



The Indian Institute of Technology Guwahati has been awarded 5th position at the ‘Swachhta Ranking 2017’ under the category of government institutions. An award ceremony based on ‘SWACHHTA’ Ranking 2017 of Higher Educational Institutions was held in New Delhi. Union Human Resource Development Minister, Shri Prakash Javadekar gave away the prizes.

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About 3500 institutions participated in the Ranking process, out of which only 174 institutions were shortlisted across four categories, viz., Universities, Technical Institutions, Colleges and Government institutions. 25 out of the 174 shortlisted higher education institutes have been selected for the top rankings.

Institutions were judged on the basis of a number of parameters of cleanliness like student / toilet ratio, kitchen hygiene, availability of running water, modernity of toilet & kitchen equipment, campus green cover, garbage disposal in hostels and academic buildings, disposal techniques, water supply systems and also a certain weightage to whether the institutions have adopted any neighboring locality or village to spread awareness & activities in Swachhta.

Prof. P. Robi, Dy. Director, IIT Guwahati and Prof. P. K. Iyer, Prof. In-Charge, Peer Review & Institutional Ranking, IIT Guwahati, received the award on behalf of the Institute.

Conference / Seminar Abroad

BSBE

Dr. Rajaram Swaminathan, Professor attended the 19th IUPAB Congress and 11th EBSA Congress at Edinburgh, United Kingdom from 16.07.17 to 20.07.17.

Dr. Bithiah Grace Jaganathan, Associate Professor attended the 2nd Asia Pacific Droplet Digital PCR Symposium at Seoul, South Korea from 04.09.17 to 05.09.17.

Chemical

Dr. Animes Kumar Golder, Associate Professor attended the 10th World Congress on Water Resources and Environment, 'Panta Rhei' conference at National Technical University of Athens, Greece from 05.07.17 to 09.07.17.

Dr. Chandan Das, Associate Professor attended the 10th World Congress on Water Resources and Environment, 'Panta Rhei' conference at National Technical University of Athens, Greece from 05.07.17 to 09.07.17.

Dr. Manish Kumar Goyal, Assistant Professor attended the 10th World Congress on Water Resources and Environment, 'Panta Rhei' conference at National Technical University of Athens, Greece from 05.07.17 to 09.07.17.

Dr. Rajesh Kumar Upadhyay, Associate Professor attended the 10th International Symposium on Catalysis in Multi-phase Reactors (CAMURE-10) and 9th International Symposium on Multifunctional reactors (ISMR - 9) at Huanghai Hotel in Qingdao, China from 07.07.17 to 10.07.17.

Dr. Tamal Banerjee, Professor attended the 10th Liquid Matter conference at Ljubljana, Slovenia from 17.07.17 to 21.07.17.

Dr. Dipankar Bandopadhyay, Associate Professor attended the Advanced Fluid Mechanics: Theoretical and Numerical Modeling, Experimental Approaches at University of Bordeaux, France from 11.09.17 to 13.09.17.

Chemistry

Dr. Ashish Kumar Gupta, Professor attended the Advances in Theory of Electronic Resonances conference at Telluride CO, USA from 17.07.17 to 21.07.17 and Research work at University of California, Los Angeles, USA from 23.07.17 to 31.07.17.

Dr. Jubaraj Bikash Baruah, Professor attended the 17th Asian Chemical Congress at Melbourne, Australia from 23.07.17 to 28.07.17.

Dr. Manabendra Sarma, Associate Professor attended the 4th International Conference on Physical and Theoretical Chemistry at Crowne Plaza Dublin Airport Hotel, Dublin, Ireland from 18.09.17 to 19.09.17.

Civil

Dr. Arup Kr. Sarma, Professor attended the Water and the Neighborhood at Bangkok, Thailand from 21.08.17 to 23.08.17.

Dr. Budhaditya Hazra, Assistant Professor attended the International Conference on Structural Dynamics (EURODYN 2017) at Rome, Italy from 10.09.17 to 13.09.17.

Computer Science

Dr. Rashmi Dutta Baruah, Assistant Professor attended the IEEE International Conference on Fuzzy Systems 2017 at Naples, Italy from 09.07.17 to 12.07.17.

Dr. Pradip Kumar Das, Professor attended the International Conference on Watermarking and Image Processing (ICWIP 2017) at Paris, France from 06.09.17 to 08.09.17.

Design

Dr. Sougata Karmakar, Associate Professor attended the 8th International Conference on Applied Human Factors and Ergonomics 2017 at Westin Bonaventure Hotel, California, USA from 17.07.17 to 21.07.17.

Dr. Urmi Ravindra Salve, Assistant Professor attended the 8th International Conference on Applied Human Factors and Ergonomics 2017 at Westin Bonaventure Hotel, California, USA from 17.07.17 to 21.07.17.

Electronics

Dr. Srinivasan Krishnaswamy, Assistant Professor attended the 20th World Congress of the International Federation of Automatic Control (IFAC) at Toulouse, France from 09.07.17 to 14.07.17.

Dr. Mahima Arrawatia, Assistant Professor attended the 2017 IEEE International Symposium on Antennas and Propagation and USNC-USRI Radio Science Meeting AP-S/URSI 2017 at San Diego, California, USA from 09.07.17 to 14.07.17.

Dr. Praveen Kumar, Associate Professor attended the 2017 IEEE PES General Meeting at Chicago, USA from 16.07.17 to 20.07.17.

Dr. P. K. Bora, Professor attended the 4th International Conference on Advances in Electrical Engineering 2017 at Dhaka, Bangladesh from 28.09.17 to 30.09.17.

Humanities

Dr. Bodhisattva Sengupta, Associate Professor attended the 18th meeting of the Association for Public Economic Theory (PET 2017 - PARIS) at Université Panthéon – Assas Paris II, France from 10.07.17 to 13.07.17.

Dr. Priyankoo Sarmah, Associate Professor attended the Interspeach 2017 at Stockholm, Sweden from 20.08.17 to 24.08.17.

Dr. Anamika Barua, Associate Professor attended the Brahmaputra meets Mekong: Media Workshop at Bangkok, Thailand from 21.08.17 to 23.08.17.

Dr. Daksha Chandu Parmar, Assistant Professor attended the Disciplining Reproduction in Modern South Asia: The Emergency and Beyond at United Kingdom from 04.09.17 to 05.09.17.

Mathematics

Dr. Ayon Ganguly, Assistant Professor attended the 10th International Conference on Mathematical Methods in Reliability (MMR 2017) at INP-ENSE3, GreEn – ER, Grenoble, France from 03.07.17 to 06.07.17.

Dr. Rupam Barman, Associate Professor 30th Journee's Arithmetiques 2017 at Universite de Caen, France from 03.07.17 to 07.07.17.

Dr. Shreemayee Bora, Associate Professor attended the Foundations of Computational Mathematics (FOCM) at University of Barcelona, Spain from 10.07.17 to 19.07.17.

Dr. Pratyosh Kumar, Assistant Professor attended the Analysis and Applications at Wroclaw, Poland from 04.09.17 to 08.09.17.

Mechanical

Dr. Pranab Kumar Mondal, Assistant Professor attended the International Conference on Thermal and Fluid Engineering Thailand 2017 at Bangkok, Thailand from 03.07.17 to 05.07.17.

Dr. Poonam Kumari, Assistant Professor attended the 25th International Conference on Composites / Nano Engineering (ICCE-25) at Rome, Italy from 16.07.17 to 22.07.17.

Dr. Mamilla Ravi Sankar, Assistant Professor attended the 2017 2nd International Conference on advanced Materials Research and Manufacturing Technologies (AMRMT 2017) at Phuket, Thailand from 02.08.17 to 05.08.17.

Dr. Karuna Kalita, Associate Professor attended the Journal of Structural Mechanics 50 Years anniversary seminar (RM50) at Finland from 24.08.17 to 25.08.17.

Dr. Pranab Kumar Mandal, Assistant Professor attended the Advanced Fluid Mechanics: Theoretical and Numerical Modeling, Experimental Approaches at University of Bordeaux, France from 11.09.17 to 13.09.17.

