two decades. The document was released by the Hon'ble Prime Minister of India on January 3, 2016 during the 103rd session of the Indian Science Congress held at Mysuru. Towards realization of the vision, comprehensive technology roadmaps for 12 sectors viz. Education , Energy, Environment, Food & Agriculture, Information & Communication Technologies, Infrastructure, Habitat, Materials, Manufacturing Technologies, Medical Sciences & Healthcare, Transportation and Water are being prepared in parallel and will be rolled out one after the other.

A technology foresight study on Solar PV was completed and the report was formally released by Hon'ble Minister of Science & Technology and Earth Sciences, Govt. of India on the occasion of TIFAC Foundation Day on February 10, 2016. Among other things, it recommends action plans for stakeholders towards sustainable, production, utilization and research in emerging areas of Solar PV.

TIFAC has been contributing to national innovation ecosystem by supporting industries through diverse interventions. Under its programmes of SIDBI Revolving Fund for Technology Innovation Programme (SRIJAN), MSME Cluster Programme, and MSME Exports Enhancement Programme, number of projects were taken up, continued or completed during the year. Patent Facilitating Centre (PFC) continues to support the institutions for IP protection, raise awareness about IPR among the academicians and researchers and create self-employable women IP professionals. PFC actively provided inputs to think tank which piloted formulation of National IPR Policy.

During the year, TIFAC on one hand had the opportunity to organize the International Conference on Disaster Risk Reduction and host the 6th meeting of Government Foresight Organizations Network (GFN) with a large number of overseas delegates; on the other, TIFAC had the privilege of organizing the first edition of Indian International Science Festival (IISF 2015).

Picking up from its own TV2035 document, TIFAC identified three challenges and organised brainstorming sessions on its Foundation Day in collaboration with concerned ministries / departments and stakeholders with a view to put them under national focus and trigger actions.

Hon'ble President of India conferred Rani Lakshmbai Award (Nari Shakti Puraskar 2015) upon TIFAC for its scheme KIRAN-IPR that is empowering women in R&D through training on Intellectual Property Rights (IPR) especially patents. The award was given on the occasion of International Women's Day (March 8).

With involvement in large number of activities of national importance, TIFAC would be seeing a very busy year ahead.

(Prof Prabhat Ranjan)

Executive Director

1. TECHNOLOGY FORESIGHT ACTIVITIES

Technology Foresight in its latest manifestation is emerging as a tool for 'wiring up' innovation system, anticipating future socio-economic demands and designing appropriate strategies. TIFAC since its inception has been involved in technology foresight exercise by way of bringing out technology vision documents, techno market survey reports, sector specific technology foresight reports, technology roadmaps etc. Several technology foresight initiatives were taken by TIFAC, most prominent being Technology Vision 2020.

1.1 Technology Vision 2035

Ever since its inception in 1988, TIFAC has been involved in Technology

2020. As a response to changes in global scenarios, economic growth of the country, disruptions induced by technologies and rising aspirations of



Foresight related activities. A long-term foresight exercise, Technology Vision 2020 was pioneered by TIFAC in mid 1990's under the leadership of Dr. APJ Abdul Kalam, the then Chairman of TIFAC, with an objective to provide directions for S&T initiatives to make India a developed country by

the countrymen, it was decided to conduct yet another nationwide foresight exercise.

1.1.1 Technology Vision 2035

The second nationwide visioning exercise, Technology Vision 2035, was taken up to review the actual state of

play, explore new possibilities and identify challenges that would confront the country in the run up to the year 2035. The vision document was released by the Hon'ble PM in the 103rd session of the Indian Science Congress on January 3, 2016 at Mysore. The document has been prepared on a consultative framework and is being placed as a referential document to inspire all the stakeholders. It roots itself into the collective aspirations of the people of India, the ambitions of our youth and the likely expectations of Indians in 2035 as the country moves ahead. The overall exercise was steered by a National Apex Committee chaired by Dr. Anil Kakodkar, Chairman- TIFAC.

Technology Vision 2035 document begins with retrospection of the TV 2020 exercise, assessing the progress in sectors chosen in it vis-a-vis our performance in those sectors as on today. The Vision foresees the types of Indians in 2035, identifies their needs in terms of security, prosperity and identity and articulates them as 12 prerogatives which every citizen must be assured of. It identifies technologies in different stages of evolution that can help in guaranteeing these prerogatives. In order to build up steam for realization of envisioned scenario, the document puts up 10 grand challenges that our country should confront to make wide-scale impact across the sectors, as we move towards 2035. The transversal technologies: Materials, Manufacturing and Information & Communication Technology (ICT) that provide the substratum and cut across all other technologies have also been focused. It further highlights the capabilities and

constraints of India, along with the principal actors and key activities which could be taken up to convert the vision into action. The document concludes by reflecting upon the impact of technology on boosting the comprehensive national power.

1.1.2 Technology Roadmaps

Towards realising the vision for the Indians captured in the TV 2035 document, technology roadmaps of 12 sectors are being drawn up in parallel. The roadmap for each sector would provide future technology trends, demand projections, R&D directives, pointers for research, anticipated challenges and policy imperatives etc.

The roadmaps are being developed through interaction with stake-holders, brainstorming meetings with experts, online and offline surveys using structured questionnaires, Delphi exercise, scenarios and theme-based interactive sessions with young students, faculty, technocrats etc.

Among these roadmaps, the one on Materials is in advanced stage of completion. The roadmap on Materials in 2035 foresees "India to be a global leader in niche materials and its processing technologies by 2035". Since materials in general play a quintessential role in the development and sustainable progress of any country, this technology presents a compendium of technologies in five critical sectors viz. Glass & Ceramics, Polymers & Composites, Metallic Materials, Electronic & Energy Materials and Biomaterials. It will also have a section focussing on emerging materials.

Technology Roadmap on Manufacturing is also under finalisation and will be ready for release within next 6 months. This roadmap analyses the current status and ecosystem in India, global scenario in manufacturing, technology trends and gaps, drivers to change, future technologies, R&D drivers, anticipated challenges and policy imperatives in eight key segments namely, leather, textile & apparel, chemical, metal

fabrication, food processing, electronics & ICT appliances, metal fabrication, composites and micro nano manufacturing. "To strengthen manufacturing base of India through innovation driven clean, lean and green processes" is the sectoral vision that this roadmap puts down.

Status of technology roadmaps is given in table below

Sector	Status
Education	..
Medical Sciences & Healthcare	...
Food and Agriculture	...
Water	...
Energy	...
Environment	..
Habitat	...
Transportation	...
Infrastructure	...
Manufacturing
Materials
ICT	...

.... Draft Ready ... Draft nearing completion .. Under process

1.2 Technology Foresight for Automotive R&D (TFAR)

1.2.1 Detailed Project Report (DPR) for the Technology Platform under the National Mission on Electric Mobility

TIFAC was requested by the Department of Heavy Industry (DHI) to prepare the Detailed Project Report (DPR) for the Technology Platform under the National Mission on Electric Mobility. Based on brainstorming sessions and stakeholder

consultations, TIFAC had submitted an interim report in October 2014. In September 2015, version 1 of the final report was submitted to DHI. The report is expected to be released shortly after final consultations with stakeholder. The report identifies technology trends, gaps and technology development strategies for India in the field of electric mobility. The major verticals are Systems Integration and Lightweighting, Rechargeable Energy Storage Systems, Motors and Drives and Power Electronics.

1.2.2 Technology Foresight studies on Electric Mobility

The objective is to examine various issues related to electric mobility including comparative trends and benefits of various technology choices, potential impacts of electric mobility on energy sector, environment and natural resources. The study attempts to identify policy implications based on these analysis. Work has been carried out on development of simulation models for the drive-train of various electric drive vehicles, their interaction with the infrastructure and their future penetration scenarios.

1.3 Thematic Foresight Studies

1.3.1 Security Technologies

Technology foresight studies aim to understand and assess malicious threats and security vulnerabilities, prioritize/ rank threats and vulnerabilities with respect to national perspective, identify potential technologies to counter existing and future threats. The studies also attempt to highlight the technology capabilities of Government and private sector in India, their large scale deployability along with the policies and strategies for adequate countermeasures.

A study on 'Natural Resources/ Environment Security' in association with The Energy and Resources Institute (TERI), New Delhi is ongoing during the period. A draft report covering the sub-sectors of forest resources, biodiversity/ bio-resources, agriculture & allied resources, mines/ minerals, water resources, air & atmosphere, and marine resources has been prepared.

1.3.2 Information & Communication Security and Financial Sector Security

This study has been commissioned with Centre for Development of Advanced Computing (CDAC), Pune and Data Security Council of India (DSCI), New Delhi. It covers key technology areas likely to prevail in the future such as Internet of Things (IoT), Cloud & Virtualization, Big Data, Industrial Control security (SCADA) and Financial Systems security. The secondary research and primary data collection on identified technology areas have been initiated. Data analysis techniques such as current state mapping, threat assessment and geo-political risk mapping are to be adopted. The assessment of security paradigm, thresholds & tipping points, capabilities, time line derivation and hype testing would be applied to understand changes in the technology landscape.

1.3.3 Individual & Societal Security and Infrastructure & Physical Security

The study has been initiated in association with Sardar Vallabhbhai Patel National Police Academy (SVPNPA), Hyderabad and International Institute of Information Technology (IIIT), Hyderabad. Various aspects targeted in the study includes security of schools/ students, religious gatherings, ports/ coastal security, power plants/ refineries, water supply, human health, food/ agriculture etc. The study also focuses on usage of social media as a medium of threat to individuals and society.

1.3.4 Relationship between GDP growth and technology causes in different districts of select Indian states-Andhra Pradesh & Telangana

The study ascertains the relation between S&T inputs and growth in Gross District Domestic Product (GDDP) in five select districts of Andhra Pradesh and Telangana. The draft report covering the districts of Visakhapatnam, East Godavari, Srikakulam, Guntur and Adilabad is under finalization.

1.3.5 Solar Photovoltaic

The technology foresight study on Solar PV was aimed at facilitating national level planning and recommending action plans to various stakeholders towards sustainable production, utilization and research in emerging areas of Solar PV to position India as a leader in this globally important area. The study was completed and the report was formally released by Dr. Harsh Vardhan, Hon'ble Minister of Science & Technology and Earth Sciences, Govt. of India on the occasion of TIFAC Foundation Day on February 10, 2016. Towards wider dissemination of the content of the report and its use, the report has been forwarded to various stakeholders including concerned Ministries/ Departments at the centre and state as well as laboratories, academia etc.

1.3.6 Assistive Technologies

TIFAC in collaboration with Department of Empowerment of Persons with Disabilities (DEPWD) has come up with a national portal with a directory, where all the information about aids & assistive devices is available at the click of a button. The

project was granted an extension up to October 31, 2015, to further build and upgrade the existing directory database into log-in based system. This is a decentralized setup that facilitates manufacturers/ sellers to independently update information about their products. The portal is also made more accessible now, in compliance with Government of India guidelines. Few changes in the functional categories of disability were incorporated after consultation with the concerned Department and its autonomous bodies.

1.4 Quantitative Technology Foresight

With a view to further enrich and strengthen TIFAC's technology foresight efforts, building of capacities in quantitative foresight has been initiated. Quantitative methods offer the opportunity to represent the driving forces and the possible futures with better precision. Such methods allow comparison of the scale of developments in various circumstances and enable visualization through tables, graphs etc. Thus it enables a better insight into the impact of various socio-economic factors, policy options and the roadmap to a desirable future.

TIFAC has started quantitative foresight efforts initially focusing on the transportation sector. The objective is to analyse and identify the pathways towards meeting the Technology Vision 2035 prerogative "Safe and Speedy Mobility". This involves interfacing of available modelling tools as well as development of new tools wherever required.

1.5 Horizon Scanning

TIFAC is following the developments, breakthroughs and upheavals on the global technology landscape on a regular and continuous basis. Horizon Scanning is carried out routinely for feeding forward technology intelligence in foresight activities for India and generating thematic reports assessing potential opportunities and threats linked with technologies showing up on the horizon.

Technology updates from multiple sources were collected regularly and posted on the TIFAC Facebook page (www.facebook.com/tifac.dst.india); in all, there were about 5,000 posts during the year. The readership/ reach of these posts was, on an average over 38000 per month. A database of the posts is maintained using Twitter.

The technology updates were also used as inputs to Technology Vision 2035 activity and in the sectoral technology roadmaps that are underway.

1.6 Climate Change

1.6.1 Intended Nationally Determined Contribution (INDC)

India submitted its new climate plan in October 2015 to UNFCCC (United Nation Framework Convention on Climate Change) known as its Intended Nationally Determined Contribution (INDC). As the world's third-largest emitter and a country that's highly vulnerable to the impacts of climate change, India's INDC commits reduction in the emissions intensity of its GDP by 33-35% by 2030 from the level in 2005.

INDC reflects some of the enabling technologies that would help in achieving the goal set. TIFAC played a crucial role by identifying and providing inputs related to appropriate technologies in the area of clean coal, renewables and nuclear on the request of Ministry of Environment, Forest & Climate Change (MoEF&CC) and DST. India would need these technologies in future for mitigation and adaptation purpose to combat with adverse impact of climate change.

1.6.2 Global Technology Watch Group (GTWG)

At the behest of DST, TIFAC took up a project for preparing Global Technology Watch reports for six sectors viz. Renewable Energy, Green Forest, Sustainable Habitat, Water, Sustainable Agriculture and Manufacturing. GTWG is an ambitious initiative of DST under National Mission on Strategic Knowledge for Climate Change (NMSKCC) with an objective to keep track of state-of-the-art technologies emerging globally. The major activities under GTWG include technology mapping, selection and prioritization of technologies for mitigation and adaptation strategies, relevant for India besides forecasting requirement of technologies for the next 20 years in climate change perspective. A major component of GTW project is to develop GTWG NMSKCC Web-Portal that would be interactive and highly dynamic in nature and will feed information to various other climate change missions.

1.6.3 Third National Communication and Biennial Updated Report (TNC & BUR)

At the behest of MoEF&CC, TIFAC has submitted a study proposal on Technology Need Assessment in various sectors looking into the importance of mitigation and adaptation. It is aimed at providing an update on gaps, constraints and financial/ technical needs with regard to the fulfilment of India's obligations to the UNFCCC. Carrying out assessment of India specific technology needs and transfer of technologies at sectoral level is the major focus.

1.7 Alternate Fuels

TIFAC has ventured into foresight in the area of alternate fuels, beginning with Coal and Bio-mass to liquid fuels and recycle of CO₂. It is preparing a roadmap on Methanol & Di-Methyl-Ether (DME) for India, towards which

following two studies have been initiated at the behest of NITI Aayog and DST.

1.7.1 Survey study on Methanol & DME– Production aspects

The survey would broadly cover technologies for production from high ash coal, biomass and other sources like cement and steel industry and an assessment of current status of technologies along with their cost effectiveness (today and likely in future).

1.7.2 Survey study on Methanol & DME-Utilisation aspects

The survey would broadly cover issues and challenges related to utilization aspects on quality, utilization, storage, handling, transportation, commercial & regulatory requirements, safety and environmental effects of methanol & DME and their usage in the sectors of transport, chemicals, fuel cells, etc.

2. NURTURING INNOVATION

TIFAC has been supporting innovations at academic institutions, government R&D institutes, industry and also at individual level under its various innovation support programmes. Mainly this technical and financial support is provided in the form of protecting intellectual property and upscaling the technologies from pilot scale to industrial production scale, under different programmes. These programmes are Patent Facilitating Centre (PFC), and TIFAC-SIDBI Revolving Fund for Technology Innovation Programme (SRIJAN). Each of these programmes has its own mandate and support system. TIFAC also endeavours to synergise the functioning and output of these programmes.

2.1 Patent Facilitating Centre (PFC)

PFC at TIFAC has been constantly creating awareness and deeper understanding of patents and IPR amongst scientific community in the

government R&D institutes and academic institutes in obtaining patents and other IP rights on their innovative and creative work. PFC also provides patent information as vital input to the process of R&D in the



country by organising workshops and training programmes across the country and also reaching out through newsletters and social media. It lends technical and financial support to

form of patent search reports or patent analysis reports. It also keeps watch on the developments in the area of IPR and provides policy inputs to government.

TIFAC was awarded Nari Shakti Puraskar 2015 (Rani Lakshmbai Award) by Ministry of Women and Child Development for its programme KIRAN IPR implemented by PFC for women empowerment through its work of training about 400 Women Scientist in the area of IPR in 7 batches. 10% of active patent agents in the country have been created through this scheme. The award was given on the occasion of International Women's Day (March 8) by Hon'ble President of India.

2.1.1 Patent/ IP Facilitation

As a part of patent facilitation with total technical and financial support, PFC took up 96 new cases on behalf of academic institutions and government R&D institutions and more than 150 related to INSPIRE programme of DST. It found 38 inventions patentable and proceeded further for filing of new patent applications, of which 4 patent applications were related to INSPIRE programme. Another two cases were processed for filing of PCT international applications, out of which finally one PCT application was filed.

2.1.1.1 Grant of Patents

During the period, 14 patents were granted- 10 Indian, 2 US and 2 South

Korean, details of which are as below:

Patents Granted in the financial year

Indian Patents				
S. No	Patent No.	Grant Date	Applicant	Title
1.	272938	04/05/2016	University of Calcutta	Microencapsulated Enzyme Biosensor For Pesticide
2.	272480	04/04/2016	DST, New Delhi	An Improved Process for the Alkylation Of Phenols
3.	271334	17/02/2016	IIT Kharagpur	A Structured Catalyst for Steam Reforming of Methane for Production of Syn Gas
4.	271230	10/02/2016	MS University, Vadodara	Supported Undecaphosphotungstate Catalyst for Aerobic Epoxidation of Alkenes
5.	270285	09/12/2015	Indian Association for the Cultivation of Science, Kolkata	Synthesized carbon nanotubes and its process of manufacture
6.	270484	28/12/2015	IIT Guwahati	A Process for the Preparation of Carbodiimides
7.	269204	09/10/2015	M D University, Rohtak	Immobilization of proteins onto solid support and its process thereof

S. No	Patent No.	Grant Date	Applicant	Title
8.	269149	01/10/2015	IIT Guwahati	A process for the production of 9, 9-Dialkyl substituted fluorine monomer and obtaining the polyfluorene polymers (PFC) thereof
9.	268892	22/09/2015	Shaheed Bhagat Singh College of Engineering, Ferozpur	Method for the manufacture of fully stabilised cubic zirconia
10.	268363	09/09/2015	PGIMER, Chandigarh	Root canal irrigation needle
11.	267527	22/07/2015	IIT Delhi	Cross linked protein coated microcrystals and a process for preparation thereof
12.	266115	01/04/2015	IIT Kharagpur	A multipurpose device for processing of high viscous products in particular dairy and food products
US Patents				
1.	9197789	24/11/2015	IIT Kharagpur	Method and system for removal of fog, mist or haze from images and videos
2.	9077869	07/07/2015	IIT Kharagpur	Method and apparatus for detection and removal of rain from videos using temporal and spatiotemporal properties
South Korean Patent				
1.	1015915 760000	28/01/2016	IIT Kharagpur	Method and apparatus for detection and removal of rain from videos using temporal and spatiotemporal properties
2	1015689 710000	09/11/2015	IIT Kharagpur	Method and system for removal of fog, mist or haze from images and videos

2.1.1.2 IPR Awareness Workshops and Training

PFC conducted 4 workshops on IPR and patents; one each at Manesar, Gandhinagar, Tezpur and Dibrugarh. Manesar workshop was organised in association with Indian Institute of Corporate Affairs (IICA), Manesar. Attended by about 60 participants from different parts of the country, in this workshop an ex-NASA scientist shared the experience of handling IP and patents at NASA. Workshops in Tezpur and Dibrugarh were on patent searches & analysis and were organised in association with MHRD-IPR Chair at Tezpur University; highlight being hands-on-training by creating multiple Wi-Fi hotspots to enable patent search by themselves during practical session.

In addition to above 4 workshops PFC conducted special workshop on IPR during the India International Science Festival (IISF) at IIT Delhi jointly organised by TIFAC and Vijnan Bharti (VIBHA), attended by about 60 delegates.

PFC in association with DRDO organised a 3 days Advanced Workshop- cum- Training Programme on IPR. The faculty was drawn from European Patent Office, Indian Patent Office, European patent attorney, PFC and other leading IP managing organisations. It was attended by 51 delegates of DRDO, ICAR, DST, and Patent Information Centres opened at state level by DST. All the participants of the training programme are handling IPR in their respective institutions

2.1.2 Training to Women Scientists in IPR (KIRAN-IPR)

Knowledge Involvement in Research Advancement through Nurturing (KIRAN-IPR) scheme (erstwhile WOS-C) aims at mainstreaming the women having qualification in science & technology and but have not been able to pursue their career due to domestic compulsions. The scheme imparts them with knowledge and on the job training in the area of IPR to become employable.

For the 8th batch 3244 candidates applied, out of which 3041 were eligible for appearing in the online examination. A total of 1496 candidates actually appeared in the online examination conducted at 41 centers in 33 cities. 120 women scientists were finally selected after interview for one year training, starting with an Orientation programme beginning April 1, 2016. From 8th batch onwards, the stipend has also been increased to be between Rs.20,000 and Rs.30,000 depending on qualification of candidates.

2.1.3 Patent Licensing

PFC for the first time facilitated a patent cum technology licensing. Patent on non invasive jaundice meter (owned by S N Bose Institute of Applied Sciences, Kolkata) was licensed to M/S AMIL Ltd on non-exclusive terms with upfront fee of Rs.5 lakh and royalty of 5% on net sale and a condition of renewal of license after 5 years.

2.1.4 Policy Inputs

PFC provided inputs for Draft National IPR Policy to Department of Industrial Policy & Promotion (DIPP) at all three

stages viz. concept note, feedback and cabinet note. It also participated in one to one discussion with think tank established by the Government to frame this policy, under DIPP.

