

INDIAN INSTITUTE OF SCIENCE



PHILANTHROPY FUNDRAISING AND ALUMNI AFFAIRS



Office of Development and Alumni Affairs (ODAA) www.odaa.iisc.ac.in



MESSAGE FROM THE DIRECTOR



GOVINDAN RANGARAJAN Director Indian Institute of Science

Since it was established in 2015, the Office of Development and Alumni Affairs (ODAA) has been spearheading IISc's efforts to raise funds from industry, philanthropists, and alumni.

ODAA has raised close to Rs 400 crores in the last five years. As you will read in this report, the funding has been invaluable for several key initiatives of the Institute: construction of hostel blocks for women students, training of high school and college teachers, establishment of a skill development centre in partnership with Hindustan Aeronautics Limited, setting up of an innovation lab to develop technologies in healthcare and medical imaging in partnership with Wipro GE Healthcare, development of sustainable solutions for issues specific to rural and semi-rural areas, creation of chair professorships, and the professional development of our students and faculty members.

In 2020, the Institute kick-started many new initiatives that are also being supported by funds raised through ODAA. Apart from various projects diverse areas of research, education and innovation, our focus this past year has also been on raising money to augment critical research related to COVID-19, including the development of an ICU-grade ventilator, mobile diagnostic labs, antibody testing kits and an RT-PCR testing facility on campus. Many alumni have also come forward with funds that have helped us provide laptops and tuition reimbursements for our students.

In 2021, the Institute is embarking on a new paradigm-shifting initiative. IISc plans to establish a PG Medical School on its main campus, with a 400-bed referral hospital of which about 100 beds will be reserved for clinical research. Postgraduate programmes (MD/MS) in selected disciplines will be launched, along with a unique dual degree MD-PhD (MS-PhD) research programme. By leveraging IISc's existing strengths in science and engineering, a cross-disciplinary research training programme will be nucleated through the seamless integration of basic sciences, clinical sciences, applied engineering and clinical practice. The current pandemic has underscored the need for a robust cross-disciplinary university-based clinical research programme in India. The fact that both the mRNA vaccines (like the ones developed by Pfizer and Moderna) and more traditional vaccines (like the one developed by Oxford University/AstraZeneca) had their origins in university-based medical research further highlights this urgent need. I am confident that the proposed PG Medical School at the Institute will help in anticipating and meeting future medical challenges that will inevitably confront our country. Needless to say, it will also help in addressing the ongoing health issues. I request alumni, philanthropists and corporates to donate generously towards this important new initiative.

I take this opportunity to sincerely thank all our donors for their support. Your generosity will benefit several generations of students, teachers and researchers. We hope that you will continue to support us in our endeavours in the years to come.



MESSAGE FROM THE CHAIR



PHANEENDRA K. YALAVARTHY Chair Office of development and alumni Affairs

Public-Private Partnership runs in the DNA of IISc and it is no surprise that we have received very generous contributions for education and research initiatives from corporates and philanthropists.

The year 2020, even though largely known for the COVID-19 pandemic, IISc was able to inaugurate 75,000 sq. ft. HAL-IISc Skill Development Centre at its Challakere Campus and also successful in securing funds for establishing TCS Smart-X Hub to further strengthen the interdisciplinary research work that is being carried out at the Institute. This hub will house several interdisciplinary research departments and centres, including BioSystems Science and Engineering, Nano Science and Engineering, Transport Engineering and Cyber Physical Systems, making it truly unique in the country.

The CSR grants have enabled our faculty members to pursue various research activities related to COVID-19 as well as establish/run an RT-PCR testing centre for COVID-19 at the Institute. The much needed laptop drive for the needy students was largely successful with alumni contributions. Women fellowships, digital classrooms establishment, as well as alumni donation for the establishment of various gold medals were also part of the highlights of fundraising in recent years.

With new leadership at the Institute, the Office of Development and Alumni Affairs (ODAA) would aspire to be the leading fundraising unit of the country among academic institutes. Since its establishment in 2015, the ODAA has flourished with contributions from corporates, well-wishers, and philanthropists. This third report provides a summary of fundraising during the period (2015-2020). Needless to mention, ODAA will invite contributions in supporting the Institute initiatives towards making IISc a world-class and leading Institute of learning in the world. Your contribution towards this goal will be largely appreciated.