Physics

Dr. Arunansu Sil, Associate Professor attended the 13th International Workshop on the Dark side of the Universe 2017 (DSU 2017) at Daejeon, South Korea from 10.07.17 to 14.07.17.

Dr. Perumal Alagarsamy, Professor attended the Collaborative Research work at National Institute for Materials Science (NIMS), Japan from 31.07.17 to 06.08.17 and also attended “The magnetic Recording Conference (TMRC 2017)” at Tsukuba, Japan from 02.08.17 to 04.08.17.

Dr. Sovan Chakraborty, Assistant Professor attended a Research collaboration meeting at Max Planck Institute for Physics (MPP), Munich, Germany from 25.09.17 to 07.10.17 and attended the Supernova Neutrino Observation workshop at Mainz Institute for Theoretical Physics, Johannes Gutenberg University, Germany from 09.10.17 to 13.10.17.

ICSIMR 2017



The Conference on Sophisticated Instruments in Modern Research (ICSIMR 2017) was organized at IIT Guwahati. The first of its kind conference was organized jointly by Indian Institute of Technology Guwahati, Institute of Advance Study in Science and Technology, Tezpur University, Gauhati University and North Eastern Hill University. The conference ended on 1 July 2017.



Students Statistics

Sl. No.	Department/ Centre	No. of Students	No. of UG Students	No. of PG Students	No. of PhD Students	No. of Foreign Students
1	Computer Science and Engineering	545	349	84	112	4
2	Electronics and Electrical Engineering	803	496	117	190	3
3	Mechanical Engineering	739	319	211	209	8
4	Civil Engineering	700	294	206	200	11
5	Design	308	183	49	76	4
6	Biosciences and Bioengineering	467	192	72	203	3
7	Chemical Engineering	525	259	88	178	6
8	Physics	396	167	95	134	2
9	Chemistry	470	158	94	218	0
10	Mathematics	368	209	96	63	0
11	Humanities and Social Sciences	153	0	60	93	1
12	Energy	101	0	32	69	2
13	Environment	50	0	0	50	0
14	Nanotechnology	41	0	0	41	0
15	Rural Technology	31	0	18	13	0
16	Linguistic Science and Technology	9	0	0	9	0
		5706	2626	1222	1858	44

PhD Completed during July- September 2017

Sl. No.	Department/ Centre	No. of Students	Sl. No.	Department/ Centre	No. of Students
1	Computer Science and Engineering	3	9	Chemistry	4
2	Electronics and Electrical Engineering	8	10	Mathematics	3
3	Mechanical Engineering	3	11	Humanities and Social Sciences	4
4	Civil Engineering	7	12	Energy	0
5	Design	2	13	Environment	1
6	Biosciences and Bioengineering	3	14	Nanotechnology	0
7	Chemical Engineering	9	15	Rural Technology	0
8	Physics	0	16	Linguistic Science and Technology	0



As a part of its 19th Edition, Techniche – IIT Guwahati organized its 9th edition of Guwahati Half Marathon, a running event organized to promote a better social and human interaction amongst the residents in and around Guwahati.

One of the largest events of its kind organized by a student body, the Marathon has evolved coherently over the years since its inception in 2009 to become the largest half Marathon in North East India. The marathon was initiated to provide a platform for people from different walks of life to come and spread their cognizance and sense of concern for a better society. The 9th edition of the marathon was successfully organized on 27th August 2017 with its theme “Run for awareness of Organ Donation – Live Life Give Life”.

The Guwahati Half Marathon '17 with its theme “Organ Donation” appealed people to be a part of the change which was for the prosperity of society. It appealed to the people to become more responsible towards the issues of society like poverty, illiteracy, hunger, lack of development, inflation amongst others. Guwahati Half Marathon'16 gave everyone a platform to think about these issues and brought a little bit of change in the perception of the general public.

Professional footballer Durga Boro who was the lead striker for Northeast United FC in the first season of ISL was the Chief Guest of the marathon. Mr. Abu Nechim, Bowler from Royal Challengers Bangalore Team was the Guest of Honor and Mr. Bharat Nayak, Editorial Director and Co-founder of The Logical Indian was the Special Guest of the Marathon.

Keeping in mind the huge participation observed from various walks of life, the Guwahati Half Marathon had been conducted as four events:

Glory Run- The flagship race of the half marathon, it was a 21-km race which was meant mainly to quench professional runners' thirst. Participants from all around India participated in this category.

Spirit Run- It was a 6km race specially designed for the citizens of Guwahati. All age groups were participated in this event which encouraged all citizens to come together and run a race for the cause of their society.

General Championship- This was an event exclusive for schools and colleges, where they battle was out for that one trophy of the General Championship.



IIT Guwahati witnessed the kick start of its 19th edition of annual techno management festival Techniche on 31st August 2017 at the Bhupen Hazarika auditorium. The chief guest of inauguration ceremony was Air Commodore Shashank Mishra, Air Force Station Borjhar, Guwahati. The session started with a lamp lighting ceremony by Dean of Student Affairs, Prof. Chandan Mahanta and AOC, Borjhar.



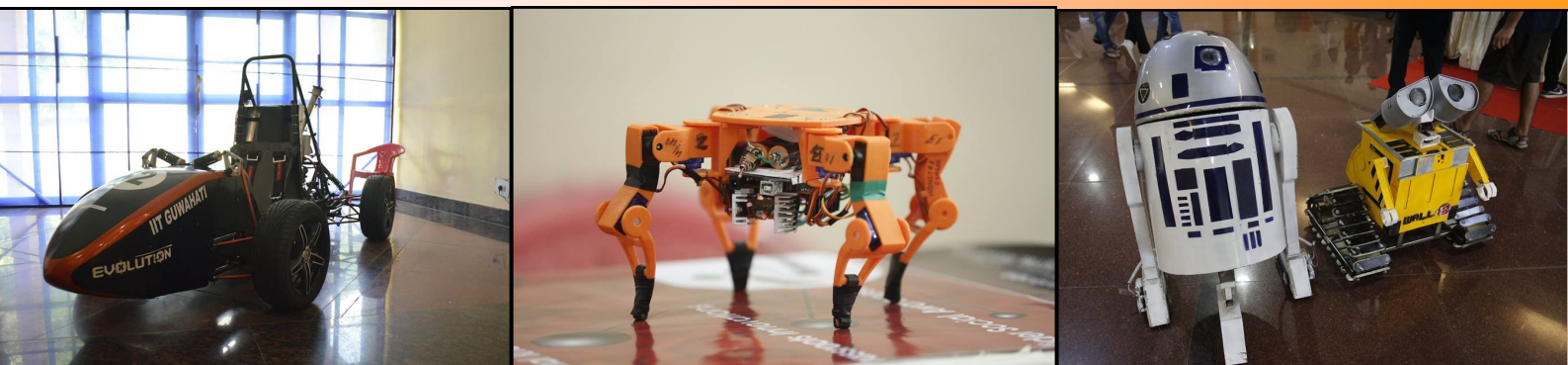
Chief Guest Airforce Office Commander, Air Commodore Shashank Mishra, Air Force Station Borjhar, Guwahati being felicitated by Prof. Chandan Mahanta, Dean, Students, IIT Guwahati.

The Keynote lecture was delivered by Brooks Moore, host of 'How It's Made'

– his interests in piano, photography, horses and his experiences of being in Radio and Television Stations. All in all a charming, optimistic personality who captivated the audience till the time he was on the stage. The night ended with a stunning solo performance by Artist Dhruv Vishwanath who is one among the Top 30 'under 30' Guitarists. He performed some of his own composed tracks with relatable lyrics in his own voice and entertained the audience.