2.2 TIFAC-SIDBI Technology Innovation Programme (SRIJAN)

The programme was launched in November, 2010 with the objective to facilitate scaling up of technology innovations in the country. TIFAC

created a revolving fund jointly with SIDBI to support industries, particularly MSMEs- both existing and start-ups.

During the year 2015-16, 6 projects were continued, 4 successfully completed and 6 new projects were technically recommended for further consideration details of which are given in following sections. The cumulative status of revolving fund created by TIFAC with SIDBI, in the financial year

	Amount
Fund released by TIFAC to SIDBI	Rs.10.00 crore
Loan sanctioned	Rs.13.56 crore
Loan disbursed	Rs.10.06 crore
Loan Recovered	Rs. 2.94 crore
Interest Earned	Rs. 0.78 crore
Balance in Revolving Fund	Rs. 3.48 crore

2.2.1 Projects successfully completed during the financial year

S. No	Title	Implementing Industry	Technology know-how partner	Total Project cost & Support under SRIJAN (Rs. in lakh)	Innovation
1.	Value added products derived from sea plants for agriculture, animal husbandry and human application	M/s. Aquagri Processing Pvt. Ltd. Manamadurai, Tamil Nadu	CSIR-CSMCRI, Bhavnagar	1072.10 100.00	Novel process with improved water efficiency for production of Carrageenan and liquid plant nutrients from freshly harvested sea weeds
2.	Single release liner carrying label stock on each side	M/s. Hassle Free Technologies, Greater Noida	Start up	146.70 100.00	Single release liner carrying printed label stock on both sides to reduce material consumption and generation of liner waste by 50%

S. No	Title	Implementing Industry	Technology know-how partner	Total Project cost & Support under SRIJAN (Rs. In lakh)	Innovation
3.	Upgradation of ROBOPLAZMA Structural cutting system	M/s. Plazma Technologies Pvt. Ltd., Pune	In-house R&D	125.00 100.00	Faster, smarter and cheaper precision plasma steel cutting system with robotics for 2D and 3D cutting towards enabling a variety of job profiles with single system
4.	Design & manufacturing of Inertial Navigation Sensors and Autopilot	M/s. Aeron Systems Private Ltd., Pune	Start up	97.50 70.00	Indigenous design & development of low cost sensor system for application in autopilots for defence and automotive applications

2.2.2 Ongoing projects during the financial year

S. No	Title	Implementing Industry	Technology know-how partner	Total Project cost & Support under SRIJAN (Rs. In lakh)	Innovation
1.	Table top automatic multi-variant dosa making machine	M/s. Mukunda Foods Private Ltd., Bengaluru	Start up	180.00 50.00	Table top portable, hiegenic, automatic dosa making machine with capacity of making 1 dosa /minute for application in service restaurants, catering services and households
2.	Coil Edge Protector	M/s. Jyoti Cero Rubber, Jamshedpur	In-house R&D	121.79 95.00	Novel packaging protector with unique design to minimize damage of steel rolls during transportation by road or rail reducing carbon footprint

S. No	Title	Implementing Industry	Technology know-how partner	Total Project cost & Support under SRIJAN (Rs. In lakh)	Innovation
3.	Processing of e-waste using thermal decomposition method for precious metal recovery	M/s. Revive Electronic Waste Pvt. Ltd., Navi Mumbai	Start up	200.00 100.00	Modular size decentralized e-waste processing plant for recovering precious metals like gold, copper, silver from obsolete PCBs creating wealth from waste
4.	Indigenous development and manufacturing of autopilot for Unmanned Aerial Vehicles (UAVs)	M/s. Sree Sai Aerotech Innovations Pvt. Ltd. Chennai	Start up	133.50 68.00	Indigenously designed & developed 'anyone can fly' app based autopilot for drones, farm vehicles
5.	Production of Low Lactose milk	M/s. Madhumita Dairy Products, Bengaluru	In-house R&D	210.00 100.00	Process for reducing lactose content in cow or buffalo milk from 5% to less than 0.1% for consumption by people specially kids with lactose mal-nutrition
6.	Standard rack mountable, SMPS based precision regulated high voltage power supplies	M/s. IONICS Power Solutions Pvt. Ltd., Hyderabad	In-house R&D	125.00 100.00	Indigenous development of Switch Mode Power Supply system for high voltage supplies in precision lab instruments

2.2.3. New Projects Technically Recommended by TIFAC and under financial appraisal by SIDBI

S.No	Title	Industry	Technology know-how partner	Innovation
1.	High Definition Aerial Surveillance and Tracking System (HDSTS)	M/s. Techware Systems Pvt. Ltd., Chennai	In-house R&D	Indigenously designed and developed portable, easy to use, all-weather and rugged HD surveillance and tracking system with a range of 1 to 15 km in traffic, ports or factories, logistic firms, etc.
2.	Powdered Oil Based Mud Products (POLVO SERIES)	M/s. Gumpro Drilling Fluids Pvt. Ltd. Mumbai	In-house R&D	Powdered form of Oil Based Mud emulsifier used in oil drilling operations to remove pre-heating in sub-zero conditions and overcome logistic issues in remote oil fields
3.	ChillerMate Desuperheater Unit for industrial and commercial operations	M/s. Promethean Energy Pvt. Ltd., Mumbai	IIT-Bombay	High efficiency desuperheater for recovery of waste heat from air conditioners and air compressors in industrial scale to convert to useful energy
4.	Long fibre thermoplastics for automobile applications	M/s. SKYi Composites Pvt. Ltd., Pune	Start up	Indigenous technology for manufacturing high performance better quality reinforced long fibre thermoplastics to replace metal parts in automotives, sports goods, construction etc.
5.	PLUGnCHILL Cold Chain products	M/s. Thermal energy service solutions Pvt Ltd., Navi Mumbai	In-house R&D	Use of Phase Change Materials (PCM) in the refrigerated transport vehicles (reefer vans) to avoid use of diesel for cooling purpose during movement of the vehicle carrying perishable food items thereby reducing diesel consumption.
6.	Inflatable Technology for Water Body Cleaning	M/s. Agastya Buoyant Pvt Ltd., Kolkata	Start up	Inflatable trash boom for surface trash collection in water bodies / river, for control of oil spill, collection of rejects thrown in river, ponds during religious function etc.

2.2.3 Awards/ Recognitions achieved by Srijan recommended innovations

- M/s. Mukunda Foods Private Ltd. was selected in top 10 of DST-Lockheed Martin IIGP awards 2015 and was also selected for Start up Connect programme in USA during the visit of Hon'ble PM of India for the innovative product
- Table-top automatic multiple variant Dosa making machine
- M/s. Bridgedots Techservices Pvt. Ltd. Noida was selected in top ten of DST-Lockheed Martin IIGP award 2015 and in top six finalists in the MSME-UNIDO Cleantech Programme 2015 for developing innovative process for extraction of

of high grade silica from rice husk ash for use in automobile tyres to improve fuel efficiency.

- M/s. Agastya Buoyant Pvt. Ltd., Kolkata was among the top three winners in the Govt. of West Bengal sponsored "Egiye Bangla"



Low cost Inertial Navigation System deployed in DRDO developed Autonomous ground vehicle to detect mines.



Gold extracted from discarded printed circuit boards.



Table-top Dosamatic machine to deliver clean Dosa.



Aquasap extract from freshly extracted seaweed.

Glimpses from TIFAC-SIDBI Technology Innovation Programme (SRIJAN)

- M/s. Promethean Energy Pvt. Ltd., Mumbai became one of the two winners of MSME-UNIDO Cleantech Programme 2015 and participated in global Cleantech Competition in USA for the innovative product ChillerMate Desuperheater Unit for waste heat recovery in industrial chillers and air compressors. The innovator was also selected among top 30 start ups to showcase technologies in USA during the visit of Hon'ble PM of India
- programme in 2016 for innovative product Inflatable trash boom for water body cleaning
- The innovative product RO-BOAT, a semi-autonomous river surface cleaning equipment developed by M/s. Omnipresent Robot Technologies Pvt. Ltd. New Delhi has been identified as a potential technology by the National Clean Ganga Mission
- M/s. Millennium Rubber Technologies Pvt. Ltd., Thrissur, Kerala was selected in top six

finalists in the MSME-UNIDO Cleantech Programme 2015 for innovative product environment friendly self-grooving rubber roller for double roller cotton ginning machines

Pimpri Chinchwad College of Engineering, Pune (Maharashtra) and VIT, Vellore (Tamil Nadu).

TIFAC supports one hundred and fifty students- 30 through each Institution per year under the scheme.

2.3 MSME Internship Scheme

Over the years, in the course of implementation of MSME Cluster Programme, it was felt that the interaction of technical institutes with the cluster industries remained rather limited and restricted to faculty only (project/ study investigators) with little or no involvement of students. Academia/ technical institutes in India have vast pool of human resource in the form of students, but these students are not sufficiently oriented towards reaching out to the MSME sector. With this in view, an MSME Internship scheme was launched towards enhanced and continued involvement of students and faculty of technical institutions with industries and providing technical support to the otherwise technologically deficient MSMEs.

The scheme was launched in the year 2014-15 with five Institutions: Indian Institute of Technology, Banaras Hindu University, Varanasi (Uttar Pradesh), PSG College of Technology, Coimbatore (Tamil Nadu), MS Ramaiah University of Applied Sciences, Bangalore (Karnataka),

- Around 180 student internships from around the country have been facilitated in MSME industries
- 6 projects supported through M.S Ramaiah University of Applied Sciences (MSRUAS), Bengaluru. under Phase-II (projects) of the scheme, which focuses on development of low cost and easily implementable solutions for the MSME industries
- Projects are being taken up through Pimpri Chinchwad College of Engineering (PCCoE), Pune
- 6 project proposals from areas like automotive, mechanical, biotechnology, electronic sensor technology etc are under consideration
- Replication of the internship scheme is being carried out by Rajiv Gandhi Commission for Science and Technology, Govt. of Maharashtra. Scheme is being supported in two (2) technical institutes by the Commission in the state and various projects under Phase- II of the scheme were also supported

3. TECHNOLOGY SUPPORT TO INDUSTRY

TIFAC follows need based approach in its interventions involving industry. The MSME sector, where the intervention design has to be comprehensive, requires much handholding and covers a broad spectrum of activities to be carried out. TIFAC designs technology intervention plans for industries which are at times followed up with imparting requisite capacity building.

3.1 MSME Cluster Programme

With target on providing R&D and technical support to the MSMEs, the programme strives at building a platform that facilitates interaction of MSMEs with proximate and competent academia/ R&D/ technical institutions towards leveraging their knowledge- and expert-base. TIFAC engagement starts with technology mapping and comprehensive assessment of technology needs with specific focus on technology status (product & process) in the cluster, identification of gaps (in terms of technology, competition and market requirements), and designing an appropriate and requisite technology interventions action plan for the cluster. Subsequent to technology mapping, TIFAC undertakes need based capacity building initiatives in the cluster. Progress under the Programme during the year is given in sections below:

3.1.1 Completed Studies

Technology Gap Analysis Study for the Printing Cluster, Mysore (Karnataka)

The study identified that in about 250 units engaged in printing work in the Mysore cluster, about 1125 persons are directly and about 8000 persons indirectly involved in the printing jobs.

The cluster has an overall annual turnover of around Rs. 47 crore. Major recommendations include enhancing the use of Computer to Plate (CtP) technology, introduction of multicolour printing machines supporting more colour combinations, waterless offset to eliminate use of isopropyl alcohol, automation in the jobs like cutting, binding and pasting to reduce rejection and wastage of material, use of digital embossing and coating machines, use of eco friendly vegetable oil based inks instead of mineral oil based inks etc. Based on study recommendations, appropriate capacity building initiatives is being formulated.

3.1.2 New Studies Initiated

Saree Cluster, Varanasi (Uttar Pradesh)

Focus is on three segments viz. Banarasi silk saree, cotton saree and synthetic saree and covers aspects related to design, processing and manufacturing / production of sarees across the entire production chain from design, raw material, processing and the final product. Study covers clusters of Varanasi, Mau and Azamgarh, the knowledge partner being the Indian Institute of Technology – BHU, Varanasi.

General Engineering Cluster, Coimbatore (Tamil Nadu)

Light engineering products and processes related to precision machining in sectors of auto components, textile machinery, cutting tools, electrical appliances, garage equipments etc. are under focus in this study. It is being conducted in Coimbatore and adjoining areas, with

PSG College of Technology, Coimbatore as the knowledge partner.

3.1.3 Awareness workshops conducted

The table below gives the workshops conducted during the year, for raising awareness.

Sr. No.	MSME Cluster	Knowledge Partner	Workshop Focus	Participants
1	Rice Milling Machinery Cluster, Raxaul (Bihar)	IIT – Patna	Efficient Designing and application of CAD/CAM in designing were the main focus.	Entrepreneurs, industry owners, workers, farmers, exporters, state govt. officials, cluster association members etc
2	Saree Cluster, Varanasi (Uttar Pradesh)	IIT – BHU, Varanasi	Focus is towards identification of technological gaps in existing manufacturing processes, energy needs and requirement, appropriate and efficient weaving machines / looms, improving product quality etc	Weavers, dying unit owners, designers, workers, entrepreneurs, saree exporters, NGOs, and manufactures, State Govt. Officials, Association members etc
3	Ready Made Garments Cluster, Patna City (Bihar)	NIFT Patna	New technologies for cutting and stitching Current designs and fashion trends etc were the focus areas.	Skilled workers like tailors, cutters, designers, entrepreneurs, industry owners – dying units state govt. officials, cluster association members etc
4	Home Textile Cluster, Karur (Tamil Nadu)	NIFT TEA, Tirupur	Expanding the product range, value added products and market exposure were in focus	Designers, dying unit owners, exporters, industry owners, entrepreneurs, stage govt. officials etc
5	Rice Milling Cluster, Lakhisarai (Bihar)	IIT – Patna	Making operations more energy efficient and environment pollution free was the focus. Introduction of new products like brown rice was also explored	Entrepreneurs, industry owners, workers, farmers, exporters, state govt. officials, cluster association members etc



*Tractor top mini rice mill
manufactured at Raxaul*



*Stitching units in Karur,
Tamil Nadu*

3.1.4 Capacity building initiatives undertaken

- A training programme on 'Textile Designing and Printing' was undertaken in the Readymade Garments Cluster, Tirupur (Tamil Nadu) during July 15-22, 2015.
- Two days training programme was organized during August 26- 27, 2015 jointly with West Bengal Khadi & Village Industries Board (WBKVIB) for the poor at Ratua Block-II under Malda Food Processing cluster. About 75 women SHG members participated in the training programme and were handed over certificates at the end of training.

3.1.5 New studies

Towards covering more clusters, an all India advertisement inviting Expression of Interest (EOI) from respective MSME industry associations was released. In response to the advertisement, a total of 19 EOIs were received from the industry associations. Subsequently, technology gap study proposals were invited from academic/technical institutions through an all India advertisement for following 9 MSME clusters

MSME Cluster	
1	Agricultural Implements Cluster, Noorsarai (Bihar)
2	a. Copper & Bronze Utensils Cluster, Vaishali (Bihar) b. Brass and German Silver Utensils Cluster, Bettiah (Bihar) c. Brass and Bell Metal Cluster – Mahisadei Purba, Medinipur (West Bengal) d. Brass Metal cluster, Pareb, Bihta (Bihar)
3	a. Baktawng Wood Carpentry Cluster (Mizoram) b. Bairabi Bamboo Cluster (Mizoram) c. Seling Bamboo Cluster (Mizoram)
4	Refractory Cluster – Bangabhoomi (West Bengal)
5	Textile and Garment Manufacturing Cluster, Erode (Tamil Nadu)

6	Surgical Dressing Manufacturers Cluster, Chatrapatti (Tamil Nadu)
7	Kanaihaganj Jhula Cluster, Nalanda (Bihar)
8	Food Cluster, Pune (Maharashtra)
9	Three Wheeler, Mini Tractor (Saneda) Cluster, Rajkot (Gujarat)

3.2 MSME Exports Enhancement Programme

3.2.1 Guar Gum

As a follow up to the Guar Gum assessment report and towards initiating dialogue with U.S academia and explore possible technological areas of mutual collaboration between Indian Academia, R&D Institutes and Industries and their counterparts in USA meetings were organized with experts of Virginia Tech and Texas Tech University at USA during September 2015.

In the course of the discussions, following potential areas were identified for collaboration:

- Seed Breeding
- Processing and Products
- High Value Guar Derivitization

It was decided that collaborative efforts for research and education, focused on developing Guar and its products be undertaken to benefit both India and US, at different levels. Towards this, some working groups– each with thrust on different aspects in the guar chain need to be constituted.

To kick-start the initiative, a joint Indo-US Conference is planned to be organized in India at a mutually convenient date. Subsequent biannual conferences can be hosted alternately by US and India.

3.2.2 Technical Textiles

An in-house report bringing out the status of technical textiles- in terms of technology, market, potential application areas etc. has been completed. The study has also identified import intensive products to draw an R&D roadmap for the country.

3.3 Bioprocess and Bioproducts Programme

The programme aims at carrying out systems studies in the field of bioprocess & bioproducts and supporting R&D in select niche areas. Under the programme, four specialized reports have been published and twelve projects were launched towards development & demonstration of new technologies in the areas of biotransformation & enzymatic processes for Active Pharma Ingredient (API), nutraceuticals, phytochemicals, value-added bioproducts, bio-energy & biofuels etc.

3.3.1 Project- Centre for Biofuels

Pilot plant trials are underway at 'Centre for Biofuels' Phase II at NIIST, Trivandrum for select Indian biomass (sugarcane tops & cotton stalks). The project aims to validate experiment conducted in the laboratory scale processes in pilot plant under more realistic conditions. Composition studies, pre-treatment process and hydrolysis trials for sugarcane tops was completed at pilot scale and similar studies are underway for cotton stalks followed by fermentation trials.

3.3.2 Technology Assessment study

Technology Assessment study has been initiated on 'Biomass availability and technologies for conversion to biofuels', in Indian context. The study aims to develop zone-wise recommendations for appropriate technologies for conversion of crop residues to biofuel and to provide technological options to concerned industries. Indian Agricultural Research Institute (IARI), New Delhi and National Remote Sensing Centre (NRSC), Hyderabad would support in estimating the generation and surplus amounts of crop residues in India. The crop residues from rice, wheat, maize, sugarcane, cotton, pulses (Gram, Tur) and oilseeds (groundnut, mustard and castor) etc would be estimated.

3.4 Initiatives with state governments

River Silt Utilization- Bihar is facing heavy silt load during the rainy season through rivers: Kosi, Kamla, Gandak, Bagmati, Mahananda etc. The state government had earlier requested TIFAC to take up this problem and suggest technological measures to address it through disposal, utilization or produce value added products.

The silt accumulated at River Kosi was taken up first. It was decided that initially samples would be collected from the first 50 km of the Kosi riverbed by CSIR - Central Road Research Institute (CRRI)- Delhi, CSIR- Central Glass and Ceramic Research Institute (CGCRI)- Kolkata and Indian Council of Agriculture Research (ICAR)- Patna for the evaluation, testing and characterization of silt and evolve a strategy for its disposal, utilization, usage in value-added products.

Samples were collected by all the three institutions. CSIR- CGCRI, Kolkata, has developed value-added ceramic products like wash basin, tiles, bricks etc. Sample collection from other Kosi silt sites is underway.

4. INTERNATIONAL LINKAGES

S&T is a global issue and no country can progress in this field in isolation given the rising interconnectedness. Continuous engagement with International experts and institutions fuels and sustains the pursuits in S&T domain. This holds true for TIFAC which has Technology Foresight and Innovation as its core mandate. During the year TIFAC continued its engagements with organizations like IIASA and Government Foresight Organizations' Network (GFN) and also joined the Science and Technology in Society Forum (STS Forum).

4.1 India-IIASA Programme

India-IIASA (International Institute for Applied Systems Analysis, Austria) Programme focuses on undertaking collaborative research projects among scientists from Indian S&T organizations/ academic institutions with IIASA researchers in the areas of mutual interests and organizing training workshops. The Programme also offers opportunities for young Indian researchers to work at IIASA under the 'Young Summer Scientist Programme (YSSP)' and Postdoctoral Programme, which help strengthen their skills in advanced systems analysis and research techniques.

As part of capacity building, during 2015, three Indian researchers participated in the YSSP. In addition, two Indian researchers participated in South Africa-YSSP programme while another researcher worked as 'postdoctoral fellow' in IIASA.

4.1.1 Collaborative Studies

Under the India-IIASA programme, following studies were taken up and are ongoing:

A cluster project on sustaining and improving rural livelihoods through adaptive approaches to land, soil nutrient and water management was taken up with three institutions namely Institute of Rural Management Anand (IRMA)-Anand, Centre For Water Resources Development and Management (CWRDM)-Kozhikode and National Institute of Hydrology (NIH)-Roorkee. The following three projects have been launched under the cluster umbrella by TIFAC:

1. Project on Climate Change Adaptation: Approaches for Sustainable Livelihoods by IRMA, Anand. The proposed study would develop knowledge, strategies, approaches, measures and processes that enable vulnerable communities in various regions of Gujarat to cope with and adapt to the impending impacts of climate change in various ways. The Gujarat study has completed spatial and temporal variability of climatic parameters by different RCPs such as historical and projected rainfall, temperature, and evapo-transpiration deficit. The AEZ methodology would provide data on current and future agricultural production. Once all this data along with data on migration are available, the spatial pattern of future

livelihoods could be analyzed. This would help spatial pattern of livelihoods and climate change adaption strategies. All this would devise guidance towards policies and governance of land and water, and mechanism for effective climate change adaptations.