Great appreciation and sincere thanks to all donors who provided funds for the key initiatives of the Institute and we hope to get the continued support in the future as well.

FUNDS RAISED (2015-2020)



Alumni have played a critical role in helping IISc raise these substantial funds

*includes 21.2 crores endowment from Infosys Foundation prior to ODAA and **30 crores endowment from Pratiksha Trust

COMPLETED PROJECTS CSR

BPCL LADIES HOSTEL BLOCK

HAL-IISC SKILL DEVELOPMENT CENTRE WIPRO GE HEALTHCARE-CDS COLLABORATIVE LABORATORY OF ARTIFICIAL INTELLIGENCE IN HEALTH CARE AND MEDICAL IMAGING

TEACHERS TRAINING PROGRAMME AND SUPPLY OF LABORATORY EXPERIMENTAL KITS TO HIGH SCHOOLS

DISSEMINATION OF SUSTAINABLE TECHNOLOGIES IN RURAL AND PERI-URBAN HABITATS

BPCL Ladies Hostel Block





To encourage more women students to pursue careers in science and engineering, **Bharat Petroleum Corporation Limited (BPCL)** has generously contributed Rs. 19 crores under Corporate Social Responsibility (CSR) to construct the BPCL Ladies Hostel Block.

It was inaugurated in February 2020 by Shri. Jayesh Shah, Executive Director (HRS), BPCL and Prof. Anurag Kumar, Director, IISc.

The new BPCL ladies hostel block has 158 single rooms for women students and 7 guest rooms. Each room is self-sufficient, with a table, chair, cot, cupboard, bookshelf and rack. The building has ground plus three floors. Each floor has been designed with necessary facilities according to the prevailing guidelines for women students to stay comfortably.



Inauguration of HAL-IISc Skill Development Centre

The Defence Minister of India, Shri. Rajnath Singh, inaugurated the HAL-IISc Skill Development Centre (SDC) on 13 August 2020, in the presence of Shri. Raj Kumar, Secretary, Defence Production; Shri. R. Madhavan, Chairman and Managing Director, Hindustan Aeronautics Limited (HAL) and Prof. G. Rangarajan, Director, IISc.

The HAL-IISc Skill Development Centre, was built at the IISc Challakere campus at a cost of Rs. 73.7 crores funded by HAL under CSR.



The Centre, a product of a unique collaboration between HAL and IISc, will impart high-end skills in manufacturing, including in the aerospace sector. The SDC includes a 75,000 sq. ft. building with modern labs, classrooms and an auditorium to seat 250 members.

This Centre can also provide residential accommodation to about 230 trainees and faculty members at any given time.



Wipro GE Healthcare and IISc Partner to set up a Healthcare Innovation Lab



On 22 September 2020, the IISc and Wipro GE Healthcare announced the inauguration of an advanced centre for innovation and research at the IISc campus in Bangalore: WIPRO GE Healthcare – Computational and Data Sciences Collaborative Laboratory of Artificial Intelligence in Healthcare and Medical Imaging.

The facility, located at the Department of Computational and Data Sciences (CDS) of IISc, will work on the next level of healthcare diagnostics with deep learning technology, artificial intelligence and future-ready digital interfaces, to provide highly sophisticated diagnostic and medical image-reconstruction techniques and protocols for faster and better imaging.

Wipro GE Healthcare, which is commemorating its 30 years of existence in the country, is supporting this centre with a one-time grant, as part of its CSR efforts. This grant will be used to equip this lab with the necessary hardware and software tools: state-of-the-art Deep Learning Servers, Advanced Visualization Workstation, LED monitors and software such as Pytorch, Tensor Flow, Keras and Pycharm.





Teachers Training Programme and Supply of Laboratory Experimental Kits to High Schools

IISc started a Talent Development Centre in 2011 at its Challakere campus in Chitradurga, Karnataka to train teachers through the teachers' training programme to promote the development of science education across the country.

A novel method of learning science by doing experiments and learning mathematics by solving problems has been developed and implemented at TDC.