1st September 2017 witnessed various programmes like TechExpo, Technotlon, Workshops and Robotics Module. The crowd witnessed formal landing of an Air Force Chopper which marked the inception of the Air Force Exhibition. In the Lecture Series, a keynote lecture was delivered by Dr. Nadrian Seeman, a famous American chemist and Crystallographer and well known as Father of DNA Nanotechnology. The event was followed by another keynote by Dr. Subramanian Swamy, Member of Rajya Sabha, Harvard Associate Professor and a famous Economist. The lecture witnessed a huge crowd with people from various parts of the North East and other parts of the country. Apart from keynotes, Techniche witnessed huge crowd in Exhibitions, Fun events, Workshops and all other competitions. As part of 'After the Sunset' event, the night concluded with a hilarious comedy show by Mr. Sahil Shah, co-founder of East India Comedy. Sahil is a famous standup comedian and was welcomed in a very cheerful way by an amazing crowd.

2nd September started with another round of judging of Tech Expo by Mr. Brooks Moore from Discovery Channel and Dr. Thomas Barclay, Research Scientist from NASA. Unique projects were demonstrated by school students like 'Goggles for the Blind', 'Voice Controlled Car', etc. Also first slot of workshops including Ethical Hacking, Sixth Sense



The IITG Monitor Robotics, etc. were concluded and amazing feedbacks were received from the participants.

As a part of Lecture Series, Mike Morasky, VFX designer of 'Lord Of The Rings', 'The Matrix', 'Pirates Of The Caribbean Saga', etc. and Music Composer in CSGO gave his keynote. Later, a video keynote by Shri Suresh Prabhu, Honorable Railway Minister was played to the audience wherein he spoke about 'How Ideas are important to bring in big changes to life' and about how just these ideas won't be sufficient to taste success but efficient implementation would surely.

Moving on, as a part of 'After the Sunset' the crowd witnessed a mesmerizing performance by 'The Animation Crew' from South Korea. Perfect alignment, dance composing, extraordinary stunts and colourful animation were few elements which made the show amazing.

Day 3 started off with the final rounds of Technothon, Tech Expo and other events including TechOlympics and Robotics. The final winners of Technothon were announced who will be awarded a fully funded trip to NASA, USA this year.

The two teams were—

Rohan Kishore and Ayush Sharan, Hauts Squad from Bangalore

Aadish Jain and Mradul Agarwal, Juniors Squad from Jaipur

Dr. Thomas Barclay, Research Scientist from NASA gave his keynote as a part of Lecture Series. His speech included the details of various projects planned by NASA to find an exo-planet in space and discover Alien Life.

The last event of Techniche was a performance by Naalayak – The Band who entertained the audience to the fullest with their amazing songs and most relatable lyrics. Techniche ended with felicitation of all performers and a thanking



Prof. Gautam Biswas, Director, IIT Guwahati welcoming Dr. Subramanian Swamy, Member of Rajya Sabha, Harvard University Associate Professor and a famous Economist .

Students' Awards & Honours

Mr. Asif Raza, Dept. of BSBE, was awarded fellowship to attend a workshop on EMBO Practical Course: Current Methods in Cell Biology by the EMBL Heidelberg, Germany from 11 to 19 September 2017.

Mr. Abshar Hasan, PhD research scholar at the BSBE Department, has been provisionally selected by the Commonwealth Scholarship Commission in the UK for a Commonwealth Split Site Scholarship, tenable at University of Strathclyde for studies in Materials Science.

Mr. Chirag Gupta, a BTech student (2017 batch) in the Department of Computer Science and Engineering of IIT Guwahati has been chosen as the prestigious Aditya Birla Scholar – Class of 2017-18.

Ms. Sonia, Dept. of CSE was the winner of Hackathon organized by the IEEE International Conference on Systems, Man and Cybernetics, SMC, Banff, Canada held from 5 - 8 October 2017. A Cash Award of 1000 USD was awarded to each member of the seven member team.

Ms. Akriti Kaur, Dept. Of Design, received the SIGGRAPH Student Travel Scholarship from Association of Computing Machinery - ACM for presenting the paper in Virtual Reality in September 2017.

Designer M. P. Rijas and Faculty Supradip Das's design work had been selected in the Global Grad Show Dubai Design Week. Both of them are invited to showcase the

Furniture design project and they will be showcasing the furniture design in the Global grad show along with projects from the prestigious institutions like Royal College of Art, Rhode Island School of Design, Nanyang Technological University and many more in November 2017.

Mr. Anmol Srivastava Dept. of Design, received the ACM SIGCHI Travel Scholarship to attend 50th Turing Award Ceremony from the Association of Computing Machinery - ACM SIGCHI.



Design Student Ambassador Anmol Srivastava invited to witness Turing award considered equivalent to Nobel in Computing Filed.

Ms Jyoti Kainthola, Centre for the Environment received the ISWA-SWIS Winter School 2018 Scholarship from the University of Texas at Arlington, USA.

Ms. Payal Mazumder, Centre for the Environment received the ISWA-SWIS Winter School 2018 Scholarship from the University of Texas at Arlington, USA.

Faculty Awards & Honours



Teaching methods and curriculum design innovations evolved at the UE-HCI lab since 2002-03 by Prof. Pradeep Yammiyavar have been recognized and conferred the "Teaching Innovator award – 2016" by the MHRD-GOI- under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching.

This honor is in recognition of over three decades of academic contribution by Prof. Pradeep Yammiyavar in establishing creative Design as a multidisciplinary cum interdisciplinary knowledge domain in higher technical institutions like IISc and IITG through an innovative curriculum framework – D.S.T.E.A.M.

The philosophy behind this innovative framework evolved from research areas of Interaction Design, HCI and Usability Engineering carried out at India's pioneering *Useability Engineering Human Computer Interaction design Laboratory* at the Department of Design. This novel Curriculum structure and pedagogy initiated in 2003 has played a unique and significant role in the success of the academic programs of the Department of Design at IITG. It has trained and placed hundreds of pioneering first time Design Innovation Leaders for the creative Design- ICT Industry worldwide. It has contributed to DoDs reputation as one of India's best Design Schools.

BSBE

Title: Enhancing microalgal biomass productivity at higher CO₂ concentrations and simultaneous carbon precipitation as mineral carbonates.

Funding Agency: SERB.

Principal Investigator: Dr. Dineshababu Gnanasekaran;
Mentor: Dr. Debasish Das.

Title: Characterization of predicted novel extracellular proteins of pathogenic *Leptospira* interrogans

Funding Agency: ICMR

Principal Investigator: Dr. Manish Kumar

Chemistry

Title: Study of Carbon-Carbon and Carbon-Heteroatom Bonds Formations via C-H Functionalization

Funding Agency: SERB

Principal Investigator: Tariq Ahmad Shah; Mentor: Prof. T. Punniyamurthy

Title: Cancer immunotherapy: Mechanism based design of potent inhibitor for Indoleamine-2,3-dioxygenase 1

Funding Agency: SERB

Principal Investigator: Dr. Sreeparna Das; Mentor: Dr. Debasis Manna

Title: Porphyrinoid based columnar liquid crystals for organic solar cells

Funding Agency: SERB

Principal Investigator: Dr. Hemanta Kalita; Mentor: Dr. A. S. Achalkumar

Title: Development of some novel chemical sensors

Funding Agency: SERB

Principal Investigator: Dr. Sudhir Kumar Shoora; Mentor: Dr. Uttam Manna

Title: Design and development of novel broad absorption semiconductor/oxides for efficient water splitting: Role of morphology and charge transfer amongst the composites

Funding Agency: SERB

Principal Investigator: Dr. M. Qureshi

Title: Bulk: Superhydrophobic polymer materials for controlled and tunable release of antimicrobial peptides" A novel material for generating antimicrobial material

Funding Agency: DBT

Principal Investigator: Dr. Uttam Manna

Title: Peptide based semiconducting materials for organic-electronic devices

Funding Agency: DST

Principal Investigator: Dr. Debapratim Das

Civil

Title: Study on the reflectance and thermal emission spectral characteristics of Orthopyroxene bearing Granitic rocks for Terrestrial and Planetary Remote Sensing

Funding Agency: SERB

Principal Investigator: Dr. Archana M. Nair

Title: Comprehensive rainfall induced landslide hazard analysis of Sunsali and Noonmati hills in Guwahati region