2. Project on Integrating hydrology, climate change and IWRM with livelihood issues: Development of methodology and a DSS for water-scarce Bundelkhand region in India by NIH, Roorkee. The study would lead to a water management tool (e.g. Decision Support System) to assist the local stakeholders in selecting and adopting appropriate water management practices on a sustainable basis. DSS model would create awareness on land & water productivity, water balance (with climate change impacts), livelihood options, technology options, institutional support, operational schemes, etc. A conceptual model of the DSS has been prepared, and a user interface guidelines for the DSS is being developed by NIH.

3. Project on Evaluation of soil nutrient budgets at field, farm and regional level in humid tropics of Kerala and development of a model for management of soil health by CWRDM, Kozhikode. The study aims to quantify the nutrient inflows and outflows (viz., soil erosion and leaching) in different cropping systems at spatial scales in Kerala soils and validate the model at different spatial scales in Kerala soils with the help of DSS linked with Geographic Information System (GIS). The study was carried out in three phases.

Strategies like pine apple strip cropping, contour trenches and drip fertigation were tested as management interventions. In second phase, regional level study was conducted for Kozhikode district. 20 farms were selected in 4 Agro ecological units covering marginal, small, medium and large farmers with crops like paddy, coconut, banana, arecanut, pepper, rubber and vegetables etc and the nutrient balance was worked out with the model. The Sustainable Livelihood Security Index (SLSI) has been calculated for targeting the nutrient recommendations for improving the productivity and sustaining the livelihood of farmers. The third phase on finalization of DSS structure and concepts has also been completed. CWRDM would have to look into providing any inputs/ cash to the farmers for adopting the recommendations for using the Soil Health Card.

4. Study on Development and Application of GAINS-City Model for Indian Cities by National Environmental Engineering and Research Institute (NEERI), Mumbai Centre. The study aims to develop a modified version of the GAINS-Asia model for major Indian urban areas. The primary objective would be to define the data requirements and availability for estimating air pollutants and GHG emissions in Indian cities and to design a flexible model framework considering specific local circumstances. GAINS estimates emission of 20 air pollution and 6 GHG's for each country based on data from international energy and individual source. 200 emission factor is being developed for each sources.

India specific source categories viz. auto-three wheeler, crematories etc. have been incorporated in the model. The emission factors from various studies/reports for various types of fuels and combustion processes suitable to Indian conditions were used for estimation of emission load from residential and commercial sources. The primary data has been collected for Kolkata for domestic and commercial sources.

The American Meteorology Society–Environmental Protection Agency Regulatory Model (AERMOD) modeling output and health data is being incorporated in the model. The AIRMOD is a steady state air quality dispersion model used to predict spatial distribution of pollutant concentrations in ambient air. The model has various options including the capability to handle Polar or Cartesian coordinates, simulating point, area, and volume sources, consideration of wet and dry deposition, accounting for terrain adjustment, building downwash algorithm, etc.

5. Study on Agro-biodiversity Conservation and Ecosystem Development– a Study in Indian agro-climatic sub-zones by Institute for Social and Economic Change (ISEC), Bangalore. The study aims to analyze the energy-economics, resource dynamics and institutional aspects of agro-biodiversity conservation in the context of an ecosystem dynamics as well as the utilization and conservation of resources and biodiversity for sustainable landscape development. The demographic data of all the study villages have been collected. The total

numbers of households and population in all the study villages across the three taluks have an increase as expected. Another common trend observed in all the villages is an increase in land under irrigation and a decrease in area under culturable waste. In addition, over time the livestock population in most villages have also seen a decrease leading to the previous grazing lands now converted to cultivation land. An increase in land area under irrigation has naturally simultaneously resulted in a decrease in land not coming under irrigation. It has been observed that ginger has been a newly introduced crop and its concentration has increased drastically from negligible in 1995-96. The floriculture has also increased in intensity over the past decade.

4.2 Science & Technology in Society Forum (STS Forum)

STS Forum, Japan is a global initiative which was successfully established as a Non-Profit Organization in March 2006, and registered in Tokyo in order to deliver the benefits of science and technology to the world where they are needed, providing a new mechanism for open discussions on an informal basis and building a human network among the world's most influential people in business, politics, academia, research/science, government, and the media that would, in time, resolve the new types of problems stemming from the application of science and technology. This forum is not necessarily a platform for specialists to unilaterally convey their knowledge, but an opportunity for real dialogue

among peers. Participants undertake cross-border activities towards the establishment of shared values and commitment for the future. TIFAC became its member in June 2015. ED, TIFAC participated in its annual meet held in October 2015 at Kyoto.

4.3 Government Foresight Organizations' Network (GFN)

GFN is a global body in the area of foresight, functional since 2009 and brings together public funded foresight organizations from across the world. The organizations come together annually for sharing their experiences and advancing Foresight and its practice. TIFAC participated in the meetings organized in Brussels (2013) and Seoul (2014).



6th Meeting of Government Foresight Organizations' Network (GFN)

TIFAC hosted the sixth meeting of GFN during November 25-26, 2015 in Vigyan Bhawan Annexe. The meeting was attended by foresight experts and practitioners hailing from Austria, Canada, Czech Republic, European Union, India, OECD, Singapore, South Korea and USA. GFN members deliberate on emerging issues

requiring policy action and share experiences in Horizon Scanning and Foresight activities.

The presentations from the participating countries/ organizations brought forth the difference in approaches to foresight, its integration in policy making, sectors that are under their focus and challenges faced in the process- a source of learning and insights for all participants. It was noted that smaller countries have foresight exercises influenced and guided by the proximity to the respective governments. Foresight organizations in larger countries worked independently focusing on an area/ theme/ country that would be of interest to their government. Evidences and instances of integrating foresight into policy making, shared by the participants were found encouraging towards advancing the foresight activities and also improving them.

The participants dwelt upon issues like communicating foresight perspectives to the government, involvement of stakeholders in foresight exercises, the time-horizons of foresight studies, differences in understanding of foresight terms across countries and also selection of experts for foresight exercises. Participants also discussed on path forward for GFN. It was felt that there should be participation of large number of countries and that collaborative projects could be bilateral in nature.

4.4 School of International Futures (SOIF)- India

TIFAC in collaboration with SOIF a UK based not-for profit organization in the business of promoting Strategic Foresight, will be organizing a SOIF Regional retreat in India (SOIF India-2016) during October 24 to 28, 2016 at Pune. In the retreats which SOIF organizes across the world, the participants learn about strategic foresight approaches and techniques from world renowned experts who expose the participants with tools that are ready to use. SOIF India-2016 will be organized targeting international participants and also participants from various Departments/ Ministries in Government of India,

Policy making bodies such as NITI Aayog, State Governments, Public Sector Undertakings and private industries/ agencies. Learning of strategic foresight techniques and tools will help participants understand importance of foresight in policy/ decision making and planning, to prepare for and shape the future of their respective organizations.

TIFAC scientists' expertise will be used for conducting sessions like live challenge, Delphi exercise, Scenario building etc. in the foresight retreat programme. This will strengthen TIFAC in organizing more such programmes independently for national/ international participants in future.

5. EVENTS

TIFAC occupies unique space in the S&T spectrum of the country, not only in terms of landscape of technologies it covers but also its focus on the future. A forward looking organization as it is, TIFAC strives to create opportunities for diverse players to come together. It routinely organizes or co organizes events that facilitate networking among stakeholders on one hand to exchange of ideas, knowledge and experience. This section reports the major events that TIFAC has organized during the year including a few with international participation.

5.1 IDRiM Conference

TIFAC organized the International Conference on Disaster Risk Reduction: Challenges and Opportunities for Sustainable Growth in partnership with Integrated Disaster Risk Management (IDRiM Forum), Japan during October 28-30, 2015 in New Delhi. The conference covered not just the technology aspects of disaster but also social and economical aspects. The conference was highly multi-disciplinary in nature with high quality papers from India and also international participation.



Innugration of IDRiM Conference

The participants and the speakers in this conference were from varied sectors such as government, private institutes, R&D institutes, academicians, NGOs and engineering

colleges. The conference was attended by senior officials from national and local governments, senior representatives from regional and international organizations, industry, experts and scientists including international organizations such as the USAID, World Bank, Oxfam, UNICEF, International Institute of Earthquake Engineering and Seismology (Iran), Northubia University (UK), Centre for Monitoring and Early Warning of Natural Disaster In Brazil, Practical Action, World Wide Fund (WWF), also representatives of the national and state level Disaster Management Authorities, Institutes, scientific and technical wings dealing with Disaster managements in India.

Realizing that there are number of technology platforms generating risk profiles, a need was felt in the Conference to set-up a Centre that can integrate the information from such platforms to guide response and resource allocation for first responders and disaster risk reduction. Development of scenarios for projected threats was also emphasized as was identification of vulnerabilities in infrastructure and social groups

5.2 India International Science Festival (IISF)

TIFAC in collaboration with Vijnana Bharati (VIBHA), organised the country's biggest ever Science & Technology and Industrial Expo - India International Science Festival (IISF) held during December 4-8, 2015 in the campus of IIT Delhi. IISF 2015 was a joint event of the Ministry of Science and Technology (DST, DBT and DSIR/CSIR) and the Ministry of Earth Sciences.

Around 4,000 delegates from India and abroad took part in the event conspicuous by the diversity of programmes it included. Among the major events of IISF 2015 were a Mega Science & Technology and Industrial Expo on the theme "Think Science, Live Science". More than 240 stalls and pavilions spread over 72,000 sq ft of exhibition space showcased innovations and technologies from government ministries and departments, science and technology councils of various states, autonomous institutions, R&D organisations, technological institutes, laboratories, educational institutions and public/private sector companies engaged in research.

Nearly 400 research papers were presented during the Young Scientists' Conference on subjects ranging from Indigenous Science and Technology, Agricultural Practices and Livestock Management, Green Energy, Waste Management and Water Management to Ocean Sciences, Geo Information Systems and Vector Control.

One of the major achievements was a successful attempt to set a World Record for the largest practical science lesson. 2,000 students from schools in Delhi gathered together and conducted a chemistry experiment successfully.

Another highlight of the Festival was the National Level Exhibition & Project Competition (NLEPC) under INSPIRE Programme of DST. Around 800 students of Classes VI to X showcased the innovative science models they had developed.

5.3 Workshop on Foresight Methodologies

TIFAC organized a one day Workshop on Foresight Methodologies: Theory and Practices, on 27 Nov 2015. Around 30 participants from various institutions across India including TIFAC scientists participated in the event interspersed with lectures and a panel discussion.

Foresight experts from South Korea, Canada, India, USAID and OECD spoke on their experience of Foresight methodologies and their practice. These included policy perspectives of Scenario Planning, latecomer's perspective on challenges integration of foresight into policy making, foresight best practices and barriers experiences of engagement with public servants. Scenario Planning and its use in evolving strategic futures was another dimension covered.



Workshop on Foresight Methodologies

The workshop concluded with a panel discussion on “What governments expect from foresight organizations?” with panelists from Finland, Singapore, Austria and India. It was opined that governments in seat would not be interested in foresights of longer perspectives and do not desire to know events that are undesired. On the positioning of foresight institutions, it was felt that their being too close to government can stifle their creativity; on the other hand, being too far would make such public funded organizations irrelevant. It was also realized that most government ministries/ departments need to be educated on foresight. Thus, the foresight institutions have a larger role to play than generating/ issuing foresights.

5.4 Conference of Parties 21 (COP 21)- Paris

Subsequent to submission of Intended Nationally Determined Contribution (INDC), MoEF&CC assigned TIFAC, the responsibility to host a panel discussion on ‘Climate Change Technologies’ during the side events at the Conference of Parties 21 (COP 21), held in Paris during November

30– December 11, 2015. TIFAC hosted the panel discussion bringing experts from, Council for Energy, Environment and Water (CEEW)-Delhi and Indian Institute of Tropical Meteorology (IITM)- Pune and IIT Madras. The panel discussed the technology gaps, need and challenges in Indian climate change context, with focus on areas of advance coal technologies, renewables and climate systems technologies. The experts also deliberated upon India’s strategy towards capacity building, finance need, technology transfer modalities, technology partnership etc. in order to promote R&D and deploy cleaner & energy efficient technologies available globally that would suit in sync with long term Indian climate change scenario.

5.5 TIFAC Foundation Day

TIFAC celebrated its 29th Foundation Day on February 10, 2016 with the Hon’ble Union Minister for Science & Technology and Earth Sciences, Govt. of India, Dr. Harsh Vardhan as the Chief Guest. He also inaugurated the product stalls showcasing Futuristic Assistive Technologies. Brainstorming sessions were organized on three different challenges identified in the Technology Vision 2035 document.

Technical Session on “Eliminating Female and Child Anaemia”

‘Guaranteeing Nutritional Security and Eliminating Female and Child Anaemia’ is one of the 10 Grand Challenges identified in the TV 2035 document. By virtue of its complexity, such a challenge cannot be met by a single agency, organization or a group

of individuals. Multiple stakeholders need to join hands with focused target and clear deliverables to take the challenges head on and this requires a detailed action plan. Towards this, a panel discussion on 'Elimination of Anaemia in women and children' was organized jointly with ICMR to assess the severity of the problem.



TIFAC Foundation Day

The experts suggested that this issue needs to be addressed in multiple ways- starting from creating awareness to the development of low cost diagnostics etc. However, it was realized that a discussion on this topic must be at a larger forum, involving respective ministries, industry and medical fraternity. The session ended with a commitment to bring out an action plan within a year and forwarding it to the government for implementation. TIFAC, ICMR and other stakeholders should join hands to carry forward this initiative.

Technical session on "Futuristic Assistive Technology: Eliminating Disability Barrier"

With an aim to enhance the role of technology in the improvement of quality of life of Persons with Disabilities (PwD), a technical session on the "Futuristic Assistive

Technology: Eliminating Disability Barrier" was organized. The session included not only presentations by eminent experts in Assistive Technology (AT) but also a thought provoking panel discussion that brought forth some very important insights. On the occasion, nearly 20 products were showcased in an exhibition which gave a glimpse of the state-of-art of Assistive Technologies in the country. The idea behind the session was to create a platform to emphasize the role of technology for PwDs and apprise the various stakeholders of the upcoming and futuristic Assistive Technologies and also strengthen the networks to maximize the benefits for PwDs.

Technical session on "Real-time Translation Among Indian Languages (ReTrAIL)"

Real-time Translation Among Indian Languages (ReTrAIL) is a technology that can possibly disrupt education and impact transactions limited by linguistic barriers. It basically involves developing technologies for automated speech recognition, machine translation and speech synthesis- all to be accomplished maintaining the VOIP standards. Experts hailing from academic institutions, industries and government came together to share the state-of-art of the technology and the challenges in their deployment. The pointers from the session can be used, with more such insights, by TIFAC to eventually come out with a strategy to deliver the technology, by involving the stakeholders.

5.6 Other events

- TIFAC organized workshops in for all the Scientists and Staff in two batches on May 7 and 21, 2015 for sensitization/ awareness on Sexual Harassment of Women at Workplace (SHWW) Act & Rules
- TIFAC observed Vigilance Awareness Week during October 26-31, 2015. The theme of

Vigilance week was “Preventive Vigilance as a tool of Good Governance”

- The Hindi Fortnight (Pakhwada) was organized in September 2015. TIFAC employees participated in 13 different competitions and were given away certificates and cash prizes, for their performance.

6. HUMAN RESOURCE DEVELOPMENT

The success of any organization's endeavours lay in its human resource and its growth on how well it is developed. This is particularly true for S&T institution because of the pace of changes on one hand to the globalization on the other. TIFAC encourages and supports human resource development in the areas of its work both internally and externally. It supports internships which allow young college students to work in TIFAC from two to six months under the guidance of TIFAC scientists. The scientists also routinely present or publish their findings, insights and experiences, besides serving as resource persons at diverse intellectual platforms.

6.1 TIFAC Internship Scheme

For strengthening technology foresight activities of TIFAC, linkages with academia and sensitizing the students about future technology priorities, TIFAC started the internship scheme in August 2013. During the year 20 students (including 4 students who joined earlier and completed internship during this year) went through internship guided by TIFAC scientists.

6.2 Papers published/presented

6.2.1 Papers published in Journal/Periodicals

- Suresh Babu & Deepak Agarwal, "Prospects of Magnesium for Automotive Lightweighting Applications", Auto Tech Review, Vol.4, Issue 3, April 2015
- Swati Sharma, Jancy Ayyaswamy and Jugal Kishore, "Technology Driven Healthcare; Advanced Techniques in Biology & Medicine", November 2, 2015, Volume 3, Issue 3, 1000146
- Neeraj Saxena, "Synallagmatic Industry-Academia Linkages", CSI Communications, November 2015

6.2.2 Papers presented in Conferences/ Symposia/ Seminar

- Nirmala Kaushik & Sanjay Singh, "Opportunities for biofuels- Indian Scenario", 5th International Conference on Solid Waste Management, Bengaluru during November 25-27, 2015. The paper was conferred 'IconSWM 2015 Excellent Paper Award'.
- Jancy Ayyaswamy, "Light trafficking; antireflection coatings with enhanced abrasion and scratch resistance properties", International Conference on Photons; Multiple & Creative Solutions to challenges" (ICPMCS), December 4-5, 2015
- Nirmala Kaushik & Sanjay Singh, "Biomass Survey- characterization and availability of Biomass in India", National Seminar on Lignocelluloses to Ethanol-Roadmap for India' organized by MoPNG, New Delhi, February 11, 2016
- Neeraj Saxena & Yashawant Dev Pawar, "Delphi study on technologies impacting future education", 10th International Technology, Education and Development Conference), Valencia, Spain, March 7-9, 2016

6.3 Participation in Conferences/ Seminars/ Symposia

- P.R. Basak participated in Roundtable Discussion on "Make in India for a Solar India" organized by NCPRE, IIT-Bombay and Observer Research Foundation (ORF) at IIT-Bombay on April 18, 2015
- Neeraj Saxena, & Manish Kumar participated in the CII Water and Energy Conclave, in New Delhi on May 29, 2015
- Sangeeta Nagar attended Indo-European Conference on Fostering Co-operation in Research, Innovation & IPR organised by EBTC, CII and DSIR on June 5, 2015 at Taj Mahal Hotel, New Delhi
- Sanjay Singh & Nirmala Kaushik attended National Seminar on 'Bio Fuel Programme in India – The Way Forward' at New Delhi organized by Ministry of Petroleum & Natural Gas (MoPNG) on July 13, 2015
- P.R. Basak & Brajeshwar Chandelia participated in the "11th India Innovation Summit 2015" under the theme "Realizing the National Dream – Scaling Local Innovations" organized by CII in Bengaluru during August 6-7, 2015
- Suresh Babu participated in iTECINDIA 2015 (Electrifying Mobility through holistic ecosystem solution) during 27-29, August 2015 in Chennai
- S. Biswas & Vipin C Shukla attended the 5th International Conference on Additive Manufacturing Technologies-AM 2015: Global Additive Manufacturing Summit " held on September 7 & 8, 2015 in Bangalore
- Nirmala Kaushik attended the conference on 'Biofuels -2015, Energizing Growth and Business Opportunities' at New Delhi during September 10-12, 2015
- Nirmala Kaushik attended 'Bioenergy Summit 2015- Bioenergy- the Next Generation' at New Delhi on November 17, 2015
- Sanjay Singh & Nirmala Kaushik attended an International conference on 'New Horizons in Biotechnology-2015' organised by CSIR-NIIST and Biotech Research Society during November 22-25, 2015 at Trivandrum
- Sangeeta Nagar & Deepti participated in International Conference on IP Laws and Enforcement of IPR organised by CII with Japan as Country Partner on December 1-2, 2015 at Eros Hotel, New Delhi
- P.R. Basak participated in a panel discussion with students and young entrepreneurs on Innovation Ecosystem for start-ups at IIT-Delhi on December 5, 2015 during India International Science Festival (IISF) organized jointly by IIT-Delhi, TIFAC and Vijnan Bharati.
- Yashawant Dev Panwar attended a Workshop for Indian SME Trainers on the promotion of Brand Creation Protection and Management organized by CII and European Union Initiatives at Taj Hotel, New Delhi on January 15, 2016
- Suresh Babu M. participated in Panel discussion on 'Electric Vehicle

Technologies and Markets' January 27, 2016 at TERI, New Delhi

- Sanjay Singh, PR Basak & Nirmala Kaushik attended 'Global Biotechnology Summit' organized by Department of Biotechnology during February 5-6, 2016.
- Suresh Babu M. participated in National Workshop on 'Lead Batteries in Solar Energy & Electric Vehicles', March 10, 2016 at India Habitat Centre, New Delhi
- Gautam Goswami & Manish Kumar attended the Round Table meeting on Climate Change on March 14, 2016 in TERI, New Delhi

6.4 Training programmes attended

- Sangeeta Nagar attended JPO/IPR Training Course on anaging IP (IPMT), during 29 June- July 10, 2015 in Tokyo, organised by the Japan Institute for Promoting Invention and Innovation (JIPII) in association with Japan Patent Office.
- Sangeeta Baksi attended a 3-day training workshop on "Disciplinary Rules and Procedures" organized by the National Academy of Human Resource Management (NAHRD), New Delhi at Pondicherry during February 03-06, 2016
- Manish Kumar attended one-week DST training on 'Role of Scientists in Natural Resources and Environment Management' during February 8-12, 2016 at Indian Institute of Forest Management, Bhopal