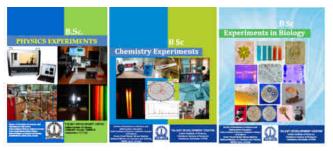


This is a large-scale experiment on Science Education and Training undertaken in India for the first time. Over 10,000 high school teachers, 4,000 pre-university (11-12th standard) from Karnataka, Kendriya Vidyalaya (KV), and Jawahar Navodaya Vidyalaya (JNV) schools, 550 College and University teachers teaching BSc and MSc classes have been trained so far. Teachers teaching Physics, Chemistry, Biology, and Mathematics at the four levels were trained. In recent years, L&T Technology Services, Pfeiffer Vacuum Pvt. Ltd. have generously contributed to this project.

Training UG (Science & Math) Teachers 212 BSc (PCMB) teachers trained



New Experiments Developed at TDC



120 Physics Experiments 112 Chemistry Experiments 110 Biology Experiments

The teachers do these experiments in the class room or laboratory to teach theory. New experiments developed at TDC have been incorporated in the training module

Distribution of Laboratory Experimental Kits to the Schools 20 schools have received the kits



This year (2020-21), 40 Experimental Science Kits consisting of over 160 experiments have been distributed to schools in rural Karnataka.

Dissemination of Sustainable Technologies in Rural and Peri-Urban Habitats

The project "Dissemination of Sustainable Technologies in rural and peri-urban habitats" was sponsored by a generous contribution from the **H.T. Parekh Foundation** under the Corporate Social Responsibility initiative of **HDFC** Limited.

The Centre for Bio-Energy and Low carbon Technologies (C-BELT) project was initiated in 2015 with an initial seed grant from the Department of IT-BT and S&T, Government of Karnataka.

Project objectives:

- Create infrastructure for capacity building /training in Sustainable Technologies (STs) for the C-BELT at IISc's Challakere campus
- Prepare necessary hardware, software and demonstration units for C-BELT
- Provide technical training for skill development in STs and promote entrepreneurship
- Demonstration of STs in a cluster of villages and peri-urban centres
- Develop a vocational training programme's in STs
- Interface with government agencies for capacity building in STs

Infrastructure for the C-BELT at IISc Challakere campus:

An academic and training facility complex and a residential area complex were constructed at the Challakere campus utilising the low-C alternative building materials and technologies, and passively conditioning techniques.

A. Academic and training facility complex

Includes: (a) Classroom, (b) Laboratory and office, (c) Exhibition centre, (d) Workshop/demonstration unit (e) Water storage facility.



Classroom complex exterior view



Interior views of the Classroom

B. Residential Area has a dormitory complex and a caretaker house.



Dormitory complex

Dissemination of Sustainable Technologies in Rural and Peri-Urban Habitats





Fuel-efficient stove training village







Capacity building and skill development in sustainable technologies

The technical training for skill development in STs & promoting entrepreneurship involved:

A. Developing training manuals, brochures and videos on sustainable technologies

B. Establishing model demonstration projects in rural & peri-urban habitats /regions:

Two Community centres and **35 Sanitary units** were constructed as demonstration structures using low carbon construction technologies in the villages and a small town near the IISc Challakere campus.

The working prototypes of fuel-efficient **Biomass devices** for cooking and processing agro produce were demonstrated in the vicinity of IISc Challakere campus and about **180** Biomass devices were established under this project.

C. Training programmes and entrepreneurship development:

Training and capacity building programmes involved 3-5 days hands-on workshops and one-day exposure programmes for

- Entrepreneurs
- Households/field staff
- Architects/Engineers/Students/NGOs

Totally **38** programmes were conducted and **620** persons were trained during 2017–2020.

COMPLETED PROJECTS Philanthropy

TATA TRUSTS CHAIRS

STUDENT AND FACULTY PROFESSIONAL DEVELOPMENT: INTERNATIONAL MOBILITY GRANT

TATA Trusts Chairs

In order to support and encourage outstanding faculty members pursuing cutting-edge research in all science and engineering disciplines, three prestigious Chair Professorships were established with generous support from the TATA TRUSTS. The Chair Professorships are awarded to current, full-time faculty members at IISc.

Selection for appointment to these distinguished endowed chairs, from among the nominations received, was carried out by a committee comprising experts from around the world.