Funding Agency: DST

Principal Investigator: Dr. A. Murali Krishna

Chemical

Title: Potential reaction pathways and kinetics of catalytic co-pyrolysis of lignocellulosic biomass and waste plastics in producing value added products

Funding Agency: SERB

Principal Investigator: Dr. Anjireddy Bhavanam; Mentor: Dr. Nageswara Rao Peela

Title: Ionic liquids and deep eutectic solvents as electrolytes for energy efficient electro-chemical double layer capacitor

Funding Agency: ISRO

Principal Investigator: Dr. Tamal Banerjee

Computer Science

Title: Formal verification of optimizing transformations of programs

Funding Agency: SERB

Principal Investigator: Dr. Chandan Karfa

Humanities

Title: Assessment and review of MGNREGA as a social protection intervention in the Barak Valley region of Assam

Funding Agency: UNICEF

Principal Investigator: Dr. Rajshree Bedamatta

Mechanical

Title: Compressible flow solver with immersed boundary approach

Funding Agency: ISRO

Principal Investigator: Dr. V. N. Kulkarni

Title: Forming of automotive materials at elevated temperature and selection of lubricants for sustainable manufacturing

Funding Agency: DST

Principal Investigator: Dr. R. Ganesh Narayanan

Physics

Title: Development of novel hierarchical magnetic ferrite-semiconductor heterostructures for efficient photocatalytic application

Funding Agency: SERB

Principal Investigator: Dr. Koushik Saikia; Mentor: Prof. Perumal Alagarsamy

Title: Studies of Dark Matter

Funding Agency: SERB

Principal Investigator: Dr. Tapobroto Bhanja; Mentor: Dr. Debaprasad Maity

Title: Hetero-atom doped graphene for tunable platinum based catalytic nano-hybrid

Funding Agency: SERB

Principal Investigator: Dr. Munu Borah; Mentor: Dr. Uday Maiti

Title: Theory and Phenomenology of Dark Matter beyond the thermal WIMP scenario and its possible connection to neutrino mass and leptogenesis

Funding Agency: SERB

Principal Investigator: Dr. Anirban Biswas; Mentor: Dr. Debasish Borah

Nanotechnology

Title: The Effect of Systematic Induction of Fluorine and Nitrogen on Semiconducting Property of Shape-Persistent Arylene-Ethynylene Macrocycles

Funding Agency: SERB

Principal Investigator: Dr. Kilingaru I Shivakumar; Mentor: Dr. Akshai Kumar Alape Seetharam

Patents

Inventor: Sandipan Mukherjee; Gopal Das, Aiyagari Ramesh

Title: Gastric fluid-resistant proteinaceous nanocomposite for mitigation of gastrointestinal pathogenic bacteria

Inventor: Surajit Haldar; Chandan K. Jana

Title: Preparation of alpha-tetrazolyl N-heterocycles

Inventor: Mitradip Bhattacharjee; Siddharth Thakur; Dipankar Bandyopadhyay

Title: Acoustic Diagnostic Point-of-Care Testing Device for Blood Urea Detection

Inventor: Mitradip Bhattacharjee; Sagnik Middya; Dipankar Bandyopadhyay

Title: A Point-of-Care Potential Detection Device for Different Body Parts

Inventor: Mitradip Bhattacharjee; Dipankar Bandyopadhyay

Title: A POCT device for mobile RF radiation detection

Inventor: Jyoti Chandra; Srinivasa Rao Manne; Sandip Mondal; Bhubaneswar Mandal

Title: (E)-ethyl 2-cyano-2-(((2,4,6-trichlorobenzoyl)oxy)imino) Acetate (TCBOXY): A Novel Coupling Reagent for Racemization-Free Esterification, Thioesterification, Amidation and Peptide Synthesis

Inventor: Avinash Shende

Title: Suction cup light using renewable energy.

Inventor: Upashi Goswami; Madhumita Das; Arun Chattopadhyay; S. S. Ghosh

Title: Bimetallic Sand Fe-Cu-Nano-composite based microorganism and metal exterminator system

Inventor: Tinu P. Saju; R. Ganesh Narayanan

Title: Dieless friction stir forming

Inventor: Ashish Singh; Anamika Dey ; Parameswar Krishnan Iyer

Title: Method for the fabrication of Ultralow Voltage Operated, Reduced Bias Stress, Multi-layer Dielectric System Comprising n-type Organic Field Effect Transistors

Inventor: Ashish Singh; Anamika Dey ; Parameswar Krishnan Iyer

Title: Method for the Fabrication of Solution Process Ultra low Operating Voltage Stable Organic Field Effect Transistor

Inventor: Samit Bhattacharya; T Venkatesh

Title: An ICT based system to enhance teaching and learning in large classrooms

Inventor: Subrata Tikadar; Samit Bhattacharya

Title: An ICT enabled sensitive system for improved teaching and learning in a classroom

भारतीय प्रौद्योगिकी संस्थान गुवाहाटी में हिंदी पखवाड़ा एवं हिंदी दिवस समारोह 2017

भारतीय प्रौद्योगिकी संस्थान गुवाहाटी में प्रत्येक वर्ष की तरह वर्ष 2017 में भी 1 सितम्बर 2017 से 15 सितम्बर 2017 तक, हिंदी पखवाड़ा एवं हिंदी दिवस समारोह उत्साह एवं उल्लास के साथ मनाया गया। हिंदी पखवाड़ा के दौरान संस्थान के कर्मचारियों, संकाय सदस्यों, विद्यार्थियों, एवं परिसर के बच्चों के लिए कई प्रतियोगिताओं का आयोजन किया गया। कर्मचारियों एवं संकाय सदस्यों के लिए हिंदी कविता पाठ प्रतियोगिता और निबंध लेखन



प्रतियोगिता का आयोजन किया गया। विद्यार्थियों के लिए हिंदी कविता लेखन, निबंध लेखन, और कविता पाठ प्रतियोगिताओं का आयोजन किया गया। इसके अलावा विद्यार्थियों द्वारा एक कवि सम्मेलन का भी आयोजन किया गया। सभी प्रतियोगिताओं में भारतीय प्रौद्योगिकी संस्थान परिवार के सदस्यों ने उत्साह के साथ भाग लिया। प्रतियोगिताओं के विजेताओं को हिंदी दिवस समारोह में पुरस्कार एवं प्रमाण पत्र प्रदान किए गए। पुरस्कार के रूप में विजेताओं एवं प्रतिभागियों को हिंदी पुस्तकें प्रदान की गईं।

14 सितंबर 2017 को देश भर के साथ भारतीय प्रौद्योगिकी संस्थान गुवाहाटी में भी हिंदी दिवस मनाया गया। हिंदी दिवस के अवसर पर संस्थान के डॉ. भूपेन हाज़रिका प्रेक्षागृह में एक भव्य समारोह का आयोजन किया गया। इस समारोह में संस्थान के कर्मचारीगण, संकाय, विद्यार्थियों, एवं परिसर के कुछ बच्चों भी उपस्थित थे। माननीय निदेशक महोदय प्रो. गौतम बिश्वास एवं उपस्थित संस्थान के वरिष्ठ संकाय तथा अधिकारियों द्वारा पवित्र दीप प्रज्वलन और गणेश वंदना के साथ समारोह का शुभारंभ किया गया। माननीय निदेशक महोदय और राजभाषा कार्यान्वयन समिति के कार्यकारी अध्यक्ष प्रो.रोहित सिन्हा ने सभा को संबोधित किया। इसके उपरांत वरिष्ठ हिंदी अधिकारी द्वारा वर्ष 2015-2016 की राजभाषा कार्यान्वयन से सम्बंधित वार्षिक प्रतिवेदन प्रस्तुत की गई। इसके बाद माननीय निदेशक महोदय ने अपने कर कमलों से हिंदी पखवाड़ा के दौरान आयोजित सभी प्रतियोगिताओं के विजेताओं को पुरस्कार एवं प्रमाण पत्र प्रदान किए। हिंदी दिवस समारोह के अवसर पर अभ्यागत वक्ता प्रो. ज्योतिप्रकाश तामुली, विभागाध्यक्ष, भाषा –विज्ञान विभाग, गौहाटी विश्वविद्यालय, द्वारा एक आमंत्रित व्याख्यान प्रस्तुत किया गया जिसका शीर्षक है “ हिंदी तक पहुँच बढ़ाने की ओर” |धन्यवाद ज्ञापन के साथ हिंदी पखवाड़ा एवं हिंदी दिवस समारोह 2017 औपचारिक रूप से संपन्न किया गया।



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Ravi K. Biroju, and P. K. Giri; Strong visible and near infrared photoluminescence from ZnO nanorods/nanowires grown on single layer graphene studied using sub-band gap excitation; *J. Appl. Phys.*; 2017; 122; 044302.