6.5 Invited lectures

- Prof. Prabhat Ranjan delivered a lecture on "Present and potential technological tools of future as facilitator for achieving developmental goals", Seminar on "Rural Development in Bihar and A Model Village- Vision 2035", Human Rights Association, Patna, April 2015
- Prof. Prabhat Ranjan chaired a session on "The Role of Public Private Partnership in Making Villages Smarter", India Smart Village Forum, Delhi, April 2015
- Prof. Prabhat Ranjan delivered lecture on "Converting Waste to Resource - Mission Mode Approach" during Workshop on Gainful Utilization of Marble Slurry and other Stone Waste on April 24, 2015 at Jaipur
- Prof. Prabhat Ranjan as Chief Guest delivered a lecture on "Sensor Network and its applications" in the TEQIP-II sponsored Faculty Development Programme on Recent Advances and Challenges in Power & Energy for Sustainable Growth, DTU, Delhi, June 2015
- Yashawant Dev Pawar delivered a lecture on "Protection of ICT related innovations through different IP rights & Determining Novelty and Inventiveness" in the Workshop on IPR: Awareness and Government Initiatives Supported by DeitY, at Manav Rachna International University, Faridabad on June 17, 2015
- Arghya Sardar made a presentation on "Electric Mobility- Opportunities and Challenges for India", in CII Conference on Advanced

- Manufacturing Technologies for Engineering Sector, June 26, 2015 in Chennai
- Prof. Prabhat Ranjan delivered Keynote address, "TIFAC activities in Patenting and Innovation, Workshop on Patent & IPR awareness", Gandhinagar, July, 2015
 - Sangeeta Nagar delivered a lecture on "IPR-Academic Prospects" at Baba Farid Group of Institutions at Bhatinda on July 20, 2015 during a One day workshop at Bhatinda
 - Yashawant Dev Pawar delivered a lecture on "IP Information, Online Patent Search and White Space Analysis and Patent Landscaping" in the Training on Contemporary Management Strategies in Intellectual Property Rights, R&D and Innovation organized by National Aluminium Company Limited (NALCO), Bhubaneswar on July 21-22, 2015
 - Prof. Prabhat Ranjan was Session Chair and Speaker, India Smart Supply Chain Forum 2015, Delhi, August 2015
 - Prof. Prabhat Ranjan delivered Keynote address, "Concept of Smart Village: Technology Vision 2035", National Convention on Smart Villages, Ranchi, August 2015
 - Neeraj Saxena delivered lectures on "Technology Forecasting: An overview" and "Technology Forecasting: Tools & Techniques, on August 10, 2015 during the four day training course on "Risk Management in Projects" conducted by Institute of Technology Management, DRDO, Mussoorie
 - Prof. Prabhat Ranjan delivered a lecture on the Role of Sensors in Digital Healthcare, HIMSS Digital India Health Summit 2015, Delhi, August 2015
 - Prof. Prabhat Ranjan shared experiences of TIFAC related to IP Management, Technology commercialization, up-scaling and business development, during the Training programme on "Intellectual Property Rights in Agriculture" organized by ICAR-Indian Agricultural Research Institute, New Delhi, August 2015
 - Yashawant Dev Pawar delivered a lecture on "Prior Art Search and Practical Session" in a 3-week training programme on IPR organised during August 17 - 18, 2015 by Zonal Technology Management Centre, ICAR, New Delhi
 - Sangeeta Nagar delivered a lecture on "Patent Search & Exercises" in a two days training programme on IPR organised by IARI at New Delhi during August 17-18, 2015
 - Deepti conducted a Patent Search session in a two days training programme on IPR organised by IARI at New Delhi during August 17-18, 2015
 - Prof. Prabhat Ranjan delivered a special address in TIFAC and CII organized workshop on Technology Roadmap for Advanced Manufacturing" on August 31, 2015 at Hyderabad
 - Prof. Prabhat Ranjan delivered Keynote address, "Role of Higher Education in Innovation", in the Higher Education Summit, New Delhi, September 2015
 - Prof. Prabhat Ranjan delivered a lecture on "Real Life Problems and Innovation", JSS Academy of Technical Education, Noida,

September 2015

- Sangeeta Nagar delivered a lecture on "Management of IPR in Academic Institutes and Role of PFC-TIFAC" on September 25, 2015 at Pondicherry at a National Conference on IPR organised by Shri Balaji Vidyapeeth University, Pondicherry
- Sangeeta Nagar delivered a lecture on "Shaping of IP Policy with Integration of IP Cell & Technology Transfer for any organisation" on September 26, 2015 organised by APTDC and TNDPC of CII during IPEX 2015 in Chennai
- Gautam Goswami participated and presented a poster on "Technology Vision 2035" in the workshop "Best Practices in Government Foresight" organised by OECD in Paris on October 2, 2015
- Prof. Prabhat Ranjan delivered a lecture on "TIFAC and Innovation", National Patent Drafting Competition (NPDC), Mumbai, in October 2015
- Prof. Prabhat Ranjan delivered a lecture on "Mind and Neuroscience", 5-day workshop on Traditional Tibetan Medicine and Astro-science, New Delhi, October 2015
- Prof. Prabhat Ranjan delivered a lecture on "Compassion and Innovation", International Conference on His Holiness The 14th Dalai Lama and His Contribution to Education, Ethics and Buddhist Science, New Delhi, October 2015
- Prof. Prabhat Ranjan delivered a lecture on "TIFAC role in Innovation and IPR", in a One Day Awareness/Sensitization Program on Intellectual Property Rights(IPR),

Ghaziabad, October 2015

- Prof. Prabhat Ranjan delivered a lecture on "Arts and Crafts of Systems Analysis", Systems Analysis Conference 2015, Vienna, November 2015
- Gautam Goswami delivered Keynote Address on "Soil Quality vis-a-vis Food Security by 2035" on November 14, 2015 in the National Seminar on "Soil Health: Key to Sustainable Agriculture" at Vishwabharati (West Bengal)
- Prof. Prabhat Ranjan delivered a lecture in the 6th Government Foresight Organizations Network (GFN) Meeting, New Delhi, November 25, 2015
- Prof. Prabhat Ranjan delivered a lecture in an interactive session on "Research Areas in Government Mission", India International Science Festival, New Delhi, December 2015
- Prof. Prabhat Ranjan delivered a lecture on "Assistive technology for persons with severe disability", India International Science Festival (IISF), New Delhi, December 2015
- Prof. Prabhat Ranjan delivered a lecture on "Technology Related to Climate Change", India Pavilion, UN Convention on Climate Change (COP21), Paris, December 2015
- Gautam Goswami moderated the Panel Discussion on "Technology Aspects of Climate Change" India Pavillion UN Convention on Climate Change (COP21), Paris, December 2015
- PR Basak delivered an invited lecture on "SRIJAN Programme for Start-ups – TIFAC Experience" at the workshop on "Growth of Start-ups" at ASCI, Hyderabad on December 9, 2015

- Yashawant Dev Pawar delivered a lecture on "Patent information and its access" in one day workshop on IPR organised on December 14, 2015 by MHRD IPR Chair, Delhi University, New Delhi
- Prof. Prabhat Ranjan delivered a lecture on "Strengthening of National Innovation Systems for Achieving SDGs", Seminar on Technology Facilitation for Sustainable Development Goals in the Asia Pacific, New Delhi, December 2015
- Prof. Prabhat Ranjan delivered a lecture on "Man Machine Interface to help persons with severe disability", International Conference on Man & Machine Interfacing (MAMI 2015), Bhubaneswar, December 2015
- Prof. Prabhat Ranjan delivered a lecture during the Annual Conference of Talash India, Patna, December 2015
- Yashawant Dev Pawar delivered a lecture on "Global Developments on IP issues and technical assistance for Further Strengthening IP Institutions and Capacities in developing countries" in 5- Day Training Program on WTO with Special Reference to Intellectual Property Rights for Officers of Indian Administrative Service during January 11-15, 2016 organised by Indian Institute of Foreign Trade (IIFT), New Delhi
- Sangeeta Nagar delivered a lecture on "Patents & Patent Procedures" on January 15, 2016 at Miranda House College, Delhi University during a one day programme for teachers of Delhi University
- Prof. Prabhat Ranjan delivered the Dr. P.K. Gopalakrishnan Memorial Lecture at Kerala State Council for Science, Technology & Environment (KSCSTE), Govt. of Kerala, in the 28th Kerala Science Congress during January 28-30, 2016
- Yashawant Dev Pawar delivered a lecture on "Recent development in the areas of IPRs" in the Seminar on the Evolving Importance of Intellectual Property Rights (IPRs) organised by Central University of Punjab, Bhatinda on January 30, 2016
- Prof. Prabhat Ranjan delivered a lecture on 'India Vision 2020 to 2035' at Inaugural Day of IIEFA Conference on February 5, 2016 at Nagpur
- Prof. Prabhat Ranjan delivered a lecture in a plenary session focused on "Consciousness Science and Spirituality' on February 12, 2016 at Vaicharik Kumbh at Bhopal
- Prof. Prabhat Ranjan delivered a lecture to address engineering students at Banasthali Vidyapeeth, Jaipur during February 22-24, 2016
- Yashawant Dev Pawar delivered a lecture on "Overview of IPR" and "Patents : developing Research Vistas in Universities" in the workshop organised by Patent Information Centre (PIC), Chhattisgarh on Intellectual Property Rights, IP Commercialization and Plagiarism" during February 26-27, 2016 at Bilaspur
- Prof. Prabhat Ranjan delivered a lecture in IACS- Kolkata on the occasion of 'National Science Day' on February 28, 2016
- Prof. Prabhat Ranjan delivered a lecture on the liens of Technology Vision 2035 at Gujarat Technical University on March 28, 2016

7. INFRASTRUCTURE AND RESOURCES

No organization can operate without a robust infrastructure especially in the age of fast technological changes. TIFAC is electronically connected to rest of the world being embedded in the National Knowledge Network (NKN). It also makes its presence felt in the social media through its Facebook and Twitter accounts. By virtue of being a member of the National Knowledge Resource Consortia (NKRC), the scientists have access to large number of e-resources. Besides, TIFAC library has over 2400 books and is a unique repository of books on Foresight and Futures.

7.1 National Knowledge Network (NKN)

During the year, TIFAC continued to make use of the connectivity to the National Knowledge Network (NKN). The connectivity provides TIFAC a 100 mbps line for internet connectivity and other services offered by NKN. Interactions were continued with National Informatics Centre (NIC) for making use of other provisions in the NKN.

7.2 E-Resources

TIFAC continued subscribing to E-resources, including IEEE, Oxford University Press, Royal Society of Chemistry, Taylor & Francis, Thompson Innovation, Wiley, Web of Science etc, during the year and online desktop computer access was facilitated. The e-resources are subscribed through the National Knowledge Network Consortium (NKRC), a joint consortium of DST and CSIR.

7.3 Implementation of Official Language Policy

The implementation of Official Language policy is done under the guidance of Official Language

Implementation Committee and was continued during this year as well. Six Hindi workshops were organized for the benefit of employees. The Hindi Fortnight (Pakhwada) was organized in September 2015. TIFAC employees participated in 13 different competitions and were given away certificates and cash prizes.

7.4 Library

TIFAC Library, a knowledge centre, facilitates and fosters the flow of the scientific/ technical information. The Library continued to strengthen its holdings by procuring scientific books/reports and journals/serials as per the requirement of TIFAC. A total 16 of scientific/ technical books/reports were procured during the year; the current holding of TIFAC Library is 2430. In addition, 28 of scientific/ technical journals, magazines and serials were subscribed.

7.5 TIFAC Information Interfaces

The Information Management Cell (IMC) continued maintaining the TIFAC Website (<http://www.tifac.org.in>). The websites served as interfaces for servicing queries received by some

users. The TIFAC site was visited by more than 5.6 lakh users. About 400 queries pertaining to various schemes of TIFAC and technology areas were received and serviced through the web-mail.

TIFAC is now active on social media through Facebook and Twitter with the following URLs

- www.facebook.com/tifac.dst.india
- www.twitter.com/TIFAC_India

These are being used to reach out to people for sharing TIFAC events, activities, advertisements, schemes

and opportunities. TIFAC is actively scouting latest technologies reported at various sources across the globe. Such scouted technology information having very important role in future technoscape, appear on Facebook page of TIFAC and its twitter account and has been liked, commented and discussed by many. This activity in turn helps us and others in foreseeing future technologies.

Our Facebook page showcases technology foresight along with futuristic with insights from eminent scientists and technocrats.

8. AUDITOR'S REPORT

S. K. JUNEJA & ASSOCIATES
CHARTERED ACCOUNTANTS

4704, Ashoka Enclave, Plot No. 8A
Sector-11, Dwarka, Delhi-110075.
Phone: 9810331588, 9810641785
E-mail: madhujun94@gmail.com

INDEPENDENT AUDITOR'S REPORT

The Members

The Governing Council

Technology Information, Forecasting and Assessment Council (TIFAC)
New Delhi

Report on the Financial Statements

1. We have audited the accompanying financial statements of M/s Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi, (hereinafter referred to as 'Society') which comprise the Balance Sheet as at March 31, 2016 and the Statement of Income and Expenditure Account for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

2. The management of the Society is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Society in accordance with the accounting principles generally accepted in India including Accounting Standards issued by the Institute of Chartered Accountants of India. Their responsibility includes maintenance of adequate accounting records for safeguarding the assets of the Society and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; design, implementation and maintenance of adequate internal financial controls, that are operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

3. Our responsibility is to express an opinion on these financial statements based on our audit. We have conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.
4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's

judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Society's preparation of the financial statements, that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Society has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by the Society's management, as well as evaluating the overall presentation of the financial statements.

5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

6. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required and give a true and fair view in conformity with the accounting principles generally accepted in India of the state of affairs of the Society as at 31st March 2016 and Excess of Expenditure over Income for the year ended on that date subject however to:
 - 1) **Non recognition of Loans given to various parties under various projects from the year 1992 to 2005 which have not been recognized as 'Loans' in Assets side of the Balance Sheet amounting to Rs. 48.23 Crores. (Note No. 18 of Notes on Accounts of the Balance Sheet).**
 - 2) **Non maintenance of Project wise Accounts, Budget and sanctions for various Projects executed and under execution by the society.**
 - 3) **Non Compliance of Income Tax Provisions related to Tax Deduction at Source in many cases.**
 - 4) **Non provision in Books of Accounts of Society's liability for employees leave encashment and gratuity payable at the time of retirement/ superannuation for which the amount is unascertained.**
 - 5) **Non allocation of housekeeping expenditure, electricity, security services, water and horticulture spent as office space is also shared by NECTAR & TDB for which the amount is unascertained. (Note No. 13 of Notes on Accounts of the Balance Sheet).**

7. We further report that:

- a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
- b) in our opinion proper books of account as required by law have been kept by the Society so far as appears from our examination of those books;
- c) the Balance Sheet and Statement of Income & Expenditure Account dealt with by this Report are in agreement with the books of account;
- d) in our opinion, the aforesaid financial statements comply with the applicable Accounting Standards issued by the Institute of Chartered Accountants of India except where disclosed otherwise.
- e) In our opinion and to the best of our information and according to the explanations given to us, we report as under with respect to other matters to be included in the Auditor's Report

Date: 23-09-2016
Place: Delhi

For S K Juneja & Associates
Chartered Accountants
Firm Registration No. 012484N

Sd/-
(Surinder Kumar)
Partner
M. No. 091449

Technology Information Forecasting And Assessment Council, (TIFAC)

Balance Sheet as at 31.03.2016

	Schedule	Current Year	Previous Year
CORPUS / CAPITAL FUND AND LIABILITIES			
Corpus / Capital Fund (Under TIFAC Main Account)	Schedule 1	366,698,250.63	280,019,306.71
Corpus/Capital Fund (Under PFC New Account)	Schedule 1	372,326.70	(1,577,922.75)
Corpus/Capital Fund (Under SFWS New Account)	Schedule 1	24,322,008.00	7,402,135.00
Reserves and Surplus	Schedule 2	-	-
Earmarked / Endowment Funds	Schedule 3	-	-
Secured Loans and Borrowings	Schedule 4	-	-
Unsecured Loans and Borrowings	Schedule 5	-	-
Deferred Credit Liabilities	Schedule 6	-	-
Current Liabilities and Provisions	Schedule 7	79,779,709.93	52,961,684.93
Total		471,172,295.26	338,805,203.89
Assets			
Fixed Assets (Net)	Schedule 8	61,332,405.47	68,235,050.54
Investments-From Earmarked / Endowment Funds	Schedule 9	106,049,000.00	-
Investments-Others	Schedule 10	-	-
Current Assets, Loans, Advances etc.	Schedule 11	303,790,889.79	270,570,153.35
Miscellaneous Expenditure (to the extent not written off or adjusted)			
Total		471,172,295.26	338,805,203.89
Significant Accounting Policies and Notes on Accounts	Schedule 32		
Contingent Liabilities	Schedule 33		

As per our report of even date Attached

For S K Juneja & Associates (FRN : 012484N)

Chartered Accountants

Sd/-

Surinder Kumar (Membership No.091449)

Partner

Date : 23.09.2016

Place : New Delhi

Sd/-
Accounts Officer
TIFAC

Sd/-
Registrar
TIFAC

Sd/-
Executive Director
TIFAC

Technology Information Forecasting And Assessment Council, (TIFAC)

Income & Expenditure Account for the Year Ended 31.03.2016

	Schedule	Current Year	Previous Year
Income			
Income from Sales / Services	Schedule 12	-	-
Grants / Subsidies	Schedule 13	154,050,000.00	70,767,000.00
Fees / Subscriptions	Schedule 14	202,440.00	5,460.00
Income from Investments	Schedule 15	-	-
Income from Royalty, Publication etc	Schedule 16	95,140.00	48,378.00
Interest Earned	Schedule 17	25,173,389.00	19,381,201.00
Other Income	Schedule 18	2,666,273.69	2,571,694.06
Increased/(Decrease) in stock of Finished Goods and Works-in-Progress	Schedule 19	-	-
Refund from Projects	Schedule 20	15,287,072.00	47,186,369.12
Total (A)		197,474,314.69	139,960,102.18
Expenditure			
Establishment & Other Administrative Expenses	Schedule 21	97,880,911.47	92,227,508.68
Expenditure on Grant, Subsidies etc	Schedule 22	104,531,894.23	70,598,877.20
Interest	Schedule 23	-	-
Depreciation (Net Total at the Year end)	Schedule 8	8,382,565.07	9,711,949.90
Total (B)		210,795,370.77	172,538,335.78
Balance being excess of Income over Expenditure (Expenditure over Income)		(13,321,056.08)	(32,578,233.60)
Transfer to Special Reserve (Specify each)			
Transfer to / from General Reserve			
Balance Being Surplus (Deficit) carried to Corpus/Capital Fund		(13,321,056.08)	(32,578,233.60)
Significant Accounting Policies & Notes on Accounts	Schedule 32		
Contingent Liabilities	Schedule 33		

As per our report of even date Attached
For S K Juneja & Associates (FRN : 012484N)
Chartered Accountants

Sd/-
Accounts Officer
TIFAC

Sd/-
Registrar
TIFAC

Sd/-
Executive Director
TIFAC

Sd/-
Surinder Kumar (Membership No.091449)
Partner
Date : 23.09.2016
Place : New Delhi

Technology Information Forecasting And Assessment Council, (TIFAC)

Patent Facilitating Centre (Under PFC New Account)

Income & Expenditure Account for the Year Ended 31.03.2016

	Schedule	Current Year	Previous Year
Income			
Grants / Subsidies	Schedule 24	13,528,479.00	-
Interest Earned	Schedule 25	143,309.97	297,048.00
Other Income	Schedule 26	5,000.00	17,483.00
Refund from Projects		-	-
Total (A)		13,676,788.97	314,531.00
Expenditure			
Establishment Expenditure / Administrative Expenditure	Schedule 27	10,702,151.52	13,671,352.59
Project Expenditure	Schedule 28	1,024,388.00	388,144.00
Total (B)		11,726,539.52	14,059,496.59
Balance being excess of Income over Expenditure (Expenditure over Income)		1,950,249.45	(13,744,965.59)
Balance being Surplus/(Deficit) transferred to Corpus / Capital Fund		1,950,249.45	(13,744,965.59)

As per our report of even date Attached
For S K Juneja & Associates (FRN : 012484N)
Chartered Accountants

Sd/-
Accounts Officer
TIFAC

Sd/-
Registrar
TIFAC

Sd/-
Executive Director
TIFAC

Sd/-
Surinder Kumar (Membership No.091449)
Partner
Date : 23.09.2016
Place : New Delhi

Technology Information Forecasting And Assessment Council, (TIFAC)
Scholarship for Women Scientists (Under Scholarship for Women Scientist New Account)
Income & Expenditure Account for the Year Ended 31.03.2016

	Schedule	Current Year	Previous Year
Income			
Grants / Subsidies	Schedule 29	20,000,000.00	-
Other Income	Schedule 30	641,879.00	450,086.00
Refund from Projects		-	-
Total (A)		20,641,879.00	450,086.00
Expenditure			
Expenditure	Schedule 31	3,722,006.00	1,535,033.00
Total (B)		3,722,006.00	1,535,033.00
Balance being excess of Income over Expenditure (Expenditure over Income)		16,919,873.00	(1,084,947.00)
Balance being Surplus/(Deficit) transferred to Corpus / Capital Fund		16,919,873.00	(1,084,947.00)

As per our report of even date Attached
For S K Juneja & Associates (FRN : 012484N)
Chartered Accountants

Sd/-
Accounts Officer
TIFAC

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Sd/-
Executive Director
TIFAC

Sd/-
Surinder Kumar (Membership No.091449)
Partner
Date : 23.09.2016
Place : New Delhi