The benefits of these endowed chairs include a top-up of Rs. 100,000/- (Rupees one lakh only) to the monthly salary, and an unrestricted research grant of Rs. 10,00,000/- (Rupees Ten lakhs only) per year, for a period of three years.

TATA TRUSTS CHAIRS 2020

J.R.D. TATA CHAIR

J. N. TATA CHAIR



PROF. UMESH VARSHNEY Dept. of Microbiology and Cell Biology



PROF. PRADIP DUTTA DEPT. OF MECHANICAL ENGINEERING HOMI BHABHA CHAIR



PROF. S.K. SATHEESH DIVECHA CENTRE FOR CLIMATE CHANGE



Student & Faculty Professional Development: International Mobility Grant

International mobility of faculty members and students is critical for their professional development. But they face several challenges.

The current international travel support given to students for the entire duration of their Ph.D. is not sufficient sometimes for even one international conference. Support for international travel for faculty members is also greatly restricted unless they receive fellowships such as the J.C. Bose Fellowship. These restrictions prevent meritorious IISc students and faculty members from traveling abroad.

To address this crucial gap, the **Tata Trusts** have contributed several grants to support the international mobility of IISc faculty members and students.

76

students have received grants to present their work at international conferences

56

faculty members have received grants to present their work at international conferences

21

faculty members have received grants for short-term international visits to build research collaborations

TATA Trusts Faculty & Student International Mobility grant includes:

- Student & faculty travel fund for international conferences: to attend an international conference
- Faculty travel fund for short-term international visits: to spend an average of 2 months a year in a collaborating laboratory or university abroad in order to pursue joint research projects

NEW CSR PROJECTS (2020)

Nokia Centre of Excellence in Networked Robotics

NOKIA

To promote inter-disciplinary research involving robotics, advanced communication technologies, and Artificial Intelligence (AI)

Labs for M.Tech (AI) Programme

SBI Cards, Tata Elxsi, GroupM and Timken

To develop manpower in Artificial Intelligence and related areas by training students under the M.Tech (AI) programme

Start-Up Funding at SID Citibank NA

Part funding of six start-ups incubated at the Society for Innovation and Development (SID), IISc

Condition Monitoring of Legacy Machines (CPDM)

Garrett Motion Technologies (India) Pvt. Ltd.

Research to develop learning algorithms to understand the performance and failures of legacy machines

Autonomous Ground Vehicle (AGV) Telerobotics

Garrett Motion Technologies (India) Pvt. Ltd.

This project envisages developing AGV operator jig, Telerobotics software, necessary network infrastructure, and research in chosen topics

Covid-19 Projects

Project PRAANA: Novel Ventilator Design

SBI Foundation, Infineon Technologies India Pvt Ltd., and Principal Scientific Advisor's Office

An indigenously developed ICU-grade ventilator, built using a custom-designed pneumatic system controlled by a microprocessor for the COVID-19 crisis

Mobile Diagnostic Lab for COVID-19

SBI Foundation, Toyota Kirloskar Motors, Tata Motors, Principal Scientific Advisor's Office, Collins Aerospace, United Way (Bengaluru) and Borqs Software Solutions

An end-to-end COVID-19 testing lab developed at IISc to collect, process, and test samples using RT-PCR

Antibody Testing for COVID-19

Capgemini and Principal Scientific Advisor's Office

IISc team to develop two distinct variants of indirect ELISA tests to detect SARS-CoV-2-specific antibodies

The daily RT-PCR tests for the Government of Karnataka

Ocwen Financial Corporation and Citrix Systems, Inc.

The Centre for Infectious Diseases (CIDR) initiated the COVID-19 RT-PCR testing at IISc. At present, CIDR tests over 400 samples per day

Nokia Centre of Excellence in Networked Robotics

Nokia and IISc have collaborated together to establish the **Nokia Centre of Excellence in Networked Robotics** at IISc.

The Centre will promote inter-disciplinary research involving robotics, advanced communication technologies and Artificial Intelligence (AI) to develop socially relevant use cases across areas like emergency management, agriculture and industrial automation.

This Centre will also promote the engagement and cooperation between academia, startups and industry ecosystem partners in the research and development of use cases. This Centre supports and aligns with the Government initiatives of 'Start-up India'.

The state-of-the-art network robotics laboratory will be available to the IISc community to work on AI projects.