Jitendra Kumar, H. B. Nemade, P. K. Giri; Density Functional Theory Investigation of Negative Differential Resistance and Efficient Spin Filtering in Niobium Doped Armchair Graphene Nanoribbons; *Phys. Chem. Chem. Phys.*; 2017; 19; 29685-29692.

Energy

P. Kalita, Sangeeta Borah and Dudul Das; Design and performance evaluation of a novel solar distillation unit; *Desalination*; 2017; 416; 65-75.

P. Kalita and D. Das; Thermodynamic analysis of a modified solar still; *IASH Journal of International Association for Small Hydro*; 2017; 6; 1; 14-19.

Asha Yadav, Juhi Kumari and Pratima Agarwal; Role of Interface States on Electron Transport in a-Si:H/nc-Si:H Multilayer Structures; *American Institute of Physics, Proceedings*; 2017.

Independence Day Celebrations 2017

On this day our great nation attained independence and broke free from British colonialism after centuries of struggle and countless sacrifices made by freedom fighters. This day is celebrated with great zeal and enthusiasm across the country to pay homage to the countless sacrifices made and also to usher the spirit of togetherness, which will take our nation miles ahead in future.

The 71st Independence Day was celebrated on the 15 August 2017 at IIT Guwahati with the Director unfurling the Tricolour. The Hon'ble Director Prof. Gautam Biswas then addressed the IIT Guwahati Community.

This was followed by a colourful cultural programme by the students of the Institute, Kendriya Vidyalaya IIT Guwahati, Akshara Primary School, Sishugram and children of the campus.

All the residents of the campus were present throughout the function.



Bioscience & Bioengineering

Pawan Kumar Maurya and Pranjal Chandra; "Oxidative stress: Diagnostic methods and application in medical science"; Springer Singapore; 2017; Total page: 168; 978-981-10-4710-7.

Nandana Bhardwaj, Dimple Chouhan and Biman B. Mandal; "3D functional scaffolds for skin tissue engineering"; Functional Three-Dimensional Tissue Engineering Scaffolds: Materials, Technologies and Applications; Woodhead Publisher; 2017; 978-0-08-100979-6.

Chemistry

J. B. Baruah; "N-oxides in Multi-component Crystals and in Bottom-up Synthesis and Applications' in Multi-Component Crystals; Synthesis, Concepts, Function"; E. R. T. Tiekink, J. Zukerman-Schpector (Eds.) Walter de Gruyter GmbH, Berlin; 2017; 6; 145-164.

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A. S. Achalkumar, Manoj Mathews, Quan Li; "Stimuli-Directed Self-Organized One-Dimensional Organic Semi-conducting Nanostructures for Optoelectronic Applications"; Wiley VCH; 2017; 247-305.

S. Sarkar, A. Banerjee, B. K. Patel; "Synthesis of Bioactive Heterocycles"; CRC Press, Taylor and Francis; 2017; 139-181; 9781498734127.

Computer Science

S. Kumar, D. Goswami, A. Sarkar, A. Sur; "Communication Systems and Networks / A Buffer Aware Resource Allocation Framework for Video Streaming over LTE"; Lecture Notes in Computer Science (LNCS), Springer; 2017; 10340; 978-3-319-67234-2.

Design

Keyur Sorathia, Aditi Singh, Mayank Chhabra; "Human Computer Interaction – Interact 2017"; Springer, Cham; 2017; 10516; 431-435; 978-3-319-68058-3.

Keyur Sorathia, Kshipra Sharma, Shimmila Bhowmich, Preetham Kamidi; "Human Computer Interaction – Interact 2017"; Springer, Cham; 2017; 10516; 459-463; 978-3-319-68058-3.

Electronics

Rishikesh Kulkarni and Pramod Rastogi; "Single and Multi-component Digital Optical Signal Analysis- Estimation of phase and its derivatives"; IOP Science; 2017; Total page: 214; 978-0-7503-1469-5.

Humanities

M. Kumari, S. Mallick; "Debating the Controversies: A Study of Agricultural Innovation Systems in India"; Globalization and Indias Innovation Systems: Towards Creative Destruction; Mahatma Gandhi University Press; 2017; 129-135; 978-93-80419-35-0.

Maths

Debasis Kundu and Ayon Ganguly; "Analysis of Step-stress Models: Existing Results and Some Recent Developments"; Elsevier/Academic Press, London, UK; 2017; Total page: 186; Ebook : 9780081012406; Paperback : 9780128097137.

Mechanical

D.N. Basu, M.K.S. Sarkar; "Supercritical Natural Circulation Loop: A Technology for Future Reactors"; Advanced Applications of Supercritical Fluids in Energy Systems, IGI Global, Hershey PA, USA; 2017; 6; 188-214.

Ogier Maitre, Frederic Kruger, Deepak Sharma, Stephane Querry, Nicolas Lachiche and Pierre Collet; "Parallelizing Evolutionary Algorithms on GPGPU Cards with the EASEA Platform"; In Programming multi-core and many-core computing systems, edited by Sabri Pllana, Fatos Xhafa; 2017; 15.

Sachin Singh, , V.K. Jain, J. Ramkumar; “Abrasive flow finishing process and Modeling”; Nanofinishing Science and Technology: Basic and Advanced Finishing and Polishing Processes; 2017; 75-110; 978-1-315-40409-7.

Deepak Mylavarapu, Manas Das, Ganesh Narayanan R; “Prediction of Temperature Evolution During Self-Pierced Riveting of Sheets”; Handbook of Research on Manufacturing Process Modeling and Optimization Strategies, IGI Global; 2017; 381-298; 9781522524410.

Niraj Kumar Mishra, Snehasish Panigrahy, Muthukumar P; “A Review on Clean Porous Medium Combustion”; Springer Nature Singapore Pvt Ltds.; 2017; 16; 978-981-10-7184-3.

Energy

Pankaj Kalita, Munu Borah, Rupam Katak, Dipti Yadav, Dipam Patowary, Rupam Patowary; “Sustainable Biofuels Development in India, Biogas and Fuel Cell as Vehicular Fuel in India”; Springer International Publishing; 2017; 87-133; 978-3-319-50217-5.

Visitors from other Institutes / Universities

BSBE

Dr. Nihar Ranjan Nayak, Ramalingaswami Fellow of DBT, Senior Scientist, Regional Plant Resource Centre, Bhubaneswar; ‘Protein Methylation in Plants - Experiences with Carbon Fixation and Protein Repair’; 27- 28 August 2017.

Prof. T. J. Higgins, CSIRO Agriculture and Food, Canberra, and Professor, Science and Technology, Queensland University of Technology, Brisbane, Australia; ‘Bt Cowpeas are protected against Maruca Podborers’; 21 September 2017.

Design

Sushma Chakravarty, Former Creative Director, FCB Uika, Mumbai; ‘Workshop on Creative Minds Expressive hands’; 4 – 8 September 2017.

Electronics

Prof. Ram Bilas Pachori, Department of EE, IIT Indore; ‘Invited Talk’; 24 August 2017.

Prof. Sharat Chandran, Department of CSE, IIT Bombay; ‘Invited Talk’; 30 August 2017.

Humanities

Prof. Shobhana Chelliah, Professor, Department of

Linguistics, University of North Texas, Denton; ‘Frames of reference in syntax in Lamkang verb’; 4 July 2017.