Technology Information Forecasting And Assessment Council, (TIFAC)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 1 - Corpus / Capital Fund	TIFAC		Transferring to their respective New Accounts			
	Current Year	Previous Year	Patent Facilitating Center (New Account)		Scholarship for Women Scientists (New Account)	
			Current Year	Previous Year	Current Year	Previous Year
Opening Balance	110,019,306.71	142,597,540.31	(1,577,922.75)	12,167,042.84	7,402,135.00	8,487,082.00
Sub Total (A)	110,019,306.71	142,597,540.31	(1,577,922.75)	12,167,042.84	7,402,135.00	8,487,082.00
Opening Balance related to SIDBI Earmarked for Release (Revolving Fund)	170,000,000.00	170,000,000.00				
Earmarked for Release to SIDBI (Revolving Fund)						
Amount Given to SIDBI in 2010-2011	100,000,000.00					
Sub Total (B)	270,000,000.00	170,000,000.00				
Excess of Income over Expenditure (Expenditure over Income)	(13,321,056.08)	(32,578,233.60)	1,950,249.45	(13,744,965.59)	16,919,873.00	(1,084,947.00)
Sub Total (C)	(13,321,056.08)	(32,578,233.60)	1,950,249.45	(13,744,965.59)	16,919,873.00	(1,084,947.00)
Total (A)+(B)+(C)	366,698,250.63	280,019,306.71	372,326.70	(1,577,922.75)	24,322,008.00	7,402,135.00
Closing Balance	366,698,250.63	280,019,306.71	372,326.70	(1,577,922.75)	24,322,008.00	7,402,135.00

Technology Information Forecasting And Assessment Council, (TI FAC)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 2 – Reserve and Surplus

Particulars	Current Year		Previous Year	
1. Capital Reserves :				
As Per Last Account	*		*	
Addition during the year	*		*	
Less : Deductions during the year	*		*	
2. Revaluation Reserves :				
As Per Last Account	*		*	
Addition during the year	*		*	
Less : Deductions during the year	*		*	
3. Special Reserve :				
As Per Last Account	*		*	
Addition during the year	*		*	
Less : Deductions during the year	*		*	
4. General Reserve :				
As Per Last Account	*		*	
Addition during the year	*		*	
Less : Deductions during the year	*		*	
Total				

Technology Information Forecasting And Assessment Council, (TI FAC)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 3 - Earmarked/Endowment Funds

	Current Year	Previous Year
a) Opening Balance of the Funds	-	-
b) Additions to the funds	-	-
i) Donations / Grants	-	-
ii) Income from Investments made on account of Funds	-	-
iii) Other Additions (Specify)	-	-
Total (a+b)	-	-
c) Utilization / Expenditure towards objectives of funds	-	-
i) Capital Expenditure	-	-
Fixed Assets	-	-
Other Additions (Specify)	-	-
ii) Revenue Expenditure	-	-
Salary, Wages and allowance etc	-	-
Rent	-	-
Other Administrative Expenditure	-	-
Total c)	-	-
Net Balance as at the year end (a+b-c)	-	-

Note : 1) Disclosures shall be made under relevant heads based on conditions attached to the Grants

Note : 2) Plan Funds received from Central / State Governments are to be shown as separate Funds and not to be mixed up with any other funds

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 4 - Secured Loans and Borrowings

Particulars	Current Year		Previous Year	
1. Central Government				
2. State Government (Specify)				
3. Financial Institutions				
a) Term Loans				
b) Interest accrued and dues				
4. Banks :				
a) Term Loans				
Interest accrued and due				
b) Other Loans (Specify)				
Interest accrued and due				
5. Other Institutions and Agencies				
6. Debentures and Bonds				
7. Others (Specify)				
Total				

Note : Amounts due within one year

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 5 - Unsecured Loans and Borrowings

Particulars	Current Year		Previous Year	
1. Central Government				
2. State Government (Specify)				
3. Financial Institutions				
4. Banks :				
a) Term Loans				
b) Other Loans (Specify)				
5. Other Institutions and Agencies				
6. Debentures and Bonds				
7. Fixed deposits				
8. Others (Specify)				
Total				

Note : Amounts due within one year

Schedule 6 - Deferred Credit Liabilities

Particulars	Current Year		Previous Year	
a) Acceptances secured by Hypothecation of Capital Equipment and other assets				
b) Others				
Total				

Note : Amounts due within one year

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 7 - Current Liabilities And Provisions

Particulars	Current Year	Previous Year
A) Current Liabilities		
1. Acceptances		
2. Sundry Creditors : a) For Goods		
M/s Blue Star Ltd	2,580.00	2,580.00
CGHS (Sh. Rajani Kanth Gupta) Ex. Registrar	3,000.00	3,000.00
Permali Wallace Pvt. Ltd.		5,000,000.00
Payable by PFC to TIFAC (Contra)		-
Alaka Chakraborty	46,648.00	
House Rent Recovered (Prof. Prabhat Ranjan)	4,000.00	
3. Advances Received		
4. Interest accrued but not due on :		
a) Secured Loans / Borrowings		
b) Unsecured Loans / Borrowings		
5. Statutory Liabilities		
a) Over Due		
b) Others : TDS Payable (Sub Total (B) (Under TIFAC Account) of Annexure -12)	602,184.00	507,707.00
TDS Payable (Sub Total (B) (Under PFC New Account) of (Annexure -12)	49,056.00	157,554.00
6. Other Current Liabilities		
Salary Payable (Prof. Ganapathy)	-	1,800.00
State Cheque	119,110.00	-
IT-TIFAC Maintenance (Provisions)	16,057,470.00	8,057,470.00
India-IIASA Membership Fee (Provision)	24,500,000.00	-
Expenses Payable (Sub Total (A) (Under TIFAC Account) of Annexure - 12)	6,370,850.00	5,366,501.00
Expenses Payable (Sub Total (A) (Under PFC New Account) of Annexure - 12)	615,341.00	1,760,568.00
Expenses Payable (Sub Total (A) (Under SFWS New Account) of Annexure - 12)	67,664.00	178,634.00
CPF (Under PFC New Account)	-	26,000.00
GSLIS (Under PFC New Account)	-	1,488.00
Medical Scheme (Under TIFAC Account)	-	1,654,617.00
Medical Scheme (Under PFC New Account)	-	51,277.00
6 (a) Usupt Balance of Running Projects	1,921,124.00	1,071,806.00
6. (b) Due to DST (Usupt Balance Amount In Respect of Old Projects) (List enclosed in Notes to Accounts at S.No7)	25,616,928.93	25,616,928.93
7.EMD/ Security Deposit (TIFAC)		
Earnest Money : M/s Nimbus Harbour Pvt Ltd	20,000.00	20,000.00
Earnest Money : M/s Sansanwal Travels	50,000.00	-

Earnest Money from Sugar Factories (Annex 13)	3,300,000.00	3,300,000.00	3,300,000.00
Earnest Money : M/s Dogra Enterprises	-	-	5,000.00
Earnest Money : M/s Boggia Tours and Travels	-	-	50,000.00
Earnest Money : M/s Dip Technologies Pvt. Ltd	5,000.00	5,000.00	5,000.00
Earnest Money : M/s Perfect Traders	50,000.00	50,000.00	5,000.00
Earnest Money : M/s Asha Enterprises	-	-	50,000.00
Earnest Money : M/s Sarat Tours & Travels	300,000.00	300,000.00	50,000.00
Earnest Money : M/s Pevillions Interiors India (P) Ltd.	5,000.00	5,000.00	-
Earnest Money : M/s GMC Beverages Pvt. Ltd.	5,000.00	5,000.00	-
Earnest Money : M/s Bellack Canadian Water Ltd. (Aqualina)	18,784.00	18,784.00	-
Security deposit : M/s Pink House Keeping	50,000.00	50,000.00	18,784.00
7.EMD/ Security Deposit (WSSS)			
Earnest Money : M/s NSE IT			
Total (ii)	79,779,709.93	79,779,709.93	52,961,684.93
Total (i)+(ii) = (A)	79,779,709.93	79,779,709.93	52,961,684.93

Technology Information Forecasting And Assessment Council, (TI FAC) (Regular)

Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 7 - Current Liabilities And Provisions

Particulars	Current Year	Previous Year
8. Superannuation / Pension	-	-
9. Accumulated Leave Encashment	-	-
9. Trade Warranties/ Claims	-	-
10. Provisions	-	-
Total (B)	-	-
Total (A+B)	79,779,709.93	52,961,684.93

TECHNOLOGY INFORMATION FORECASTING AND ASSESSMENT COUNCIL (TIFAC) (REGULAR)
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31.03.2016

SCHEDULE & FIXED ASSETS	GROSS BLOCK						DEPRECIATION			NET BLOCK	
	Rate of Depreciation	Cost / v valuation As at beginning of the year	Additions during the year	Deductions during the year	Cost / valuation at the year end	As at the beginning of the year	On during the year	Total upto the year end	As at the current year end	As at the previous year end	
A. FIXED ASSETS											
1. LAND											
a) Freehold											
b) Leasehold											
2. BUILDING											
a) On Freehold Land											
b) On Leasehold Land											
c) Ownership Flats/Premises											
d) Superstructures on Land not belonging to the entity	10.00	117,850,000.00	-	-	117,850,000.00	80,867,421.26	3,698,257.87	84,565,679.13	33,284,320.87	36,982,578.74	
e) Interior work of TIFAC Building	10.00	52,476,907.00	-	-	52,476,907.00	26,934,742.08	2,554,216.50	29,488,958.58	22,987,948.42	25,542,164.92	
3. PLANT MACHINERY & EQUIPMENT : Fire Alarm System at TIFAC Building & Fire Extinguishers	15.00	1,076,728.00	-	-	1,076,728.00	637,367.46	65,904.08	703,271.54	373,456.46	439,360.54	
4. VEHICLES											
5. FURNITURE & FIXTURES	10.00	1,874,189.60	63,980.00	-	1,938,169.60	1,478,666.57	45,460.35	1,524,126.92	414,042.68	395,523.03	
6. OFFICE EQUIPMENT	15.00	23,346,580.58	426,750.00	-	23,773,330.58	20,222,772.54	532,883.71	20,755,656.25	3,017,974.33	3,123,808.04	
7. COMPUTER/PERIPHERALS	60.00	9,958,327.28	958,293.00	-	10,916,620.28	8,223,918.51	1,450,216.06	9,674,164.57	1,242,455.71	1,734,408.77	
8. ELECTRIC INSTALLATIONS											
9. LIBRARY BOOKS	100.00	5,603,166.55	30,897.00	-	5,634,063.55	5,585,960.05	35,896.50	5,621,856.55	12,207.00	17,206.50	
10. TUBEWELL & W SUPPLY											
11. OTHER FIXED ASSETS											
TOTAL OF CURRENT YEAR		212,185,899.01	1,479,920.00	-	213,665,819.01	143,950,848.47	8,382,565.07	152,333,413.54	61,332,405.47	68,235,050.54	
PREVIOUS YEAR		208,256,025.01	3,972,329.00	42,455.00	212,185,899.01	134,238,898.57	9,711,949.90	143,950,848.47	68,235,050.54	74,017,126.44	
B. CAPITAL WORK IN PROGRESS											

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 9 - Investments from Earmarked/Endowment Funds

Particulars	Current Year	Previous Year
1. In Government Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (TIFAC-SIDBI Revolving Fund)	106,049,000.00	-
Total	106,049,000.00	-

Schedule 10 - Investments - Others

Particulars	Current Year	Previous Year
1. In Government Securities	-	-
2. Other approved Securities	-	-
3. Shares	-	-
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others (to be Specified)	-	-
Total	-	-

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Particulars	Current Year		Previous Year	
Schedule 11 - Current Assets, Loans, Advances Etc				
A) Current Assets				
1. Inventories :				
a) Stores and Spares				
b) Loose Tools				
c) Stock-in-Trade				
Finished Goods				
Work-in-Progress				
Raw Material				
2. Sundry Debtors :				
a) Debts outstanding for a period exceeding six months				
b) others		8,773.00		6,574.00
3. Cash Balances in Hand (including Cheques / Drafts and Imprest) (Under TIFAC Account)				
Cash Balances in Hand (including Cheques / Drafts and Imprest) (Under PFC New Account)		16,225.00		5,623.00
Cash Balances in Hand (including Cheques / Drafts and Imprest) (Under SIWA New Account)		253.00		911.00
4. Bank Balances :				
a) With Scheduled Banks : (Union Bank of India)				
On Current Accounts				
On deposit Accounts (Short Term deposits) (Annex-11)		244,398,660.00		185,500,000.00
Accrued Interest (Accrued Interest) (Annexure 11)		3,273,743.00		43,965,571.00
On Savings Accounts (Under TIFAC Account)		27,516,562.09		18,687,269.55
On Savings Accounts (Under PFC New Account)		894,178.73		5,364,554.25
On Savings Accounts (Under SIWS New Account)		24,274,364.00		7,530,883.00
b) With non-Scheduled Banks :				
On Current Accounts				
On deposit Accounts				
On Savings Accounts				
5. Post Office - Savings Accounts		300,357,507.82		261,048,277.80
Total (A)		300,352,758.82		261,061,385.80

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule II - Current Assets, Loans, Advances Etc

Particulars	Current Year		Previous Year	
B) Loans, Advances and Other Assets :-				
I. Loans:				
a) Staff Loan (Under TIFAC Account) (Annex-1)		1,523,301.00		2,268,652.00
Staff Loan (Under PFC New Account) (Annex-1)		192,550.00		41,625.00
b) Entities financed under different Projects				
c) Others				
2. Advances and other amounts recoverable in cash or in kind or for value to be received:-				
a) On Capital Account				
b) Prepayments		5,355.00	14,473.00	
Advance : Franking Machine		420,108.00	199,333.00	
Advance : DAVP		-	20,000.00	233,806.00
Advance : Acharya Vinaba Bhave Rural Hospital, Sawangi		-		
c) Others				
SAIL NMPP		-	19,736.55	
Sundry Debtor : Shree Chitra Tribunal Institute for Medical Science & Technology		270,000.00	270,000.00	
Security Deposit Lease Accommodation		-	9,500.00	
Security Deposit MTNL		22,937.00	22,937.00	
Security deposit Tata Teleservices Ltd		-	16,000.00	
Security deposit : Sh.Kapil Aggarwal		-	100,000.00	
Security Deposit : DST (ITF)		74,520.00	74,520.00	
Security deposit : UBI Locker Rent		8,403.00	8,403.00	
Prof. Prabhath Ranjan		428,510.00		
TIFAC/DST ITS Canada Workshop		-	167,640.00	
International Conference on Disaster Management		-	44,493.00	
Preparation of Detailed Project Report & Design of R&D Scheme for Launch of National Mission Electric Mobility		-	1,008,322.00	
Sh.Kapil Aggarwal (Rent)		-	29,630.00	
Payable by PFC to TIFAC (Contra)		-	5,000,000.00	
Security Deposit : Mrs. Veena Bhandari (Against Lease Accommodation)		80,000.00	80,000.00	
CPE Trust (TIFAC)		207,368.00		
TDS (Indian Oil Corporation Limited)		-	61,346.00	
Total (i)		1,091,738.00	6,908,547.55	6,908,547.55
		3,233,052.00		9,452,630.55

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Balance Sheet as at 31.03.2016

Schedule 11 - Current Assets, Loans, Advances Etc

	Current Year		Previous Year	
3. Income Accrued:				
a) On Investments from Earmarked/ Endowment Funds				-
b) On Investment - Others				-
c) On Loans and Advances				-
d) Others				-
Interest Accrued from Union Bank of India (Under PFC New Account)		10,023.97		7,162.00
Interest Accrued from Union Bank of India (Under SFWS New Account)		165,055.00		48,975.00
4. Claim Receivable				
Total (ii)		175,078.97		56,137.00
Total (i) + (ii) = (B)		3,408,130.97		9,508,767.55
Total (A) + (B)		303,790,889.79		270,570,153.35

Technology Information Forecasting And Assessment Council, (TIIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 12 - Income From Sales / Services

Particulars	Current Year		Previous Year	
1. Income from Sales				
a) Sale of finished Goods	-	-	-	-
b) Sale of Raw Material	-	-	-	-
c) Sale of Scraps	-	-	-	-
2. Income from Services				
a) Labour and Processing Charges	-	-	-	-
b) Professional / Consultancy Services	-	-	-	-
c) Agency Commissions and Brokerages	-	-	-	-
d) Maintenance Services (Equipment/Property)	-	-	-	-
e) Others (Specify)	-	-	-	-
Total				

Schedule 13 - Grants / Subsidies (TIIFAC Regular)

Particulars	Current Year		Previous Year	
1. From Central Government				
TIIFAC Grant				
a) Grants in Aid (Plan)	22,762,000.00	26,870,000.00		
b) Grant in Aid (Non-Plan)	188,000.00	338,000.00		
c) Grant in Aid (Plan) Capital Assets	4,950,000.00	2,667,000.00		
d) Grant in Aid (Salary)	76,400,000.00	32,892,000.00		
e) Grant in Aid (Salary) Scheduled Castes	5,700,000.00	8,000,000.00		
f) Grant in Aid INSPIRE Award Scheme 5th National Level Exhibition And Project Competition	14,050,000.00	-		
g) Grant in Aid : India International Science Festival (IISF) 2015	30,000,000.00	-		
2. State Government(s)				
3. Government Agencies				
4. Institutions Organisations				
5. International Organisations				
6. Other (Specify)				
Total	154,050,000.00	70,767,000.00		

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 14 - Fees / Subscriptions

Particulars	Investment from Earmarked Funds	
	Current Year	Previous Year
1. Entrance Fees	-	-
2. Annual Fees / Subscriptions	-	-
3. Seminar / Program Fees	-	-
4. Consultancy Fee	-	-
5. Others (Specify)	-	-
Award for Nari Shakti	200,000.00	460.00
RTIA Questions	440.00	3,000.00
Tender for Car Hiring	500.00	2,000.00
Tender for Housekeeping at TIFAC	-	-
Tender for Payroll and Financial Software	1,500.00	-
Total	202,440.00	5,460.00

Schedule 15 - Income From Investments (Income on Invest. From Earmarked/Endowment Funds transferred to Funds).

Particulars	Investment from Earmarked Funds	
	Current Year	Previous Year
1. Interest		
a) On Govt. Securities		
b) Other Bonds/Debentures		
2. Dividends		
a) On shares		
b) On Mutual Fund Securities		
3. Rents		
4. Others (Specify)		
Total	-	-

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Particulars	Current Year	Previous Year
1) Income from Royalty	67,010.00	
2) Sale of Publications	28,130.00	48,378.00
3) Other (Specify)		-
Total	95,140.00	48,378.00

Schedule 17 - Interest Earned (Regular)

Particulars	Current Year	Previous Year
1. On Term Deposits		
a) With Scheduled Banks	877,423.00	16,741,357.00
b) With Non-Scheduled Banks		
c) With Institutions		
d) Others		
2. On Savings Accounts		
a) With Scheduled Banks	18,206,832.00	2,605,572.00
b) With Non-Scheduled Banks		
c) Post Office Savings Accounts		
d) Others (Project Interest)		
3. On Loans :		
a) Employees (LTA, Scooter ,Car, tour and LTC)	36,150.00	34,272.00
b) Others (Interest from Income Tax)	3,984.00	-
4. Interest on Debtors and Other Receivables (TIFAC-SIDBI Revolving Fund)	6,049,000.00	
Total	25,173,389.00	19,381,201.00

Note : Tax deducted at source to be indicated

Technology Information Forecasting And Assessment Council, (TIIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 18 - Other Income

Particulars	Current Year	Previous Year
1. Profit on sale / disposal of Assets		
a) Owned assets	-	-
b) Assets acquired out of grants, or received free of cost	-	-
2. Export Incentives realized		
3. Fees for Miscellaneous Services		
4. Miscellaneous Income		
Other Receipts	26,419.00	5,985.00
Stale Cheques (Income)	23,184.00	2,380,570.06
Leave Salary & Pension Contribution		-
Rent Recoverable	376,000.00	
5. Income Accrued and Received on Running Projects		
Contingency : Prepayment of Directory of Assistive Devices for Persons with Disabilities under SIPDA Scheme	26,428.00	35,603.00
Overhead : Preparation of Detailed Project Report and R&D Scheme Under the NIMEA Project	468,080.00	-
Overhead : Prepayment of Directory of Assistive Devices for Persons with Disabilities under SIPDA Scheme	178,467.00	149,533.00
International Conference on Disaster Management	1,567,695.69	
Total	2,666,273.69	2,571,694.06

Schedule 19 - Increase / (Decrease) in stock of Finished Goods & Work in Progress

Particulars	Current Year	Previous Year
a) Closing Stock		
Finished Goods	-	-
Work-in-Progress	-	-
b) Less : Opening Stock		
Finished Goods	-	-
Work-in-Progress	-	-
Total	-	-

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 20 - Refund from Projects, (TIFAC Regular Account)

Particulars	Current Year	Previous Year
Home Crown Technology (Annex-2)	10,440,000.00	5,652,095.00
Advanced Composites Programme (Annex-2)	1,649,072.00	8,119,220.00
Fly Ash Utilisation Programme (Annex-2)	1,350,000.00	10,000.00
Refund from Projects (Vision 2020) (Annex 2)	1,848,000.00	33,405,046.12
Total	15,287,072.00	47,186,369.12

Schedule 21 - Establishment & Other Administrative Expenses

Particulars	Current Year	Previous Year
Establishment Expenditure (TIFAC Regular) (Annex 3)	53,365,225.00	59,066,194.00
Administrative Expenses (TIFAC Regular) (Annex 4)	25,613,588.47	17,830,433.68
Establishment & Administrative Expenditure (Vision 2020) (Annex-6)	18,902,098.00	15,330,881.00
Total	97,880,911.47	92,227,508.68

Schedule 22 - Expenditure on Grants, Subsidies Etc

Particulars	Current Year	Previous Year
Grants given to Institutions/Organisations		
Project Expenditure (TIFAC Regular) (Annex - 5)	91,823,863.23	52,309,179.20
Project Expenditure (Vision 2020) (Annex-6A)	11,192,650.00	15,415,753.00
Project Expenditure (Vision 2020) (Annex-7)	1,515,381.00	2,872,945.00
Total	104,531,894.23	70,598,877.20

Technology Information Forecasting And Assessment Council, (TIFAC) (Regular)
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 23 - Interest

Particulars	Current Year	Previous Year
a) On Fixed Loans (Including Bank Charges)	-	-
b) On Other Loans (Including Bank Charges)	-	-
c) Others (Specify)	-	-
Total	-	-

Technology Information Forecasting And Assessment Council, (TIFAC)
Patent Facilitating Centre

Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 24 - Grants / Subsidies (Patent Facilitating Centre) (Irrevocable Grants & Subsidies Received)

Particulars	Current Year	Previous Year
Grant Received under PFC New Account		
1. From Central Government		
2. Patent Facilitating Centre Grants	13,528,479.00	-
a) Grants in Aid (Plan)	-	-
b) Grant in Aid (Non-Plan)	-	-
3. State Government(s)	-	-
4. Government Agencies	-	-
5. Institutions Organisations	-	-
6. International Organisations	-	-
7. Other (Specify)	-	-
Total	13,528,479.00	-

Schedule 25 - Interest Earned (Patent Facilitating Centre)

Particulars	Current Year	Previous Year
Interest Earned under PFC New Account		
1. On Term Deposits		286,800.00
a) With Scheduled Banks	131,665.97	-
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others (Interest : Scooter, LTA, LTC & Car)	11,644.00	10,248.00
Total	143,309.97	297,048.00

Schedule 26- Other Income (Patent Facilitating Centre)

Particulars	Current Year	Previous Year
Other Income under PFC New Account		
Other Income (Annex-8)	5,000.00	17,483.00
Total	5,000.00	17,483.00

Technology Information Forecasting And Assessment Council, (TI FAC)

Patent Facilitating Centre

Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 27 - Establishment & Administrative Expenditure (PFC)

Particulars	Current Year	Previous Year
Establishment & Administrative Expenditure under PFC New Account		
Establishment & Administrative Expenditure (Annex-9)	10,702,151.52	13,671,352.59
Total	10,702,151.52	13,671,352.59

Schedule 28- Project Expenditure (PFC)

Particulars	Current Year	Previous Year
Project Expenditure under PFC New Account		
Project Expenditure (Annex-10)	1,024,386.00	386,144.00
Total	1,024,386.00	386,144.00

Technology Information Forecasting And Assessment Council, (TI FAC)

Scholarship for Women Scientists

Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 29 - Grants / Subsidies (Scholarship for Women Scientists) (Irrevocable Grants & Subsidies Received).