While Nokia along with Nokia Bell Labs will share technical expertise in network innovations robot orchestration, robot network controller and human-robot interaction, IISc will engage its cross-disciplinary faculty and researchers to provide its in-house expertise in algorithms, drones and robotic systems.

Source:<u>https://analyticsindiamag.com/nokia-to-set-up-robotics-</u> lab-at-iisc-to-boost-socially-relevant-use-cases/

Activities:

- Establish a network robotics laboratory that will be available to the academic and innovation ecosystem (startups, entrepreneurs, etc.)
- Research and teaching by faculty, students, and staff via focussed research projects
 - Research projects will involve co-design of next-generation networks and application of AI for solving societally relevant problems
- Support research students, postdoctoral fellows, and technical staff
- Knowledge dissemination via research symposia, short courses & hackathons
- Showcase innovation outputs at national and international conferences

Labs for M.Tech. (AI) Programme

Four new labs for the M.Tech. (AI) **Programme** have been established at IISc for the recently introduced two-year M.Tech. (AI) joint degree programme offered by the Divison of Electrical, Electronics and Computer Sciences. Currently, the Department of CSA, EE, ECE and DESE is offering this joint degree.

Artificial Intelligence has captured the imagination of the entire world with its potential ability to solve complex societal problems of our times: universal access to healthcare and education. efficient transportation, increased efficiency in providing e-governance services to the public, etc. With many countries taking big strides in the domain, there is a need for AI capacity building in India so that we can become an intellectual force in this emerging domain.

To address this need, the M.Tech. (AI) programme has been created at IISc. The two-year M.Tech. in Artificial Intelligence aims to fulfill the critical needs of the industry and to fill the gap in the availability of high-end AI scientists and engineers.



The vision of the M.Tech. (AI) programme is to develop manpower in Artificial Intelligence and related areas by training students under the M.Tech (AI) programme so as to develop leadership in the field of AI. The M.Tech AI programme will have an annual intake of about 50 students from all over India.

The proposed M.Tech. (AI) labs at IISc will be equipped with a DGX series which is a high-end computing facility with state-of the-art GPUs and several thousand CUDA cores. A class of 45 students would be able to utilize this facility by remotely logging through their laptops or through desktops in the AI labs.

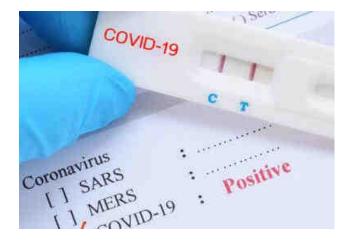
The project has received generous CSR funding from: SBI Cards Tata Elxsi GroupM Timken

COVID-19 Projects

Project PRAANA: Novel Ventilator Design

A team of engineers at the IISc has developed a novel design to build an emergency electro-mechanical ventilator for the COVID-19 crisis, using components available in India. This ventilator is built using a custom designed pneumatic system controlled by a microprocessor; it uses proprietary algorithms and techniques to blend air and oxygen in the desired ratio.

The team took about 35 days to go from the drawing board to a proof-of-concept system, and then a working prototype was developed in another two weeks.





Project PRAANA is supported by IISc, and CSR funds from SBI Foundation and Infineon Technologies India Pvt Ltd. and by the Principal Scientific Advisor's Office.

Antibody Testing for COVID-19

An IISc team has developed two distinct variants of indirect ELISA tests to detect SARS-CoV-2specific antibodies. The assay employs SARS-CoV-2 specific antigen or peptides for detection. The COVID-19 specific antibody in the blood of an individual binds with the antigens immobilized on the microwell and can be detected using antibody against human IgG/IgM antibodies.

This peptide-based ELISA assay has 100% specificity albeit with poorer sensitivity (50%) and this method costs only half as much as protein assays. This method can be used to understand seroprevalence in a country like India where PCR-based assays are not feasible for all.

This project is a collaboration between IISc, Bangalore Medical College (BMC), St. John's Research Institute (SJRI), and Tata Center for Interdisciplinary Sciences (TCIS). The project is funded by Capgemini in coordination with the Principal Scientific Advisor's Office.

Mobile Diagnostic Lab for COVID-19

An end-to-end COVID-19 testing solution called Mobile Infection Testing and Reporting (MITR) Labs has been developed by faculty members at the IISc, in collaboration with an IISc-incubated startup called ShanMukha Innovations.