Prof. Prakash Sinha, Professor, Department of Ancient History, Culture & Archaeology, University of Allahabad, India;

‘Decoding symbolism of prehistoric tools: a cognitive approach to Archaeology’; 21 August 2017.

Maths

Prof. Kaushal Verma, Indian Institute of Science Bangalore; ‘Quadrature Domains in the Plane’; 21 August 2017.

Mechanical

Prof. Pratibha Sharma, IIT Bombay; ‘Hydrogen Energy : Issues and Challenges’; 28 September 2017.

Environment

Prof. George van Driem, Institut für Sprachwissenschaft, Universität Bern, 3000 Bern 9, Switzerland; ‘New insights in North East India as a throughfare in human prehistory’; 4 July 2017.

Dr. Tanmoy Bhattacharya, Department of Linguistics, University of Delhi; ‘Peopling of the North East of India: Stories of Migration and Contact’; 4 July 2017.

Induction programme for the new batch

The induction programme for the new batch of students was organized at the Dr. Bhupen Hazarika Institute Auditorium. Director of the Institute, Prof. Gautam Biswas, Dean, Academic Affairs, Prof. M. G. P. Prasad, Dean, Students' Affairs, Prof. Chandan Mahanta, Dean, Alumni and External Relations, Prof. Ravi. M. Punekar, Assoc. Dean, R&D, Prof. Gopal Das, Chairman, JEE (Advanced), Dr. H. B. Kaushik,



Prof. Gautam Biswas, addressing the students and their parents

Kaushik, Vice President, Students' Gymkhana, Mr. Nikhil Nagaraj spoke about important topics the new students need to know. The induction programme continued for a week.



Prof. Ravi Mokashi Punekar, Dean, Alumni and External Relations



A new student sharing his thought



Prof. Bhisma Kumar Patel, Professor, Department of Chemistry, was awarded the prestigious Govt. of Odisha "Samanta Chandra Sekhar Award" for his outstanding contribution to science and technology. In the picture here, Prof. Patel is seen receiving the award from the Hon'ble Chief Minister of Odisha, Shri Naveen Patnaik.



Dr. Lalit Mohan Pandey, of Department of Biosciences and Bioengineering, IIT Guwahati, has been selected for the "Institution of Engineers (India) - IEI Young Engineers Award 2017-2018" in Environmental Engineering.

Dr. Manish Kumar Goyal of Dept. of Civil Engineering, has been chosen for "IEI YOUNG ENGINEERS AWARD 2017-2018" in Civil Engineering discipline.

Prof. Mihir Kumar Purkait of Department of Chemical Engineering has been admitted as a Fellow of the Royal Society of Chemistry (FRSC)

Dr. Debabrata Sikdar, Dept. of EEE was awarded the The Douglas Lampard Electrical Engineering research prize and medal for 2016 by the Monash University, Australia. The award was conferred on Dr. Das for the Best PhD thesis in the Department of Electrical and Computer Systems Engineering. The award consisted of a Citation, Medal and Cash AUD 1000.

Prof. Rakesh Singh Kshetrimayum, Dept. of Electronics and Electrical Engineering, and his co-researcher Dr. Bri-jesh Kumbhani, have been awarded the prestigious IETE S. K. Mitra Memorial Award 2017 in the category of Best Research Oriented Paper for their paper entitled "Performance Analysis of MIMO Systems with Antenna Selection over Generalized $k-\mu$ Fading Channels"

Prof. Utpal Bora Centre for the Environment was Felicitated on 17 Sept 2017 by the North East Students Youth Summit 2017 as the Distinguished person in multiple fields of NE

Dr. P. Muthukumar, Dept. of Mechanical Engineering received the Fulbright-Nehru Academic & Professional Excellence Award (Teaching & Research) 2017 by the Indo - U.S. Science and Technology Forum.

Poonam Kumari, Dept. of Mechanical Engineering received the Young Engineer of India award from the Indian National Academy of Engineers (INAE)

Dr. S. K. Dwivedy received the award for Excellence for the paper published in Mechanism and Machine Theory journal as one of the top 10 most cited papers since its first publication

Dr. M. Ravi Sankar, Dept. of Mechanical Engineering was awarded the Skill India Indo Global Research Excellence Award by the Andhra Pradesh and Telangana Skill Development Chapter.

Dr. M. Ravi Sankar, Dept. of Mechanical Engineering was awarded the Venus International Faculty Award for Outstanding Faculty in Mechanical Engineering.



Dr. Mamilla Ravi Sankar receiving the Best Paper award (First Position) in International Conference on Manufacturing Technology and Simulation (ICMTS –

2017) during 7th – 8th July, 2017 at Indian Institute of Technology Madras, India

Prof. Sambit Mallick of Department of Humanities and Social Sciences, has been chosen as the Fellow of the Royal Asiatic Society of Great Britain and Ireland, 18 September October 2017.

The ecosystem resilience map of India from 2000-2014 developed by a team led by Dr. Manish Kumar Goyal from

Researchers at Indian Institute of Technology Guwahati have taken the first successful step in treating peripheral nerve damage which can result from traumatic injuries caused by accidents, physical conflict, bullet wounds as well as during surgical intervention. The nerve conduits synthesised by the researchers and implanted in rats with sciatic nerve injury showed “excellent” functional recovery one year after implantation. The results were published in the journal *Biomedical Materials*.

A team led by Prof. Utpal Bora from the Department of Biosciences and Bioengineering at IIT Guwahati synthesised nerve conduits by electrospinning a mixture of silk fibroin protein and electrically conductive polymer called polyaniline. To produce tubular shaped nerve conduits, the researchers rolled the electrospun sheets multiple times over a stainless steel spindle.



Dr. Mamilla Ravi Sankar receiving the Best Presenter Award in 2nd International Conference on Advanced Materials Research and Manufacturing Tec-

-hnologies (AMRMT-2017), during Aug., 2017, Phuket, Thailand (Hong Kong Society of Mechanical Engi-

the Civil Engineering Department of IIT Guwahati - prepared for the first time using high resolution remote sensing satellite data for all river basins - found that two-third of the India’s terrestrial ecosystems is not resilient to drought. The results were published in *Global Change Biology*, a journal from the Wiley group

Researchers at Indian Institute of Technology Guwahati have fabricated a 3D cardiac tissue patch using silk protein membranes seeded with heart muscle cells. The patch can potentially be used for regenerating damaged heart tissue. The results were published in the journal *Materials Chemistry B*.

According to Prof. Biman Mandal from the Department of Biosciences and Bioengineering, IIT Guwahati, who led the research, the fabricated 3D patch can be implanted at the site of damage to help the heart regain normal function. It can also be used for sealing holes in the heart.

The team led by Prof. Mandal tested both mulberry (*Bombyx mori*) and non-mulberry (*Antheraea assama*) silk to fabricate the membrane.

Summer School in Neuroimaging

The goal of the summer school is to cover applications of the statistical and machine learning approaches in the analysis of neuroimaging data comprising both structural and functional images and appreciate the related cognitive neuroscience research. The expected outcomes of the five-day summer school are gaining familiarity with neuroimaging as a tool for Cognitive Neuroscience investigation, exposure to the data processing pipeline and appreciation of the recent advances and open research questions in the domain of neuroimaging . The Summer School in Neuroimaging was convened by Dr. Navin Gupta , Department of BSBE at IIIT Hyderabad from 16-20 July 2017.

Lecture series on “Cultural Genetics”

Lecture Series on “Cultural Genetics” was successfully organized by the Centre for the Environment for the undergraduate, postgraduate, research scholars and faculties on 4th July 2017. More than 145 participants including under graduate, post-graduate, research scholars and academicians from across the Assam as well as from neighboring states attended the Lecture series.

The lectures of these eminent scientists intended to impart basic knowledge of human evolution, genetic-language diversity and further influence of North-East India, the Indo Burma biodiversity hotspot in intimating the dynamics of lingual diversity. Presentation by the experts and interactive sessions provided first-hand exposure to the participants on the basic nitty-gritty of the discipline and the symposium provided an interactive platform to discuss various research works carried out in Linguistics and associated genetics.