Particulars	Current Year	Previous Year
Grant Received under SEWS New Account.		
1. From Central Government		
2. Scholarship for Women Scientists Grants	20,000,000.00	
a) Grants in Aid (Plan)		
b) Grant in Aid (Non-Plan)		
3. State Government(s)		
4. Government Agencies		
5. Institutions Organisations		
6. International Organisations		
7. Other (Specify)		
Total	20,000,000.00	

Schedule 30- Other Income (SWS)

Particulars	Current Year	Previous Year
Other Income under SFWS New Account		
Interest on Savings Account	638,879.00	450,086.00
Tender Fees from Examination	3,000.00	
Total	641,879.00	450,086.00

Technology Information Forecasting And Assessment Council, (TIIFAC)
Scholarship for Women Scientists
Schedules Forming Part of Income & Expenditure for the year ended 31.03.2016

Schedule 31 - Expenditure (SWS).

Particulars	Current Year	Previous Year
Project Expenditure under SWS New Account.		
Scholarship for Women Scientist	14,489.00	52,839.00
Computers	7,130.00	-
Advertisement, Written Exam	2,733,273.00	-
Orientation Programme	78,650.00	-
Contingency	10,008.00	197,225.00
Overheads	12,512.00	396,043.00
Salary of Accounts Assistant	175,060.00	216,697.00
Salary of Data Entry Operator	174,000.00	167,807.00
Salary for Training Assistant	174,000.00	168,106.00
Salary for Training Coordinator	330,000.00	322,500.00
Web Based ICT Modules	8,148.00	-
Ad-Hoc Bonus	4,736.00	13,816.00
Total	3,722,006.00	1,535,033.00

TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL

**SCHEDULE FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED
31.03.2016**

SCHEDULE 32

SIGNIFICANT ACCOUNTING POLICIES

1. The financial statements are prepared under the historical cost convention on going concern basis. The Society follows the mercantile system of accounting except receipt of Government grants, Royalty and sale of publications
2. Fixed assets are stated at cost less accumulated depreciation. Cost comprises the purchase price and any attributable cost of bringing the asset to its working condition for its intended use.
3. Depreciation on fixed assets is computed on the written down value (WDV) method at the rates and in the manner prescribed under the provisions of Income Tax Act.
4. Prior period expenditure, extra-ordinary items and changes in accounting policies having material impact on the financial statements of the council are required to be disclosed.
5. Amounts released under various projects are accounted for as expenditure for the year in which the same are released, irrespective of the fact that the amounts so released may not have been fully utilized towards the projects during the year.
6. Unspent amount of grant received during the year has been transferred to Corpus/Capital Fund.
7. The repayment of grant/assistance to society by the beneficiaries as per the conditions stated in the agreement is accounted for on receipt basis.
8. All disbursements (irrespective of its utilization) for projects are treated as expenditure during the Financial Year and assets if any created/purchased by the beneficiaries, out of the said disbursements to the project, are not accounted for as assets in the books of accounts of society.
9. Contingent liabilities in respect of on-going projects/studies etc. are neither provided for nor determined.
10. Total expenditure is not bifurcated into plan and non-plan expenditure in the financial statements.

As per our report of even date annexed herewith

For S K Juneja & Associates

Chartered Accountants

FRN: 012484N

**Sd/-
CA. Surinder Kumar
(Partner)
MRN: 091449**

**Sd/-
Accounts Officer
TIFAC**

**Sd/-
Registrar
TIFAC**

**Sd/-
Executive Director
TIFAC**

Date: 23-09-2016

Place: New Delhi

TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL

SCHEDULE FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31.03.2016

SCHEDULE- 33 CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

A. Contingent Liabilities

1. Department of Income Tax has created a demand of Rs.340/- for Financial Year 2012-13 and Rs.12,04,776/- for Financial Year prior to F.Y 2012-13 for short payment, short deduction of TDS and interest charged thereon which is being contested by the society.

B. Notes on Accounts

1. Though society runs various projects under the instructions and guidance of Department of Science and Technology, separate accounts for these projects have not been maintained.
2. Other current liabilities include amount refundable to Department of Science & Technology on account of unutilized balance under various projects which have since been closed the details of which is given as under :-

S. No.	Particulars - Current Liabilities (Schedule 7)	Amount (Rs.)
1.	Project (ICOSER)	1,32,02,152.00
2.	Indian-Mayanmar S & T Friendship Library in Yangoon	9,59,659.00
3.	MSEB-Ash Utilisation/ Management	6,00,094.00
4.	FAM Large Scale Stowing of HWP Pond Ash into the Underground Mines of SCCL (M) Manugure	82,94,830.00
5.	Earth Quake Serving Nature's Fury	1,65,157.00
6.	MPSEB use of Fly Ash in Agriculture Development Thermal Power Plants, Sarni	3,56,825.00
7.	TIFAC-World Bank Project	13,39,747.93
8.	DRDO-PFC	3,95,745.00
	Training Programme on IPR and WTO Issues for scientists/technologists working in Government sector	2,02,549.00
9.	G.M.W Workshop (SRF)	1,00,170.00
	Total	256,16,928.93

2. Advances and other amounts recoverable in cash or in kind include Rs.2,70,000/- as amount recoverable from Shree Chitra Tribunal Institute for Medical Science and Technology an another Autonomous Institute under Ministry of Science and Technology which is outstanding since March 2011.

3. Advances and other amounts recoverable in cash or in kind include Rs.74,520/- as amount recoverable from Department of Science and Technology for Security given to them for purpose of India ISC Expo 2011 which is outstanding since March 2011.
4. Stock of Publications and Studies, which are published and printed by the Council and distributed at a cost are not accounted for as Stock in hand at the end of the year.
5. Liability towards gratuity and accumulated leave encashment payable to regular employees on their death/retirement is not provided for.
6. During the year salary payable to Prof. Ganapathi amounting to Rs.1,800/- outstanding prior to year 1996 shown under current liabilities has been written bank since the amount of Rs.19,736.55 recoverable from SAIL NMPP against which the salary was withheld has not been recovered till date.
7. The amount of Rs.19,736.55 due from SAIL NMPP prior to year 1996 being unrecoverable has been written off during the year.
8. Security Deposit of Rs.16,000/- deposited with M/s Tata Telecom Ltd. in the year 2003 for availing telephone service being unrecoverable is written off during the year.
9. Security Deposit amounting to Rs.9500/- for availing lease accommodation of then Registrar of NMBA paid to Smt.RomiSukhija in the year 2003 being unrecoverable is written off during the year.
10. Stale cheques amounting to Rs.1,19,110/- under current liabilities denote cheques issued which have not been presented for payment and have become obsolete being outstanding for more the three months the details of which is given below :-

Voucher No.	Cheque No.	Date	Parties Name	Amount
3331	32105263	27.02.2015	Mr.Manoranjan Sinha	1500.00
3331	32105268	27.02.2015	Mr.G.K.Acharya	1500.00
3547	32106366	17.03.2015	Mr.AnilChawdhry	2500.00
76	32105404	10.04.2015	Ms.Sara Ahmed	400.00
126	32105420	17.04.2015	Mr.B P Gautam	2500.00
158	32105439	21.04.2015	Mr.O P Nahar	63000.00
435	32105553	21.05.2015	Mr.R.R.Hirwani	2710.00
1146	32105738	14.08.2015	Mr.Felix Mohan	2500.00
1431	32105793	15.09.2015	Mr.R.K.Shevgaonkar	2500.00
2288	32106055	08.12.2015	Dr.Pratibha Jolly	6000.00
2288	32106063	08.12.2015	Dr.SaraswatiKanodia	6000.00
2288	32106068	08.12.2015	Dr.Amita Kapoor	6000.00
2288	32106148	08.12.2015	Dr.SunitaJetly	6000.00
2288	32106196	08.12.2015	Dr.Manju Singh	6000.00
2293	32106316	08.12.2015	Sh.Prithvi Raj	10000.00
Total				119110.00

11. During the Financial Year 2010-2011 an amount of Rs.10.00 crores was given to SIDBI to manage TIFAC-SIDBI Revolving fund Technology Innovation Fund which was then charged to Project expenses and written off as per then prevailing accounting policy of the societies is now written back to show the assets of the society as per generally accepted accounting principles the income of the society has increased by Rs.10.00 crores due to change in this accounting policy.
12. From the Financial Years 2010-11 to 2014-15 the Interest income on SIDBI Revolving fund amounting to Rs.29.92 lakhs was not booked as income as per the then prevailing accounting policy, is now booked as per the generally accepted accounting principles. The income of the society has increased by Rs.29.92 lakhs due to change in this accounting policy.
13. NECTOR & TDB have been using approximately 10,000 Sq Ft. & 3,000 Sq Ft. respectively out of total useable area of 50,000 Sq Ft. available with TIFAC but no share of maintenance from NECTOR and TDB is being charged since the matter has not yet been decided by DST.

14. **CURRENT ASSETS, LOANS AND ADVANCES**

- In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, at least equal to the amount at which they are stated in the Balance Sheet.

15. **TAXATION**

- In view of there being no taxable income under Income tax Act, 1961 no provision for Income Tax has been considered necessary.

16. **FOREIGN CURRENCY TRANSACTIONS**

16.1 Value of Imports Calculated on C.I.F. Basis:

(Amount Rs.)
Current Year Previous Year

Purchase of finished Goods	Nil	Nil
Raw Materials & Components (Including in transit)	Nil	Nil
Capital Goods	Nil	Nil
Stores, Spares & Consumables	Nil	Nil

16.2 Expenditure in foreign currency:

a) Travel	Rs.19,57,807/-	Rs. 11,18,933/-
b) Remittances and Interest Payment to Financial Institutions/ Banks in Foreign Currency	Nil	Nil
c) Other expenditure:		
- Commission on Sale	Nil	Nil
- Legal and Professional Expenses	Nil	Nil
- Miscellaneous Expenses	Nil	Nil

16.3 Earning:

Value of Exports on FOB basis Nil Nil

16.2 Remuneration to Auditors:

(inclusive of applicable taxes)

- Audit Fees	Rs.90,000.00	Rs. 78,791.00
- Taxation matters	RS. 5,000.00	Nil
- For Consultancy Charges	Nil	Rs. 16,854.00
- For certificate	Rs. 26,065.00	Nil
- Others	Nil	Nil

17. Expenditure for the year include prior period items of Rs. 1.42 lakhs in contingency Expenses, Rs.0.36 lakhs in Internship Expenses, Rs.0.81 lakhs in consultancy Expenses, Rs.0.03 lakhs in IIASA Expenses, Rs.0.36 lakhs in MSME Expenses and Rs.0.36 Project Assistance Expenses respectively.

18. TIFAC has given loans to various parties under various projects from the year 1992 to 2005 which were written off in the Financial Years in which they were given as per the then prevailing accounting policies of TIFAC. These loans have not been recognized as loans and hence not been reflected in the assets side of the balance sheet. The details are given as follows :-

Name of the Project	Overdue upto six months	Overdue from six months upto 3 years	Overdue more than 3 years	Due after 31.03.2016	Total
Home Grown Technology	0.00	0.00	174489920.00	50000.00	174539920.00
Advanced Composite Programme	0.00	18414940.00	127259777.00	0.00	145674717.00
Sugar Technology Unit	0.00	0.00	45938588.00	0.00	45938588.00
Fly Ash Utilization	0.00	0.00	11834000.00	0.00	11834000.00
Agriculture and Agro Food Sector	0.00	0.00	10625000.00	0.00	10625000.00

Targetted Programme in other Important Areas	15677000.00	52308000.00	24780000.00	924000.00	93689000.00
Total	15677000.00	70722940.00	394927285.00	974000.00	482301225.00

19. Previous year's figures have been regrouped/rearranged wherever found necessary, to make them comparable with current year figures.
20. Schedules 1 to 33 are annexed to and form an integral part of the Balance Sheet as at 31.03.2016 and the Income and Expenditure Account for the year ended on that date.

As per our report of even date annexed herewith

For S K Juneja & Associates
Chartered Accountants
FRN: 012484N

Sd/-
CA. Surinder Kumar
(Partner)
MRN: 091449

Sd/-
Accounts Officer
TIFAC

Sd/-
Registrar
TIFAC

Sd/-
Executive Director
TIFAC

Date: 23-09-2016
Place: New Delhi

Staff Advances

PARTICULARS	Current Year	Previous Year
Staff Advances under TIFAC Account		
A) Staff Advances		
Sh.Sushil Kumar Jha	-	4,000.00
Ms. Mercy Kutty	-	1,000.00
Ms. Geeta Nair	-	5,000.00
Ms. Poonam Mehta	-	5,500.00
Ms.Uma Daral	-	5,000.00
Sh. Bishram Bhakta	-	3,500.00
Sh.Sanjay Sundriyal	500.00	6,500.00
Sh. Deep Prakash	-	4,000.00
Sh.Pankaj Sundriyal	-	5,000.00
Ms. Asha Kumari	-	6,000.00
Sh.Kunwar Singh	-	1,000.00
Sh.Dilip Kumar	-	2,000.00
Dr.S.K.Goel	-	6,000.00
Ms.Jyoti Saklani	-	5,500.00
B) HBA Advance		
Ms. Sangeeta Baksi	443,400.00	493,800.00
Dr.Debabrata Majumdar	410,000.00	470,000.00
Sh.P.R.Basak	69,000.00	141,000.00
C) Car Advance		
Dr.Gautam Goswami	-	12,000.00
Sh.T.Chandrasekhar	104,400.00	115,200.00
Ms. Achla Khanna	108,000.00	144,000.00
Ms.Sangeeta Baksi	16,000.00	40,000.00
Total (i)	1,151,300.00	1,476,000.00

Annexure - 1

Staff Advances

PARTICULARS	Current Year	Previous Year
Staff Advances under TIFAC Account		
D) Leave Travel Concessionation		
Sh.T Chandrasekhar	-	257,000.00
Sh.M.Themaraivelvan	-	99,600.00
Dr. Neeraj Saxena	-	95,738.00
Sh.Bishram Bhakta	5,400.00	-
Sh.Vipin Shukla	66,037.00	-
E) Tour Advance		
Ms. Jancy A	15,000.00	-
Sh.Sajid Mubashir	81,042.00	81,042.00
Dr. Gautam Goswami	15,822.00	822.00
F) Scooter Advance		
Sh.Bishram Bhakta	-	4,000.00
Ms. Geeta Nair	1,000.00	13,000.00
Sh.Sushil Kumar Jha	9,200.00	14,000.00
Sh.Sanjay Sundriyal	4,500.00	10,500.00
Dr.S.K.Goel	30,000.00	-
Sh. Rajan Sharam	21,250.00	-
G)Computer Advance		
Ms. Uma Daral	-	22,000.00
Sh.Mahipal Singh Rawat	10,000.00	16,000.00
Sh.Sanjay Sundriyal	7,000.00	19,000.00
Sh.Suresh Somanchi	-	3,000.00
Sh.Aneesh S	-	9,000.00
Sh.Anil Kumar Rai	-	11,000.00
Sh.Sushil Kumar Jha	15,500.00	21,500.00
Sh. Ravi Dutt	6,000.00	18,000.00
Sh. Surinder Kumar	9,000.00	21,000.00
Ms.Promila Khilnani	9,000.00	21,000.00
Dr.S.K.Goel	-	19,950.00
Sh.Rajan Sharma	18,750.00	-
Sh T Adarsh Mayya	30,000.00	-
Sh Deep Prakash	17,500.00	35,500.00
Total (ii)	372,001.00	792,652.00
Total (i) + (ii)	1,523,301.00	2,268,652.00

Annexure - 1

PARTICULARS	Current Year	Previous Year
Staff Advances under PFC New Account		
a) Car Advance		
Sh Yashwant Dev Panwar	163,800.00	-
b) Scooter Advance		
Sh.Ranbir Singh	-	6,000.00
c) Computer Advance		
Sh.Yashwand Dev Panver	28,750.00	35,625.00
Total	192,550.00	41,625.00

Annexure -2

REFUND FROM PROJECTS (TIFAC REGULAR ACCOUNT)

PARTICULARS	Current Year	Previous Year
(A) Home Grown Technology :		
Development of Robots for Manufacturing	10,000,000.00	3,000,000.00
Eco-Friendly Lac Dye From Shellac Wash Water Effluent	-	1,542,093.00
Pilot Scale Manufacture of Bio Reactors	-	500,000.00
Manufacture of Nutan Himveer Bakhari	440,000.00	-
Flexible Machining Centre	-	360,000.00
Manufacture of Unsturated Polyster Resin	-	250,000.00
Sub Total (A)	10,440,000.00	5,652,093.00
(B) Advanced Composites Programme		
Development of Energy Efficient Azial Flow FRP Fans	-	1,680,694.00
Development of Composite Artificial Limbs for Physically Handicapped	-	2,837,320.00
Development of Composite Sky Bus Coaches	300,000.00	-
Development of Filament Wound Pipes & Pipe Fitting for oil & Gas Sector	-	1,024,000.00
FRP Bracket Assembly for Railways Electric Traction	659,072.00	1,977,216.00
Development of Filament Wound Venturi Scrubber along with the Accessories	690,000.00	600,000.00
Sub Total (B)	1,649,072.00	8,119,230.00
(C) Fly Ash Utilization Programme		
Setting up of Fly Ash Bricks making Plant	1,350,000.00	-
Bulk Production of Fly Ash Bricks	-	10,000.00
Sub Total (C)	1,350,000.00	10,000.00
(D) REFUND FROM PROJECT TECHNOLOGY VISION 2020		
Processing & Export of Loin & Steak of Yellow Fin Tuna	-	333,096.12
Car : Electromagnetic Forming	-	22,170,435.00
Car : Low Cost Flexible Automation (LCFA)	-	4,829,699.00
Bio Transformation of Meso Cyclopents 14 Diacetate to 4-Rhydrozycyclopent -ENE-1-(S) Acetate	1,848,000.00	1,848,000.00
Functional Test for Evaluating the Performance of Cricket Bat	-	23,816.00
Enzymatic Conversion of Reemic Molecules to Obtain stereospecific Active Pheamaculical	-	4,200,000.00
Sub Total (D)	1,848,000.00	33,405,046.12
Total (A) + (B) + (C) + (D)	15,287,072.00	47,186,369.12

Annexure 3

Establishment Expenditure (TIFAC Regular)

PARTICULARS	Current Year	Previous Year
a) Salaries	43,024,568.00	44,621,542.00
Salary - Consolidated	2,023,729.00	6,001,845.00
Ad-hoc Bonus	116,555.00	120,890.00
Internship Scheme	929,605.00	-
Project Associates	313,547.00	-
b) TIFAC Contribution to New Pension Scheme	319,776.00	293,798.00
c) TIFAC Contribution to Provident Fund	1,632,833.00	1,698,872.00
d) Others (Specify)		
Consultancy Fee	1,008,445.00	-
Contengency	1,614,374.00	-
Hospitalsation Expenses	-	1,016,280.00
Honorarium	13,000.00	37,500.00
Medical Expenses	83,407.00	1,581,672.00
Leave Travel Concession	1,047,544.00	949,515.00
Gratuity	-	1,000,000.00
Leave Encashment	298,052.00	684,970.00
Leave Salary and Pention Contribution	-	97,462.00
Tution Fee	939,790.00	961,848.00
Total	53,365,225.00	59,066,194.00

Annexure 4

Administrative Expenses (TIFAC Regular)