MITR Labs is India's first and only Biosafety Level two-plus (BSL 2+) compliant mobile diagnostic lab approved by the Indian Council for Medical Research (ICMR). The mobile labs which consist of a fleet of vans allow healthcare workers to collect. process, and test samples using RT-PCR onsite, and upload results directly to the ICMR portal. The mobile labs have the capacity to process between 6,000 to 9,000 samples per month with the potential to scale up with additional equipment and manpower, thus adding to India's response to the COVID-19 challenge.



SBI Foundation, Toyota Kirloskar Motors, and Tata Motors have funded this project in coordination with the Principal Scientific Advisor's Office, Collins Aerospace (through United Way Bengaluru) and Borgs Software Solutions.

COVID-19 Testing at IISc

The Centre for Infectious Diseases (CIDR) at IISc hosts several state-of-the-art facilities for cutting-edge biological research. CIDR has a BSL3 facility for working with infectious samples such as tuberculosis bacteria and HIV. With the recent order from the Principal Scientific Advisor to the Government of India's office and ICMR, CIDR initiated the process for COVID-19 testing at IISc.

The samples are initially processed at the Biosafety level 3 facility of the CIDR and then further processed in a biosafety level 2+ laboratory. At this facility, the samples received in the form of swabs are first inactivated at the BSL3, properly catalogued, and then moved to the BSL2+ laboratory for the purpose of RNA extraction, cDNA synthesis followed by RT-PCR. Once the results are available, the data team prepares reports and the results are directly uploaded to the ICMR website. At present, CIDR tests over 400 samples per day.

The project has received CSR funding from various organisations.

Philanthropic Contributions



Monsoon workshop on Experimental Neuroscience



IISc - Pennsylvania State University Joint Workshop



MoU signing between IISc & Western Sidney University, Australia



Initiative on Brain, Computation and Data Science - Pratiksha Trust

Pratiksha Trust, founded by Mr. Kris Gopalakrishnan and Mrs. Sudha Gopalakrishnan, has been extending very generous support to IISc in promoting research in brain science, data science, and computing architectures and algorithms inspired by the brain.

The Pratiksha Trust has made a generous endowment for three distinguished visiting chairs at IISc and many other academic activities related to the research of this group are also supported by this endowment.

Pratiksha Trust Visiting Chairs

- Shri K. Vaidyanathan Distinguished Chair
- Smt. Sudha Murty Distinguished Chair
- Pratiksha Trust Distinguished Chair

Pratiksha Trust Young Investigators

These awards have been instituted to recognize and reward the accomplishments of young faculty members or prospective faculty members. The Pratiksha endowment supports the award of up to five Young Investigator awards at any time.

Other support

- Internal Tech Workshops
- Seed Funding for projects
- Pratiksha Postdoctoral Fellowship for students
- Pratiksha Travel Fellowships for young faculty members, Ph.D. students, and Postdoctoral fellows to attend top-tier international conferences and workshops

Designing a rodent behaviour arena

Philanthropic Contributions

Gore Subraya Bhat Chair Associate Professor in Digital Health

The Gore Subraya Bhat Chair Associate Professor in Digital Health, established with an endowment from Mr. Sameer Bhat, Co-founder eClinicalWorks, Boston, USA, in memory of his grandfather. The Chair will be awarded to a selected Associate Professor of the Institute, with stellar research performance in the general area of Digital Health, including but not limited to topics such as:

- Diagnostics and Therapeutics
- Organs and Body-on-Chip
- Medical Devices
- Human System Modelling
- Omics for Healthcare
- AI/ML for Clinical Decision Support Systems

Nominations will be evaluated by a committee comprising of a Dean and members who are subject experts.