Convenor, Prof. Utpal Bora felicitating Prof. George van Driem with a traditional Aronai



Prof. George van Driem, delivering a talk on “New Insights on North East India as a thoroughfare in human prehistory”



Dr. Tanmoy Bhattacharya, delivering a talk on “Peopling of North East India: Stories of Migration and Contact”

MoU Signed

A Memorandum of Understanding was signed between the Dept. of Design, IIT Guwahati and FTDC- Ferrous Materials Technology Development Centre Hyderabad on 14-September 2017 .

The scope of MOU specifically covers research interaction between NFTDC and IITG leading to advanced engineering research thereby enabling system level R&D covering product development, process development and manufacturing in a System Design & Engineering perspective so as to serve the requirements of the country.

Under this MOU the first collaborative research programme in Electric Vehicle Technologies has been initiated in 2017-18 with E-Mobility Lab – EEE department and Useability –HCI lab – Department of Design. An electric vehicle is under design and development.

Public Lectures under Outreach Education Programme

Two public lectures were organized under Outreach Education Programme at the Institute Conference Centre on 4 August 2017.

The first lecture titled *Technology and Our Future* was delivered by Prof. Arun Chattopadhyay from the Department of Chemistry, IIT Guwahati. He gave a view of the technologies that are being developed in different countries through a number of videos, like spherical tyres, biometric verification, anti-aging treatment using nano-scale robots, detecting diseases using breathe analysis, etc. In his concluding remarks, he spoke of the success recently achieved by his group of researchers in developing a technique to detect jaundice using a thumb imprint, i.e. without having a blood test. A person is said to have jaundice when the bilirubin concentration in the blood typically exceeds 12 ppm in adults and 50 ppm in a newborn. In general, it is confirmed by a blood test within a few hours.



The second lecture titled *Nerve Conduits for Neurosurgery* was delivered by Prof. Utpal Bora from the Department of Biosciences and Bioengineering. A team of researchers, led by Dr. Bora had synthesised nerve conduits by electrospinning a mixture of silk fibroin protein and electrically conductive polymer called polyaniline. To produce tubular shaped nerve conduits, the researchers rolled the electrospun sheets multiple times over a stainless steel spindle. This is the first successful step in treating peripheral nerve damage which can result from traumatic grade 4 & 5 injuries caused by accidents, physical conflict, bullet wounds as well as during surgical intervention. The nerve conduits synthesised by the researchers and implanted in rats with sciatic nerve injury, at College of Veterinary Science, Khanapara, showed excellent functional recovery within one year after implantation. The next step is to conduct trials on pigs, which are genetically and physiologically closer to humans.

This was followed by a highly active interaction session with the audience comprising mostly of school students. There were also faculty and staff members of the institute who have benefited from the event.



School visits under Outreach Education Programme

The SPIE, IIT Guwahati student chapter organized a day long program “Outreach Education Program” at Barhampur Sahid Smriti Adarsha Girls’ High School and Barhampur S. S. I. Higher Secondary School, Barhampur Nagaon, Assam. This program was organized in association with Department of Physics and Outreach Education Program Office, IIT Guwahati. Optics at the high school level were taught in class VII, IX & X by Mr. Prahlad Baruah, Mr. Santanu Konwar, Mr. Pulak Dutta, Mr. Rahul Kesarwani, Mr. Jagamohan Rao and Mr. S. GautamBudha., all of whom are research scholars at the Department of Physics, IIT Guwahati and are active members of SPIE, IITG student chapter. Some simple science model designed using the waste materials were also demonstrated by Dr. Sidananda Sarma and Mr Aditya Kalita, Technical Officer, Dept. of Physics.

The cooperation from the school authorities, the teaching staffs and the students were very encouraging. All the members of IITG were felicitated by the schools authorities and they offer their sincere thanks to IIT Guwahati for organizing such an event .



In spite of many meritorious students in this region, it seems they lack the confidence to appear for the national level exams such as NET, GATE and JAM etc. and the percentage of qualified candidates is meager compared to the promise that exists in the region. Thus a problem solving camp was organized on 9 September 2017 on Physics for the college students of Guwahati. Approximately 70 students from 6 different colleges in Guwahati. Several problems from the past years GATE, JAM and NET exams were solved and the students gathered enough confidence at the end of the session. There are regular follow up of performance of these students are being done, in collaboration with the teachers of those colleges.

A day long event on 4 July 2017 was organized to speak to the school and college children at St. Andrews College, Shillong. Extensive interaction on basic sciences and career counseling was conducted with a large number of students (approximately 250). A capacity building cum refresher course was also organized for the teachers of nearby schools and colleges

As a part of the outreach initiative of the Institute, the Department of mathematics held a two-week Summer Training Camp in Mathematics during 3-14 July, 2017 for undergraduate students pursuing Mathematics. Twenty students drawn from different colleges/universities of the North East region participated in the programme. The selection of the participants was on the basis of their performance in the Madhava Mathematics Competition held on January 08, 2017. The students were trained in basic mathematics through short courses in Real Analysis, Linear Algebra, Modern Algebra and Differential Equations.



In the year 1965, some of the prominent students of Late Dr. S. Radhakrishnan organized a gathering to pay obeisance to the Great Teacher of repute. In that gathering, in his speech Dr. Radhakrishnan expressed his deep reservation regarding his birth anniversary celebration, and emphasized that his birth anniversary should be celebrated as 'Teachers' Day', as mark of respect, love and admiration to all the teachers.



Prof. Dhruba Jyoti Saikia

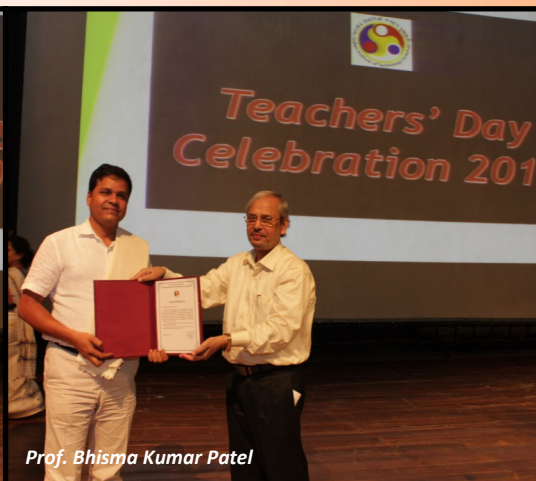
Since then, 5th September, the birth anniversary of well-known diplomat, scholar, the President of India and above all, a teacher, Dr. Radhakrishnan is celebrated as Teachers' Day as a mark of tribute to the contribution made by teachers towards our society.

The Faculty Affairs Section of the Institute on the occasion of the Teachers Day organized a felicitation ceremony of the teaching members of the Institute who had completed twenty years of service at IIT Guwahati. The welcome address on the occasion was delivered by Prof. Dr. Natesan Srinivasan, Associate Dean of Faculty Affairs, which was followed by an address by Prof. Gautam Biswas, Director, IIT Guwahati. The Founder Director of the Institute Prof. D. N. Buragohain also addressed the gathering on the occasion.

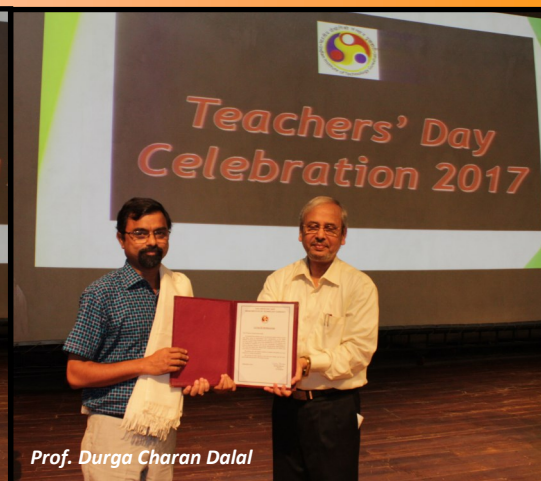
Prof. Dhruba Jyoti Saikia, Senior Professor, National Centre for Radio Astrophysics, Tata Institute of Fundamental Research, Pune University Campus, Pune, graced the occasion as the Chief Guest.