PARTICULARS	Current Year	Previous Year
Repair and Maintenance	964,929.00	1,177,335.00
Rent, Rates and Taxes	304,800.00	398,800.00
Car hire Charges	2,092,840.00	2,392,740.00
Postage, Telephone and Communication Charges	1,704,437.00	1,704,838.00
Printing, Stationary & Printing of Publications	1,471,401.00	1,960,981.00
Travelling and Conveyance Expenses	259,325.00	327,860.00
Subscription Expenses	101,331.00	142,282.87
Amount Written Off	43,436.55	-
Professional Charges	137,162.00	-
Auditors Remuneration		
(a) Audit Fee	90,000.00	78,791.00
India-Japan STS Forum Membership	1,111,247.43	-
Manpower Assessment Study of TIFAC	100,000.00	125,000.00
Advertisement and Publicity	36,067.00	719,602.00
Others (Specify)		
Bank Charges	13,493.49	2,987.81
Misc. Office Expenses	2,165,770.00	2,724,987.00
Membership Fee	81,204.00	79,453.00
Maintenance of Vishwakarma Bhavan	11,721,175.00	3,205,845.00
Stamp Duty for Government Treasury	-	261,000.00
Legal Charges	1,972,215.00	1,422,453.00
WAITRO Membership	30,293.00	28,000.00
PM Relief Fund (Simbhaoli Sugar)	35,000.00	-
Rajabhasha Committee Meeting	157,872.00	146,768.00
Court Fee	38,400.00	35,000.00
Housekeeping of TIFAC Building	981,190.00	895,710.00
Total	25,613,588.47	17,830,433.68

Annexure-5

PROJECT EXPENSES (TIFAC Regular Account)

PARTICULARS	Current Year	Previous Year
(a) Follow-Up Action/Special Initiatives		
Determinants and Impact of FDI in R&D in creation & Deffusion of Knowlege in Automobile Industires	-	132,000.00
Government Foresight Organization Network (GFN)	725,897.00	
Centre for Global or Local for Global Examination of FDI in R&D Centre	-	48,872.00
Impact of FDI in R&D on Indian Production and R&S Systems	-	261,410.00
Initiating Technology Road Map Exercise for Indian Aluminium Sector	-	100,000.00
Industry - Academia Interaction Programme	-	124,000.00
Study : Relationship Between GDP Growth and Technology Causes in Different Districts of Select Indian	1,400,000.00	350,000.00
Information & Communication Security and Financial Sector Security	5,366,500.00	-
Study on Technology Foresight on Solar PV	853,307.00	1,514,627.00
Sub-Total (a)	8,345,704.00	2,530,909.00
(b) IIASA - TIFAC Projects/Study/Membership Fee		
IIASA - TIFAC joint Workshop (TIFAC)	1,460,311.23	1,057,904.00
India - IIASA MemberShip Fee	24,500,000.00	29,006,538.43
TIFAC-IIASA Study on Indian Perspectives on Global Energy Scenarios till 2050		
IIASA-TIFAC : Climate Change Adaptation Approachs for Sustainable Livelihood With IRMA.	-	2,500,000.00
India-IIASA Study on Evaluation of Soil Nutrient Budgets at Field Farm and Regional Leel in Humid Tropics	-	1,957,342.00
IIASA-TIFAC : Conservation of Agro-Biodiversity and Ecosystem Management : A Study in Indian Agriclimate Condition	-	2,000,000.00
IIASA-TIFAC workshop on Demographic Computations Series II Titled Multistate Population Mode	170,771.00	283,525.00
TIFAC-IIASA Study on Integrated Hydrology Climate Change and Integrated Water Resources Management	-	1,681,547.00
TIFAC-IIASA-JU Workshop on Accounting for Ecosystem Services : Theropy and Practice	-	362,173.00
TIFAC-IIASA Study on Development & Application of Gains-City Model for Indian Cities with Neeri Mumbai	510,921.00	-
TIFAC - IIASA Study : Analyzing Forest Carbon Accounts for Sustainable Policy Opt. Special Ref. Livelihood	205,550.00	-
IIASA - TIFAC Support for Indian YSSP Participation for 2011 at IIASA. Lazenburg	-	661,643.77
Sub-Total (b)	26,847,553.23	39,510,673.20
(c) HOME GROWN TECHNOLOGIES		
Project related expenses	-	69,448.00
Sub-Total (c)	-	69,448.00
(d) TePP PROJECTS		
TePP Expenditure	-	-
Sub-Total (d)	-	-

Annexure-5

PROJECT EXPENSES (TIFAC Regular Account)

PARTICULARS	Current Year	Previous Year
(e) Technology Refinement Marketing Programme (TREMAP)		
TREMAP Expenditure	19,832.00	1,363.00
TREMAP TCFA at VIT-TBI, Vellore	-	450,000.00
TREMAP TCFA at MSRSAS, Bangalore	-	322,750.00
TREMAP : Supraglottic Airway Device for Airway Management	50,000.00	-
TREMAP : Mulit Crop Seed Cum Fertilizer Drill	-	80,000.00
TREMAP at IT-BHU, Varanasi	-	368,750.00
TREMAP : TCFA at EDC, NCL Innovation Park, Pune	-	444,820.00
TREMAP : Automatic Cashew Decorticating Machine	-	55,000.00
TREMAP : Suraksha : LPG and Gas Detection Device wigh SMS Alert	-	66,928.00
TREMAP : Improved Wonnowing Fan	-	10,000.00
TREMAP : Door Bolt System	-	18,543.00
TREMAP : Segmental Interlocking Bolt a New Implant System for Fracture Neck of Femur	-	22,500.00
Sub-Total (e)	69,832.00	1,840,654.00

Annexure-5

PROJECT EXPENSES (TIFAC Regular Account)

PARTICULARS	Current Year	Previous Year
(f) Revolving Fund (SIDBI)		
Funds Released to Revolving Fund (SIDBI)		
Earmarked fund to be released to SIDBI		-
Sub-Total (f)	-	-
(g) Technology Foresight for Automative Research		
Technology Foresight for Automative Research (TFAR)	155,105.00	173,198.00
Sub-Total (g)	155,105.00	173,198.00
(h) Technology Foresight Study in Security Technology		
Technology Foresight study on Security Technologies	17,031.00	-
Technology Study on Individual & societal Security and infrastructure and Physical Security	2,800,000.00	-
Security Technologies : Natural Resources / Environment Security	1,200,000.00	1,200,000.00
Sub-Total (h)	4,017,031.00	1,200,000.00
(i) India International Science Festival		
India International Science Festival	33,637,742.00	-
Sub-Total (i)	33,637,742.00	
(j) INSPIRE		
INSPIRE	10,381,716.00	-
Sub-Total (j)	10,381,716.00	
(k) Project Related Expenditure		
Exhibition/Workshop International	-	25,000.00
Meeting Expenditure (Project Related)	1,206,302.00	1,105,877.00
Meeting Expenditure	386,340.00	292,893.00
Travel Abroad	1,957,807.00	1,118,933.00
Travel Expenditure (Project Expenditure)	3,692,163.00	3,803,783.00
Workshop : TIFAC/DST ITS Canada)	167,640.00	
Workshop Expenditure	958,928.00	637,811.00
Sub-Total (k)	8,369,180.00	6,984,297.00
Total (a) to (k)	91,823,863.23	52,309,179.20

Annexure -6

EXPENDITURE OF VISION 2020

PARTICULARS	Current Year	Previous Year
<u>Establishment & Administrative Expenditure</u>		
Advertisement Expenses	140,648.00	-
Misc Office Expenses	39,490.00	19,059.00
Periodical & Magazine Charges	10,058.00	6,392.00
Repair and Maintenance	5,293.00	18,871.00
Telephone & Internet Charges	46,070.00	53,607.00
Conveyance	-	13,187.00
Ad-hoc Bonus	33,120.00	34,540.00
Gratuity	170,477.00	-
Employers Contribution CPF	552,255.00	526,716.00
Encashment of Leave	348,686.00	39,245.00
Medical Reimbursement	513,265.00	496,449.00
Salary	15,902,443.00	13,052,694.00
Salary - Consolidated	-	36,000.00
Leave Travel Concession	310,161.00	349,428.00
Honorarium	-	1,500.00
Hospitalisation Expenses	548,432.00	337,194.00
Tuition Fee	260,495.00	300,245.00
Leave Encashment	21,205.00	6,554.00
Legal Charges	-	39,200.00
Total	18,902,098.00	15,330,881.00

Annexure – 6A

PROJECT EXPENDITURE OF VISION 2020

PARTICULARS	Current Year	Previous Year
(a) Agriculture Sector		
Agriculture, Quality mode Production in Rice -Wheat Cropping System Through Farmers, Bhu, Varanasi	-	107,744.00
On Farm Demonstration, Commercial Cultivation of Trichoderma as bio pesticide & growth Promoter	-	88,128.00
Sub-Total (a)	-	195,872.00

Annexure – 6A

PROJECT EXPENDITURE OF VISION 2020

PARTICULARS	Current Year	Previous Year
(b) Targeted Programme in Other Important Area		
Technology Gap Analysis study for the Printing Cluster in Mysore	-	500,000.00
CAR : Demonstration of the Competence to develop Automobile Components using Electro Magnetic Formign(EMF)	-	54,543.00
CAR : Ultracapacitor for electric and Hybrid Electric Vehicles	-	1,451,215.00
Centre for Biofuels (Phase II)	4,400,000.00	7,300,000.00
Technology Gap Analysis study in production/Manufacturing Processes as well as Environment Aspects of Readymade Garments	-	180,000.00
Prospects of Fashion Designing and Product Development and Diversification	-	300,000.00
MSME Expenditure	262,452.00	-
MSME : Study for the Banarasi Silk Saree, Cotton Saree and Synthetic Saree Cluster	600,000.00	-
MSME General Engineering Cluster	490,000.00	-
MSME Design, Simulation and Development of Acquisition of MRI	163,134.00	-
MSME Automation and Control of Special Purpose Packaging Machine	164,500.00	-
MSME Four Layered Printing Circuit Board for RF synthesizer	159,775.00	-
MSME Design and Static Analysis of Special Purpose Packaging Machine	163,777.00	-
MSME System Engineering Approach to Design Motion Control System of Multi Axis Bench Top Robot	141,575.00	-
MSME Design Simulaton and Development of Reconstruction of MRI	164,382.00	-
V2020 Rice Milling Machinery Cluster in Sitalpur , Raxual, Bihar	375,000.00	-
V2020 Rice Milling Cluster in Lakhisarai, Bhiar	375,000.00	-
V2020 Readymade Garmetn Cluster in Patna City, Bihar	450,000.00	-
V2020 Home Textile Manufacturing Cluster	500,000.00	-
R&D Centre for Howrah	-	-
Development of Enzymatic Process for producing Slevioside from Stevia Leaves & Lycopena from Tometoo	-	-
Technology Gap Analysis Study in Pr	-	-
Technology Status Gap Analysis Study	-	-
Technology Gap Analysis Study for Surgical Instruments Manufacturing Unit Cluster for Baruipar	-	400,000.00
MSME Internship Scheme Stakeholder Iteration Meeting	-	25,000.00

TIFAC -MSME Internship Scheme with IIT BHU, Varanasi	345,600.00	-
TIFAC-MSME Internship Scheme with M.S.Ramaiah University of Applied Science	491,400.00	370,000.00
TIFAC-MSME Internship Scheme with VIT, Vellore	-	345,600.00
TIFAC-MSME Internship Scheme with PSG College of Technology, Coimbatore	-	345,600.00
TIFAC-MSME Internship Scheme with Pimpri Chinchwad College of Engineering, Pune	86,400.00	353,675.00
Sub-Total (b)	9,332,995.00	11,625,633.00

Annexure – 6A

PROJECT EXPENDITURE OF VISION 2020

	Current Year	Previous Year
(d) Project Related Expenditure		
Meeting Expenditure (Project Related)	98,826.00	27,009.00
Travelling Expenditure (Project Related)	1,149,650.00	1,768,901.00
Workshop Expenditure	611,179.00	1,798,338.00
Sub-Total (d)	1,859,655.00	3,594,248.00
TOTAL (a) to (d)	11,192,650.00	15,415,753.00

Annexure -7

Technology Vision 2035

PARTICULARS	Current Year	Previous Year
Expenditure :		
Brainstroming Meeting Vision 2035	470,338.00	709,470.00
Misc Office Expenses	99,900.00	9,400.00
Printing Charges	165,672.00	281,537.00
Printing of Publications	7,518.00	-
Project Associates	312,000.00	-
Salary-Consolidated	-	271,548.00
Honorarium	87,500.00	552,500.00
Project Related Expenditure		
Meeting Expenditure (Project Expenditure)	42,972.00	60,480.00
Meeting Expenditure	-	148,357.00
Travelling (Project Expenditure)	227,165.00	820,653.00
Workshop Expenditure	77,600.00	20,000.00
Travelling Expenditure	24,716.00	-
Total	1,515,381.00	2,873,945.00

Annexure - 8

Patent Facilitating Centre

PARTICULARS	Current Year	Previous Year
Income Under PFC New Account		
Other Income		
Ekaswa CD ROM A B & C	5,000.00	12,473.00
RTIA Question	-	10.00
Publications	-	5,000.00
	5,000.00	17,483.00

Annexure - 9

Patent Facilitating Centre

PARTICULARS	Current Year	Previous Year
Expenditure under PFC New Account		
Establishment Expenditure		
Salary	5,101,842.00	4,878,035.00
Salary Consolidated	1,403,383.00	1,766,511.00
Adhoc Bonus	-	6,908.00
Gratuity	-	549,195.00
Leave Encashment	35,777.00	367,093.00
Leave Travel Concession	65,354.00	90,630.00
Hospitalization Expenses	-	118,955.00
Medical Reimbursement	56,301.00	79,338.00
PFC Contribution to Provident Fund	216,659.00	222,909.00
Tuition Fee	72,000.00	100,500.00
Sub Total (A)	6,951,316.00	8,180,074.00
Administrative Expenditure		
Advertisement Expenses	6,487.00	-
Bank Charges	340.52	473.90
Car Hire Charges	3,956.00	-
Filing Of Patent	3,523,579.00	5,096,793.00
Legalisation of Documents	-	105,850.00
PFC Membership (STN)	-	61,420.69
Misc. Office Expenses	50,481.00	66,880.00
Periodical & Magazines	1,730.00	1,441.00
Printing of Publication	-	14,750.00
Printing Charges	450.00	300.00
Repair & Maintenance	9,536.00	31,001.00
Telephone & Telex	69,823.00	108,424.00
Honorarium Experts	70,000.00	-
Stationary	-	517.00
Conveyance	14,453.00	3,428.00
Sub Total (B)	3,750,835.52	5,491,278.59
TOTAL A +B	10,702,151.52	13,671,352.59

Annexure - 10

PARTICULARS	Current Year	Previous Year
Expenditure under PFC New Account		
Travelling Expenses	228,199.00	135,908.00
Travel Abroad	-	45,932.00
Meeting Expenses	13,328.00	2,520.00
GIPC 2016 Workshop	226,196.00	-
Workshop Expenditure	556,665.00	203,784.00
Total	1,024,388.00	388,144.00

Annexure-11

SHORT TERM DEPOSITS WITH BANKS

PARTICULARS	Current Year	Previous Year
Short Term Deposits		
TIFAC	244,398,660.00	185,500,000.00
Accrued Interest	3,273,743.00	43,965,571.00
Total	247,672,403.00	229,465,571.00

Annexure – 12

EXPENSES PAYABLE

PARTICULARS	Current Year	Previous Year
Expenses Payables Under TIFAC		
Salary Payable	4,738,440.00	4,690,571.00
Consultancy Fee	40,500.00	-
Contengency	49,500.00	-
Internship Scheme	135,161.00	-
Project Associates	146,710.00	-
Legal Fee	51,300.00	-
A K Anand	2,750.00	-
Abhijit Lahiri	10,800.00	-
Manju Bagai	19,800.00	-
Mahmood Ali Khan	19,800.00	-
M/s Sansanwal Travels	158,804.00	-
M/s GMC Beverages Pvt. Ltd.	56,421.00	-
M/s IRIS Park Leisures Pvt. Ltd.	14,051.00	-
M/s Noble Aqua	50,407.00	-
M/s S.K.Juneja & Associates	121,065.00	-
M/s Neopost India Pvt. Ltd.	13,500.00	-
M/s Universal Solutions	16,961.00	16,637.00
M/s Sarathi Enterprises	-	14,420.00
M/s Asha Enterprises Pvt. Ltd.	74,568.00	72,520.00
M/s Sarat Tours and Travels	-	105,921.00
M/s Director, New Delhi HPO, Delhi	15,137.00	6,488.00
M/s Airtel Relationship No.10954184	45,215.00	50,445.00
M/s Airtel Mobile No.9910074428	608.00	-
M/s Vodafone No.7838560652	467.00	-
M/s. MTNL	47,195.00	26,577.00
M/s Anil Bhatla & Company	-	78,791.00
M/s Balmer Lawrie & Co. Ltd, New Delhi	510,041.00	112,901.00
M/s Kendriya Bhandar, New Delhi	31,649.00	98,201.00
M/s Dogra Enterprises, New Delhi	-	21,382.00
M/s Bagga Tours & Travels	-	71,647.00
SubTotal (A)	6,370,850.00	5,366,501.00
Expenses Payables Under TIFAC Account		
TDS Payable	602,184.00	507,707.00
Sub Total (B)	602,184.00	507,707.00
Total (A) + (B)	6,973,034.00	5,874,208.00

EXPENSES PAYABLE

PARTICULARS	Current Year	Previous Year
<u>Expenses Payables Under PFC New Account</u>		
M/s L.S.Davar & Co.	24,400.00	-
M/s Anand & Anand	9,000.00	55,900.00
M/s K&S Partners	4,450.00	35,820.00
M/s Subramaniam Natraj & Associates	-	9,320.00
M/s Lakshmi Kumaran & Sridharan	-	561,445.00
M/s R.K.Dewan & Co.	-	75,380.00
M/s Fox Mandal & Associates	-	102,037.00
M/s Anjan Sen & Associates	98,504.00	341,841.00
M/s Vutts & Associates	77,218.00	-
M/s S.Majumdar & Co.	-	63,085.00
M/s Lall Lahiri & Salhotra	-	42,990.00
M/s Balmer & Lawrie	-	-
M/s Dogra Enterprises	-	4,950.00
M/s Gurusons Communications Pvt Ltd	-	2,889.00
MTNL	1,065.00	-
M/s World Wide News India	-	-
Salary Payable	400,704.00	464,911.00
Sub Total (A)	615,341.00	1,760,568.00
PARTICULARS	Current Year	Previous Year
<u>Expenses Payables Under PFC New Account</u>		
TDS Payable	49,056.00	157,554.00
Sub Total (B)	49,056.00	157,554.00
Total A+B	664,397.00	1,918,122.00
PARTICULARS	Current Year	Previous Year
<u>Expenses Payables Under SFWS New Account</u>		
Salary Payable	56,500.00	74,570.00
Overheads Payable	11,164.00	104,064.00
Sub Total (A)	67,664.00	178,634.00
Total A+B	67,664.00	178,634.00

Earnest Money from Sugar Factories

PARTICULARS	Current Year	Previous Year
Earnest Money: Sakthi Sugars Ltd	100,000.00	100,000.00
Earnest Money : Pratappur Sugar Industry Ltd	100,000.00	100,000.00
Earnest Money : RBN Sugar Mills	100,000.00	100,000.00
Earnest Money : L.H.Sugar	100,000.00	100,000.00
Earnest Money : Jind Coop-Sugar	100,000.00	100,000.00
Earnest Money : Vishnu Sugar	100,000.00	100,000.00
Earnest Money : DSM Sugar	100,000.00	100,000.00
Earnest Money : Valsad Sugar	100,000.00	100,000.00
Earnest Money : Budhewal Co	100,000.00	100,000.00
Earnest Money : Palwal Sugar Ltd	100,000.00	100,000.00
Earnest Money : Godawari Sugar Mill	100,000.00	100,000.00
Earnest Money : Padamashri Dr.Vithalrao Vikho Patil SSK Ltd	100,000.00	100,000.00
Earnest Money : Mawana Sugar	100,000.00	100,000.00
Earnest Money:EID Parry, Pugalur	100,000.00	100,000.00
Earnest Money : Vishwas Rau Naik SSK Ltd	100,000.00	100,000.00
Earnest Money : M/s Terna SSK Ltd	100,000.00	100,000.00
Earnest Money : Shakumbani Sugar Ltd	100,000.00	100,000.00
Earnest Money : Shri Talabu Taluka SKM	100,000.00	100,000.00
Earnest Money : Bileshwar Khurd Udyog Khedut Sahakari Mandal	100,000.00	100,000.00
Earnest Money : Rahuri S.S.K Ltd	100,000.00	100,000.00
Earnest Money : Ashok SSK Ltd	100,000.00	100,000.00
Earnest Money : Simbhaoli Sugar	300,000.00	300,000.00
Earnes Money : Jagadamba SSK	100,000.00	100,000.00
Earnest Money : Rana Sugar Ltd	100,000.00	100,000.00
Earnest Money : Dharani Sugar & Chemical Ltd	100,000.00	100,000.00
Earnest Money : Triveni Engg. Industries Ltd	200,000.00	200,000.00
Earnest Money : Uttam Sugar Ltd	100,000.00	100,000.00
Earnest Money : Chamundeswari Sugar Mills	200,000.00	200,000.00
Earnest Money : Mansurpur Sugar Mills	100,000.00	100,000.00
Total	3,300,000.00	3,300,000.00

Technology Information Forecasting & Assessment Council
Receipts & Payments for the Period the Year Ended 31.03.2016