Other Contributors (2020)

CORPORATES/ PHILANTHROPISTS

Accel Partners Ansys Software Azim Premji Foundation Charties Aid Foundation of America Cisco Citrix R & D India Defense Research and Development Organisation Google Asia Pacific, Singapore Huawei Technologies India IBM India Nokia Solutions & Networks Ocwen Financials Ravi Salgia RD Tata Trust Samsung R&D Institute Bangalore Sheila Somanath Solcen Technologies Sprinklr India TATA Consulting Engineers Tata Education Trust Toyoto Tsusho Insurance Broker India Triveni Turbine WIPRO

OTHERS

Abhimanyu J L Aparna Kota Bikash Pradhan Gaurav Sablok Krishn A Naveen Kumar Salutagi Parimal Parag Ravikumar Rangasamy Rohit Kulshrestha

Mr. Sameer Bhat



ALUMNI AFFAIRS



This year, several alumni have contributed to support various activities at the department as well as Institute level.

Major Alumni Contributions (Rs. 1 lakh and above)

Prof. Roddam Narasimha ('53)
Rs. 25 lakhs - Late Dr. R. Aditi Simha Annual Lecture
Rs. 10 lakhs - Student/Staff Welfare fund for the Dept. of Physics

Dr. Gajanana C. Birur ('71) Rs. 5.25 lakhs - Teachers training programme at the Challakere Campus Rs. 3.45 lakhs - Aerospace Engineering Department Initiative

Prof. Satya N. Atluri ('66) Rs. 1.38 lakhs - Student Travel Fund

Prof. K. R. Sreenivasan ('70) Rs. 1.12 lakhs- Prof. Roddam Narasimha Endowment Lecture

D.N. Prahlad ('77)
Rs. 2.37 lakhs - UG Smart Classroom
Rs. 2.1 lakhs - D. Nagarajachar Student Travel Grant
Rs. 1.5 lakhs - Laptop initiative for the Department of Computer Science and Automation

Gopikrishna Mamidipudi ('85) Rs. 3.7 lakhs - Hardware support to students for online classes at IISc

Ashok Waran ('83) Rs. 1 lakhs - Hardware support to students for online classes at IISc

Avishek Chatterjee ('2016) Rs. 1 lakhs - IISc's Unrestricted Corpus

Ramachandra Kini ('70) Rs. 2 lakhs - ECE Alumni Research Fund for Students

Prof. Sargur Srihari ('70) Rs.2 lakhs - ECE Alumni Research Fund for Students

B.G. Satyanarayana ('70) Rs. 1 lakhs - ECE Alumni Research Fund for Students

Malathi Limaye ('70) Rs. 1 lakhs - ECE Alumni Research Fund for Students

Alumni Contributions (2020)

Chemical Engineering Summer Internship

Boddu Venkatesh Pramod Patil

CSA Research Fund Anonymous

ECE Alumni Research Fund for Students-BE ECE 1970 Batch Lalitha Umanath

Hardware Support for Online Classes at IISc

Anusha Posinasetty Arka Lahiri Ashok Srivastava Avik Ray Brigadier S Ramakrishnan Chandrashekar Matham Chinnathambi Arunachalam Asari D Anil Kumar Naik G Aranganathan Ganesan Viswanathan Gopal Malakar Hari Prasad Arisetty Harit Dave Narasimha Rao Kolli Narasipur Anantha Navaneethan P. Petety V. Balaji Phoolan Prasad Raghunath Subramanian Rajamani Ganesh

Rajat Sanyal Ravi Ananth Ravi S Rekha Gautam Mayank Singh Mohit Dhingras S Bhargava Sathyajit Bangalore Shrikant P Bhat Sujata Tibrewala Swapnesh Banerjee Vinod Chidambar Padaki Anonymous (12 contributions)

IISc's Unrestricted Corpus K Kamal

UG Tuition Reimbursement

Deepak Joshi ECE Batch- 1969 Ramesh Venkataraman Satish Mundra Sundaresan Sambamurthy Vinayak Subramanian

ECE Alumni Research Fund for Students Nilamani Mohanty

Financial Support for Student Gopalakrsihna A V

Donation to Support Students with Laptops, Internet facilities for Online Classes at IISc



The Coronavirus Disease (COVID-19) outbreak has imposed serious restrictions on global education systems. Educational institutes and universities have been closed for several months now, and institutes across the globe have adapted to virtual platforms to conduct classes online.

IISc too has chosen to go completely online with its classes this academic year.

We invite alumni to contribute funds to support laptops and hot spots to enable students at IISc who come from economically less privileged backgrounds and cannot afford basic needs such as laptops, wi-fi connection which are required to attend online classes.