Prof. Charudatt Yashwant Kadolkar



Prof. Bhisma Kumar Patel



Prof. Durga Charan Dalal

The following faculty members of the Institute, who had completed twenty years of service at IITG were felicitated.

Prof. Dharendra Nath Buragohain, Prof. Anil Mahanta, Prof. Gautam Barua, Prof. Jubaraj Bikash Baruah, Prof. Sukumar Nandi, Prof. Alike Khare, Prof. Anil Dattatraya Sahasrabudhe, Prof. Charudatt Yashwant Kadolkar, Prof. Rafikul Alam, Prof. Arun Chattopadhyay, Prof. Abu Taleb Khan, Prof. Anoop Kumar Dass, Prof. Prabin Kumar Bora, Prof. Durga Charan Dalal, Prof. Rajiv Tiwari, Prof. A. Srinivasan, Prof. P. S. Robi, Prof. Bhisma Kumar Patel, Prof. Sajith Gopalan and Prof. Anup Kr. Gogoi.



Pledge Ceremony



The employees of IIT Guwahati took pledge of Free India from Poverty, Terrorism, Regionalism, Corruption and Non-hygiene by the year 2022 on account of celebration of 70 years of Freedom and 75 years of Quit India Movement. The pledge was administered by Prof. Gautam Biswas, Director, IIT Guwahati, in the presence of Prof. P. K. Bora, Deputy Director, and Shri U. C. Das, Registrar of the Institute.

Invited Lectures delivered by Faculty members of IIT Guwahati in India and Abroad

Computer Science

Shivashankar B. Nair; “Immuno-Inspired Computing”; Dept. of Computer Science, St. Anthony’s College, Shillong; 28 August 2017.

John Jose; “How to transform the student in you to a national asset?”/ “How to teach?, How to excel as a teacher?”; St. Francis de Sales School, Guwahati; 7 September 2017.

John Jose; “How to master the art of paper writing? / “Doctoral Research-Essentials and Desirables ””; Government Engineering College, Idukki, Kerala; 27 July 2017.

John Jose; “On-chip cloud systems-Challenges and opportunities”/ “How to plan your life and career after campus life? ”; Cochin University of Science & Technology, Kochi, Kerala; 24-25 July 2017.

John Jose; “On-chip cloud systems-Limitations and opportunities”/ “Hardware architecture for next generation biomedical systems ”; Mar. Baselios College of Engineering Technology, Trivandrum, Kerala; 4 & 20 July 2017.

John Jose; “Network On Chip Interconnects for Future Multicore Processors”; PES University, Bangalore, Karnataka; 17-19 July 2017.

John Jose; “Effective Teaching and Assessment Methodologies”; Rajagiri School of Engineering and Technology, Kochi, Kerala; 15 July 2017.

John Jose; “Next Generation Multicore Systems: An Architectural Outlook”; MES College of Engineering, Kuttipuram, Kerala; 13 July 2017.

Design

Keyur Sorathia ; “Different shades of user involvement: participatory design, co-design, user centered design”; Indian Institute of Technology Bombay: Interact 2017; 27 September 2017.

Pradeep Yammiyavar; “Future of Design Education - Design program Curriculum and structure at IITG”; India

Design Council India – UK Design Education, NID Ahmedabad; 05 & 06 May 2017.

Pradeep Yammiyavar; “Culture & Design”; IIT Mumbai: INTERACT 2017; 25-29 September, 2017.

Sougata Karmakar; “Consideration of Ergonomics in various stages of Product Design Process’ and ‘Virtual Ergonomics for Product Design”; PEC University of Technology, Chandigarh, India; 26 September 2017.

Electronics

R. Bhattacharjee; “Microwave Power dividers: some recent trends”; Manipal University, Jaipur, Rajasthan; 1-2 July 2017.

Maths

Rupam Barman; “Counting points on Dwork hypersurfaces and hypergeometric series”; University of Caen, France; 03 July 2017.

Ayon Ganguly; “Analysis of simple step-stress model in presence of competing risks”; Grenoble Institute of Technology and University Grenoble Alpes, Grenoble, France; 03 July 2017.

Mechanical

U.S. Dixit & P. M. Dixit; “Modelling of metal Forming and Machining”; Dr BR Ambedkar NIT Jalandhar, Punjab; 17-22 July 2017.

P. Muthukumar; Green Energy Technologies; NIT Silchar, Assam; 26th Sept 2017.

Environment

Prof. Utpal Bora; “Engineers and Nation Building”/ “Nerve Tissue Engineering”; NRL Technical Forum, Jorhat; 15 Sep 2017.

Prof. Utpal Bora; “Types of research and innovation, their similarities and differences”; USTM, Guwahati; 6 Aug 2017.

Prof. Utpal Bora; “Nerve Conduits for Neurosurgery”; Outreach Education Prog, IIT Guwahati; 4 Aug 2017.



Dr. Ashok Singh Sairam
Associate Professor
Mathematics



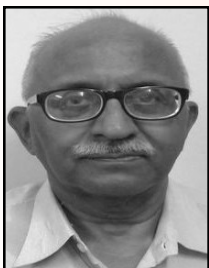
Dr. Daksha Chandu Parmar
Assistant Professor
Humanities



Dr. Prasad Khanolkar
Assistant Professor
Humanities



Dr. Kiran Keshavamurthy
Assistant Professor
Humanities



Dr. Narendra K. Sharma
Visiting Professor
Humanities



Dr. Vipul Dutta
Assistant Professor
Humanities



Dr. Ranu Roychoudhuri
Assistant Professor
Humanities



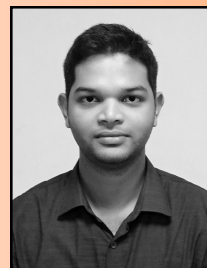
Dr. Mahima Arrawatia
Assistant Professor
Electronics



Dr. Rishikesh Dilip Kul-karni
Assistant Professor
Electronics



Dr. Salil Kashyap
Assistant Professor
Electronics



Mr. Paban Bujor Barua
Technical Officer Gr.-II
Electronics



Mr. Gobinda Chhetry
Technical Officer Gr.-II
Nanotechnology



Ms. Sayanika Das
Technical Officer Gr.-II
Nanotechnology



Ms. Radha Narzary
Jr. Tech. Superintendent
Physics



Mr. Pranab Jyoti Boro
Jr. Tech. Superintendent
Maths



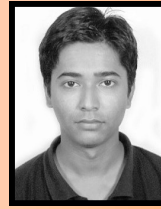
Mr. Bhargab Choudhury
Jr. Tech. Superintendent
Computer Centre



Ms. Chayanika Borah Majumdar
Jr. Tech. Superintendent
Electronics



Ms. Sabita Boro
Jr. Tech. Superintendent
Electronics



Mr. Sumit Singha
Jr. Tech. Superintendent
Electronics



Mr. Hitendra Mosahary
Jr. Technician
Computer Centre

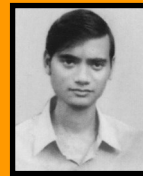


Ms. Dipti Devi
Jr. Attendant
Hostel Dhansiri

Employees on Consolidated Pay



Ms. Mithu Das
Jr. Attendant
PRIR/ IA



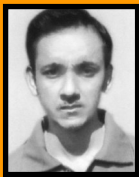
Mr. Ayon K Paul
Jr. Attendant
Nanotechnology



Mr. Rajib Boro
Jr. Attendant
Director's office



Mr. Ambarish Biswas
Jr. Attendant
Physics



Mr. Appu Kanu
Jr. Attendant
Administration



Mr. Arup Pathak
Jr. Attendant
Registrar's Office



Mr. Chandra K Boro
Jr. Attendant
ME- Workshop



Mr. Barun Halder
Jr. Attendant
CET



Mr. Basanta Choudhury
Jr. Attendant
Engineering



Mr. Pranjit Pathak
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