Receipts	Current Year	Previous Year
1 Opening Balances		
Cash in hand	6,574.00	6,195.00
Cash in Hand (Under PFC New Account)	5,623.00	520.00
Cash in Hand (Under WSSS New Account)	911.00	2,020.00
Bank balances		-
In Current Accounts		-
In Deposit Accounts	229,465,571.00	182,724,214.00
Savings Accounts	18,687,269.55	105,375,926.31
Savings Accounts (Under PFC New Account)	5,364,554.25	13,406,683.84
Savings Accounts (Under WSSS New Account)	7,530,883.00	8,836,067.00
Advance for Franking Machine	14,473.00	677.00
2 Grants Received		
From Government of India - Plan (TIFAC)	153,862,000.00	70,429,000.00
From Government of India - Non Plan (TIFAC)	188,000.00	338,000.00
3 Interest Received		
On Bank Deposits (TIFAC)	877,423.00	16,855,491.00
On Bank Savings (TIFAC)	18,206,832.00	2,605,572.00
Loans Advances etc. (Staff advances)	36,150.00	34,272.00
Interest from Income Tax	3,984.00	-
Interest on Debtors & other Receivable (TIFAC-SIDBI Revolving Fund)	6,049,000.00	-
4 Other Income (Specify)		
Refund from HGT Project	11,130,000.00	5,652,093.00
Refund from Advance Composite Programme	959,072.00	8,119,230.00
Refund from Vision 2020	1,848,000.00	33,405,046.12
Other Income (Annexure 18)	2,290,273.69	2,574,394.06
Refund from Fly Ash Utilization Programme	1,350,000.00	10,000.00
5 Receipts fro Patent Facilitating Centre		
Grant in Aid (Under PFC New Account)	13,528,479.00	-
Ekaswa A&B CD RoM (Under PFC New Account)	5,000.00	17,483.00
Interest from Bank (Savings) (Under PFC New Account)	143,309.97	279,638.00
Interest from Advances etc. (Staff Advane) (Under PFC New Account)		10,248.00
6 Receipts for Women Scientist Scholourship Scheme		
Grant in Aid (Under WSSS New Account)	20,000,000.00	-
Interest from Bank (Savings) (Under WSSS New Account)	638,879.00	401,111.00
Interest from Advances etc. (Staff Advane) (Under WSSS New Account)	3,000.00	-
7 Other Receipts (Give Details)		
Nominal Charges for Dissemination of TIFAC Reports	28,130.00	48,378.00
Income from Royalty	67,010.00	-
Tender for Housekeeping at TIFAC	-	2,000.00
Award for Nari Shakti	200,000.00	-
RTIA Questions	440.00	460.00
Tender for Car Hiring	500.00	3,000.00
Tender for Payroll and Financial Software	1,500.00	-
Stale Cheque Received	119,110.00	-
Advance : DAVP		43,179.00
Advance : Acharya Vinaba Bhave Rural Hospital, Sawangi	20,000.00	-
SAIL NMPP	19,736.55	-
Security Deposit : Lease Accommodation	9,500.00	-
Security Deposit : Tata Teleservices Ltd	16,000.00	-
Security Deposit : Sh.Kapil Aggarwal	47,490.00	-
International Conference on Disaster Management	44,493.00	-
Preparation of Detailed Project Report & Desing of R&D Schedul for Launch of National Mission Electric Mobility	1,008,322.00	-
Sh.Kapil Aggarwal (Rent)	25,650.00	-
Earnest Money : M/s Dogra Enterprises		-
Earnest Money : M/s Sansanwal Travels	50,000.00	-
Earnest Money : M/s GMC Beverages Pvt. Ltd	5,000.00	-
Earnest Money : M/s Beltek Canadian Water Ltd. (Aquafina)	5,000.00	-
Earnest Money : M/s Pavilions Interiors India (P) Ltd.	300,000.00	-
Earnest Money : M/s NSE IT (PFC New Account)	50,000.00	-
	494,213,143.01	451,180,898.33

Technology Information Forecasting & Assessment Council
Receipts & Payments for the Period the Year Ended 31.03.2016

Receipts	Current Year	Previous Year
Office Equipment (Deductions during the year)	-	42,455.00
Earmarked for Release to SIDBI (Revolving Fund) Capital Fund	-	40,000,000.00
Staff Loan (Under TIFAC Account)	745,351.00	55,712.00
Staff Loan (Under PFC Account)		19,500.00
Security Deposite : MTNL		3,000.00
Interest Accrued (Under PFC New Account)		77,888.00
Interest Accrued (Under WSSS New Account)	-	21,624.00
TDS (Indian Oil Corporation Limited)	61,346.00	
Sundry Creditor : Permal Wallace Pvt Ltd		3,000.00
Payable by PFC to TIFAC (Contra)	5,000,000.00	5,000,000.00
Sundry Creditor : Alaka Chakraborty	46,648.00	
House Rent Recovery (Prof. Prabhat Ranjan)	4,000.00	
Medical Scheme		231,150.00
Medical Scheme (Under PFC New Account)		19,827.00
Preparation of Directory of Assistive Devices for Persons with Disabilities under SIPDA Scheme 2014-2015		1,071,806.00
Unspent Balance from Running Projects	849,318.00	
TIFAC/DST ITS Canada Workshop	167,640.00	
Internainal Conference on Disaster Management	-	
Earnest Money : M/s Asha Enterprises		50,000.00
Earnest Money : M/s Sarat Tours & Travels		50,000.00
IIT-TIFAC Maintenance (Provisions)	8,000,000.00	
India-IIASA Membership Fee (Provision)	24,500,000.00	
Amount Given to SIDBI now Written Back	100,000,000.00	
CPF		26,000.00
CPF (Under PFC New Account)		1,488.00
Total (ii)	139,374,303.00	46,673,450.00
Total (i) + (ii)=(A)	633,587,446.01	497,854,348.33

Technology Information Forecasting & Assessment Council
Receipts & Payments for the Period the Year Ended 31.03.2016

Particulars	Current Year		Previous Year	
1 Expenses				
a Establishment Expenses (Schedule 21)	53,365,225.00		58,936,194.00	
Add : Opening Expenses Payable	4,145,441.00		3,311,041.00	
Less : Expenses Payable	4,738,440.00	52,772,226.00	4,145,441.00	58,101,794.00
b Administrative Expenses (Schedule 21)	25,613,588.47		14,544,115.68	
Add : Opening Expenses Payable	776,104.00		1,208,382.00	
Add : Loss of sale of Fixed Assets				
Less : Payables	2,234,594.00	24,155,098.47	697,313.00	15,055,184.68
Less : Loss on Sale of Fixed Assets				
(Previous year figure does not include obsolescence Expenses in it.)				
Expenditure on Grants, Subsidies etc.				
c (As per Schedule 22)		91,823,863.23		92,309,179.20
2 Payments made against funds for various projects				
Establishment Expenses (Under PFC New Account)	8,044,856.00		8,180,074.00	
Add : Opening Expenses Payable	520,155.00		588,897.00	
Less : Expenses Payable	400,704.00	8,164,307.00	520,155.00	8,248,816.00
Administrative Expenses (Under PFC New Account)	3,681,683.52		5,879,422.59	
Add : Opening Expenses Payable	1,397,967.00		712,761.00	
Less : Expenses Payable	263,693.00	4,815,957.52	1,397,967.00	5,194,216.59
Payments made against funds for various projects				
Establishment Expenses (Under WSSS New Account)	853,060.00		941,765.00	
Add : Opening Expenses Payable	74,570.00		268,565.00	
Less : Expenses Payable	56,500.00	871,130.00	74,570.00	1,135,760.00
Administrative Expenses (Under WSSS New Account)	2,868,946.00		593,268.00	
Add : Opening Expenses Payable	104,064.00		104,064.00	
Less : Expenses Payable	11,164.00	2,961,846.00	104,064.00	593,268.00
Grant Utilisation - Vision 2020	30,094,748.00		30,746,634.00	
Add : Opening Expenses Payable	952,663.00		1,139,724.00	
Less : Expenses Payable		31,047,411.00	952,663.00	30,933,695.00
Grant Utilisation - Technology Vision 2035		1,515,381.00		2,873,945.00
Addition in Fixed Assets				
Office Equipment		426,750.00		546,834.00
Library Book		30,897.00		37,832.00
Furniture & Fixtures		63,980.00		76,337.00
Computer & Peripherals		958,293.00		3,298,296.00
Fire Alarm System at TIFAC Building & Fire Extinguishers				13,030.00
3 Other Payments (Specify)				
CPF				35,000.00
CPF (Under PFC Account)		26,000.00		346.00
GSLIS (Under PFC Account)		1,488.00		
Sundry Creditor : M/s Blue Star Ltd.				169,274.00
Stale Cheque				2,365,446.06
Staff Advance (Under PFC New Account)		150,925.00		
Interest Accrued (Under PFC New Account)		2,861.97		
Interest Accrued (Under WSSS New Account)		116,080.00		
CPF Turst (TIFAC)		207,368.00		
IIT-TIFAC Maintenance (Provisions)				8,288,375.00
Leave Travel Expenses Payable (Sh.Sambhu Kumar) (PFC)				2,720.00
Sh.Sambhu Kumar (House Building Advance) (PFC)				8,000.00
G.M.W Workshop (SRF)				116,408.00
Preparation of Detailed Project Report & Design of R&D				547,907.00
Schedule for Launch of National Mission Electric Mobility				
Earnest Money : Sugar Factories				200,000.00
Earnest Money : M/s Dogra Enterprises		5,000.00		
Earnest Money : M/s Bagga Tours and Travels		50,000.00		
Earnest Money : M/s Perfect Traders		5,000.00		
Earnest Money : M/s Sarat Tours & Travels		50,000.00		
Earnest Money : M/s Pink House Keeping				18,784.00
Security Deposite : M/s Pink House Keeping				52,820.00
Medical Scheme (Under TIFAC Account)		1,654,617.00		
Medical Scheme (Under PFC Account)		51,277.00		
Advance DAVP		220,775.00		199,333.00
TIFAC/DST ITS Canada Workshop				78,908.00
International Conference on Disaster Management				44,493.00
Preparation of Detailed Project Report & Design of R&D Scheme for				1,008,322.00
Launch of National Mission Electric Mobility				
Sh.Kapil Aggarwal (Rent)				25,650.00
		222,148,532.19		231,579,973.53

Technology Information Forecasting & Assessment Council
Receipts & Payments for the Period the Year Ended 31.03.2016

Particulars	Current Year		Previous Year	
Payable by PFC to TIFAC (Contra)		5,000,000.00		5,000,000.00
Sundry Deposit : Mrs Veena Bhandari				80,000.00
Salary Payable (Prof Ganapathy)		1,800.00		
TIFAC-SIDBI Revolving Funds)		106,049,000.00		
Closing Balance				
Cash in Hand		8,773.00		6,574.00
Cash in Hand(Under PFC New Account)		16,225.00		5,623.00
Cash in Hand(Under WSSS New Account)		253.00		911.00
Cash at Bank		27,516,562.09		18,691,651.55
Cash in Hand (Under PFC New Account)		894,178.73		5,364,554.25
Cash in Hand (Under WSSS New Account)		24,274,364.00		7,530,883.00
Short Term Deposite		247,672,403.00		229,579,705.00
Franking Machine		5,355.00		14,473.00
Total (ii)		411,438,913.82		266,274,374.80
Total (i) + (ii) = (B)		633,587,446.01		497,854,348.33

As per our report of even date Attached
For S.K Juneja & Associates (FRN : 012484N)
Chartered Accountants

Sd/-
Accounts Officer
TIFAC

Sd/-
Registrar
TIFAC

Sd/-
Executive Director
TIFAC

Sd/-
CA. Surinder Kumar (Membership No.091449)
Partner
Date : 23.09.2016
Place : New Delhi

S. K. JUNEJA & ASSOCIATES
CHARTERED ACCOUNTANTS

4704, Ashoka Enclave, Plot No. 8A
Sector-11, Dwarka, Delhi-110075.
Phone: 9810331588, 9810641785
E-mail: madhujun94@gmail.com

INDEPENDENT AUDITOR'S REPORT

The Trustees
TIFAC Contributory Provident Fund Trust
New Delhi

Report on the Financial Statements

1. We have audited the accompanying financial statements of TIFAC Contributory Provident Fund Trust, New Delhi, (hereinafter referred to as 'Trust') which comprise the Statement of Affairs as at March 31, 2016.

Management's Responsibility for the Financial Statements

2. These financial statements are the responsibility of the management of TIFAC Contributory Provident Fund Trust with respect to the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Trust in accordance with the accounting principles generally accepted in India including Accounting Standards issued by the Institute of Chartered Accountants of India. This responsibility includes maintenance of adequate accounting records in accordance with the for safeguarding the assets of the Trust and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; design, implementation and maintenance of adequate internal financial controls, that are operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

3. Our responsibility is to express an opinion on these financial statements based on our audit. We have taken into account the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder. We conducted our audit in accordance with the Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

4. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Trust's preparation of the financial statements, that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Society has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by the Society's management and Governing Council, as well as evaluating the overall presentation of the financial statements.
5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

6. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India of the state of affairs of the Trust as at 31st March 2016:
 - a) we have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - b) in our opinion proper books of account as required by law have been kept by the Trust so far as appears from our examination of those books;
 - c) the Statement of Affairs dealt with by this Report are in agreement with the books of account;

Date: 23-09-2016

Place: Delhi

For S K Juneja & Associates

Chartered Accountants
Firm Registration No. 012484N

Sd/-
(CA. Surinder Kumar)
Partner
M. No. 091449

Contributory Provident Fund of TIFAC
Statement of Affairs as on 31st March, 2016

Previous Year as on 31.03.2015	Particulars		Current Year as on 31.03.2016	Previous Year as on 31.03.2015	Particulars	Current Year as on 31.03.2016
	Interest Accrued			2,619,017.63	Union Bank of India S/b A/C	2,264,888.13
29,718,356.70	Last Balance	34,951,686.70		520,330.00	Special deposit with RBI	520,330.00
5,670,297.00	Add: Received/ Accrued during the year	6,438,236.00		65,158,703.00	Short Term deposit with UBI	79,318,784.00
35,388,653.70		41,389,922.70		535,603.00	Flexi Deposit- UBI	573,076.00
436,967.00	Less: Intrest paid during year	323,101.50			Loan/ Advances to staff members	
34,951,686.70			41,066,821.20		Shri Anil Kumar Rai	71,444.00
	Employees Contribution			24,244.00	Shri Arghya Sardar	42,200.00
19,274,347.93	Last Balance	14,653,405.93		61,800.00	Ms. Sangeeta Nagar	85,000.00
6,672,650.00	Add: Received during the year	7,299,530.00		-	Sh. Somanath Nath	-
25,946,997.93		21,952,935.93		20,000.00	Ms. Uma Daral	-
11,293,592.00	Less: Paid during the year	2,099,387.00		22,500.00	Ms. Swati Sharma	-
14,653,405.93			19,853,548.93	27,500.00	Sh. Sundender Prasad	56,000.00
	TIFAC Contribution			180,600.00	Sh. M Suresh Babu	-
22,027,513.00	Last Balance	19,768,055.00		45,000.00	Dr. D. Majumdar	233,500.00
2,568,869.00	Add: Received during the year	2,686,451.00		-	Sh. Surinder Kumar	4,800.00
24,596,382.00		22,454,506.00		31,400.00	Sh. Deep Prakash	-
4,828,327.00	Less: Paid during the year	185,554.00		22,000.00	Sh. Sanjay Sundriyal	5,300.00
19,768,055.00	Less: Prior period adjustment due to			-	Sh. T.Chakradhar	-
	Employess left before the entilement of receipt of employer contribution	207,368.00	22,061,584.00	43,200.00	Sh. Sumit kumar	14,000.00
				30,000.00	Mr. T. Adarsh	-
	Payable To TIFAC		207,368.00	30,000.00	Sh. Bishram Bhakta	-
				1,250.00		
69,373,147.63	Total		83,189,322.13	69,373,147.63	Total	83,189,322.13

For S K Juneja & Associates
Chartered Accountants
FRN : 012484N

Sd/-
CA. Surinder Kumar
Partner
Membership No.091449
Date : 23.09.2016
Place : New Delhi

Sd/-
N.C. Chauhan
Chairman

Sd/-
Deep Prakash
Trustee

Contributory Provident Fund of TIFAC		
Statement of Affairs as on 31st March, 2016		
(Amount Rs.)		
Pervious Year as on 31.03.2015	PARTICULARS	Current Year as on 31.03.2016
2,619,017.13	Union Bank of India S/b A/C	2,264,888.13
520,330.00	Special deposit with RBI	520,330.00
65,158,703.00	Short Term deposit with (UBI)	79,318,784.00
535,603.00	Flexi Deposit -UBI	573,076.00
	Loan/ Advances to staff members	
24,244.00	Shri Anil Kumar Rai	71,444.00
61,800.00	Shri Arghya Sardar	42,200.00
43,200.00	Sh.Sanjay Sundriyal	5,300.00
30,000.00	Dr. D. Majumdar	233,500.00
30,000.00	Sh. Sumit kumar	14,000.00
45,000.00	Sh. M. Suresh Babu	-
180,600.00	Sh. Surender Prasad	56,000.00
27,500.00	Ms. Swati Sharma	-
-	Smt.Sangeeta Nagar	85,000.00
31,400.00	Sh. Surinder Kumar	4,800.00
1,250.00	Sh. Bishram Bhakta	-
22,500.00	Ms. Uma Daral	-
22,000.00	Sh. Deep Prakash	-
20,000.00	Sh. Somanath Nath	-
69,373,147.13	Total	83,189,322.13

For S K Juneja & Associates

Chartered Accountants

FRN : 012484N

Sd/-

CA. Surinder Kumar

Partner

Membership No.091449

Date : 23.09.2016

Place : New Delhi

Sd/-

N.C. Chauhan

Chairman

Sd/-

Deep Prakash

Trustee

9. TIFAC EMPLOYEES

List of employees as on 31.03.2016

1. Prof. Prabhat Ranjan, Executive Director
2. Shri Sanjay Singh, Scientist –G
3. Dr. Gautam Goswami, Scientist-F
4. Shri P R Basak, Scientist -F
5. Shri T, Chandrasekhar, Scientist-E
6. Shri Suresh Kumar K, Scientist-E
7. Smt. Kiran A Zacharia, Scientist-E
8. Shri A. Sardar, Scientist-E
9. Smt. Nirmala Kaushik, Scientist-E
10. Dr. S K Goel, Scientist-E
11. Smt. Sangeeta Bakshi, Scientist-E
12. Smt. A Jancy, Scientist-E
13. Shri Mukesh Mathur, Scientist-E
14. Shri Y D Panwar, Scientist-E
15. Smt. Sangeeta Nagar, Scientist-E
16. Dr. Neeraj Saxena, Scientist-E
17. Dr. D. Majumdar, Scientist-E
18. Shri T. Selvan, Scientist-E
19. Shri Vipin C Shukla, Scientist-E
20. Smt. Achla Khanna, Scientist-E
21. Shri Rahul Kumar, Scientist-D
22. Smt. Mukti Prasad, Scientist –C
23. Shri M. Suresh Babu, Scientist –C
24. Dr. P K Anil Kumar, Scientist-C
25. Shri Deepak Kumar, Scientist -C
26. Dr. T Chakardhar, Scientist-C
27. Dr. Brajeshwar Chandelia, Scientist-C
28. Shri S K Muneshwar, Scientist –B
29. Shri Manish Kumar, Scientist –B
30. Ms. Swati Sharma, Scientist –B
31. Ms. Sujatha R., Scientist –B
32. Smt. Kavita Tyagi, Technical Officer -B
33. Shri Deep Prakash, Accounts Officer
34. Smt. Indu Vermani, Scientific Asst. 'B'
35. Smt. Promilla Khilnani, Scientific Asst. 'B'
36. Shri Ravindra Kumar, Asst. Manager (Tech.)
37. Shri Anoop Singh Aswal, Computer Assistant
38. Shri Anil Kumar Rai, Scientific Asst. 'A'
39. Shri Samson George, Personal Assistant
40. Smt. R. Mangalambika, Assistant Gr-I
41. Smt. Poonam Nagpal, Secretarial Asst./PA
42. Shri Suresh Somanchi, Assistant Gr-I
43. Shri Ujjwal Kumar, Assistant Gr-I (Accounts)
44. Smt. Anita Nair, Stenographer
45. Smt. Geeta Nair, Stenographer
46. Smt. Babita Bose, Stenographer
47. Smt. Suja Geroge, Stenographer
48. Smt. Sreedevi N, Stenographer
49. Smt. Reena Rana, Stenographer
50. Smt. Geeta Tomar, Stenographer
51. Smt. Rajan Sharma, Stenographer
52. Shri T. Adarsh, UDC
53. Smt. Mala Sarpal, Secretarial Asst.
54. Smt. Renu Bali, Assistant Gr-II
55. S. Basu, Assistant Gr-II
56. Smt. Mini K K, Assistant Gr.-II
57. Smt. Jyotika Katyal, Accounts Assistant
58. Shri Aneesh S., Accounts Assistant
59. Shri Ajay K. Diwakar, Assistant Gr.-II
60. Smt. Rachna Bhatt, Assistant Gr.-II
61. Smt. Padma Manral, Assistant Gr.-II
62. Smt. Uma Daral, Assistant Gr.-II
63. Shri Sanjay Sundriyal, Assistant Gr.-II
64. Shri Ranbir Singh, LDC
65. Shri Mahipal Singh Rawat, LDC
66. Smt. Mercy James, LDC
67. Smt. Jyoti Saklani, LDC
68. Shri Surender Prasad, MTS
69. Shri Sushil Kumar Jha, MTS
70. Shri Surender Kumar, MTS
71. Shri Ravi Dutt, MTS
72. Shri Kunwar Singh, MTS
73. Shri Bishram Bhakta, MTS
74. Shri Dalip Kumar, MTS