In an effort to help these students, the Institute would like to seek funds from alumni that will help students to get much needed IT hardware support essential for their studies. Each student requires about Rs. 75,000/- to get a new system and hotspot facility support for one year. We have already received immense support from various alumni who have generously contributed to this project.

To see the full list of donors and to contribute for the year 2021, please visit: <u>https://www.alumni.iisc.ac.in/g/donation-to-support-students-with-laptops-internet-facilities-for-online-classes-at-iisc</u>

UG Tuition Reimbursement

In 2011, 100 years after IISc admitted its first batch of students in 1911, the Institute began offering a unique four-year Bachelor of Science (Research) programme. Some of the brightest students in the country are selected through rigorous entrance exams. To encourage more young students to join this programme, the Institute planned to raise funds that help reimburse the tuition fees for such bright students. In this regard, last year an appeal was made to alumni to support the tuition reimbursement of one UG student by contributing Rs. 10,000 (approximately US\$150).

We have received overwhelming support from various alumni who have generously contributed to this project. So far, we have received an amount **Rs. 14, 91,859/-** for this initiative from alumni throughout the globe. A total of 128 UG students benefited from this tuition fee waiver initiative.

To see the full list of donors, please visit: <u>https://www.alumni.iisc.ac.in/g/tuition-waiver-for-ug-students</u>

We invite alumni support in connecting to corporates and raising funds for these projects. Please contact us to find out more







State-of-the-art building for Energy Research

- A 100,000 sq. ft. contemporary building
- Labs for current and new faculty members
- Classrooms for students (incl. proposed MTech Energy program)
- Workshop, training facilities for skill development programs
- Cutting-edge facilities for major R&D projects
- Facilities for developing products and prototypes

UG Instructional Complex

- State-of-the-art digital learning centre keeping pace with developments and pedagogy
- To support the increased intake of students planned under IoE from current 4400 to 6000 students
- Facilities to especially support the UG programme

New 500-room women's hostel

 Apart from new women's hostel consisting of 3 blocks under construction, a second 500room women's hostel is also planned to be constructed on the IISc Bengaluru campus in the near future.

Departmental projects

- Computational Data Science Skill Development Centre
- Applied Scientific Computing Lab
- M.Tech. CDS Lab

We invite alumni support in connecting to corporates and raising funds for these projects. Please contact us to find out more

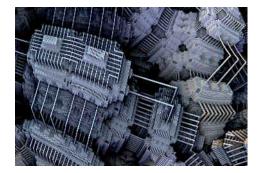
Digital Health

- Ambitious initiative to establish a futuristic digital hospital using innovative haptic interfaces, going beyond telemedicine & electronic health records
- Setting up a health data centre, health library, real-time health heat maps
- Research on digital twin for health and bodyon-chipsr developing products and prototypes



Quantum Technologies

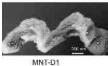
- Focus on quantum sensors, quantum communications and quantum simulations
- Fabrication and characterisation in the areas of solid state quantum devices, superconducting qubit devices, sources and detectors for quantum communication networks, and quantum sensors



Micro & Nano Robotics

- Nanorobots that can swim in biological fluids
- Bio-inspired MEMS based FFT for analog neural networks Implants for cochlea
- Self-healing circuits
- Microfluidic interfaces for cell manipulation







MNT-D2

The IISc invites contributions from corporates and philanthropists towards the Institute's development programmes. We also welcome partial funding and joint funding from multiple contributors.

TAX INFORMATION:

- Contributions made to the IISc are exempted under Section 80G(2)(a) (iiif) of the Income Tax Act, 1961
- Contributions towards scientific research at IISc are exempted under section 35(i)(ii) of Income Tax act 1961
- IISc is also exempted from the provision of the Foreign Contribution Regulation Acts, 1976, 2010 and 2020.
- IISc is audited by the Comptroller and Auditor General of India (CAG)
- Corporates may avail of the provisions of the CSR Rules, 2014.

CONTACT:

Office of Development and Alumni Affairs (ODAA) Indian Institute of Science, Bangalore – 560012 cdc.odaa@iisc.ac.in | alumniaffairs.odaa@iisc.ac.in +91 80 2293 3590/3591 www.odaa.iisc.ac.in | www.alumni.iisc.ac.in