# bitscan

Hyderabad Campus





#### **Eminent Visitors**



Prof. Sanjay Gupta, Broad School of Management, Michigan State University



Prof. T. Pradeep, Padma Shri awardee, Dept of Chemistry, IIT Madras



(L to R): Prof. Niranjan Swain, Dean - Administration with Dr. Y.V. Reddy, Former RBI Governor



Dr. Kasturirangan, Chairman - Drafting Committee of National Educational Policy (2019) and Emeritus Professor, National Institute of Advanced Studies, IISc, Bangalore & Former Chairman of ISRO



(L to R) Prof. Suman Kapur, Dean - IPCD (University wide), Dr. Aseem Z. Ansari, St. Jude Children's Research Hospital, Memphis, Tennessee, USA and Prof. G. Sundar, Director - BITS Hyderabad

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#### Convocation 2019



Prof. Govardhan Mehta addressing the convocation ceremony

Distinguished Alumnus Award being received by Ms. Akila Krishnakumar

The Birla Institute of Technology and Science (BITS) Pilani, Hyderabad Campus organised the convocation ceremony for its graduating students of 2019 batch on 4th August, 2019. Professor Goverdhan Mehta, Distinguished Professor, Dr. Kallam Anji Reddy Chair, School of Chemistry, University of Hyderabad, graced the occasion as the Chief Guest. Prof. Mehta also happens to be an alumnus of BITS. He was joined by Prof. Souvik Bhattacharyya, Vice-Chancellor; Prof. G Sundar, Director, Hyderabad campus, along with the Directors of other campuses of BITS Pilani, senate members, faculty members and staff. The state-of-the-art auditorium resonated with the excitement and enthusiasm of the graduating students,

their families, faculty members and staff. This year 921 students were awarded degrees, of whom 744 students received their first degrees, 146 students received their higher degrees, and 31 PhD scholars received PhD degrees. The first-degree students who were awarded medals for their outstanding academic performances were Mr. Anirudh Srinivasan (Gold), Mr. V Thejas (Silver), Mr. Bhavsar Neel Hiteshbhai and Mr. Sangi Manish Rao (Bronze). Apart from this, 15 first degrees and 87 higher degrees from the Work Integrated Learning Programmes (WILP) for working professionals were also awarded during the ceremony. This year's Distinguished Alumnus Award was received by Ms. Akila Krishnakumar.



#### Confluence of Academic Ideas, Intellect and Information

# Workshop by the Department of Civil Engineering – Sustainable Processes in Civil and Chemical Engineering (SPCCE 2019)

An International workshop on 'Sustainable Processes in Civil & Chemical Engineering (SPCCE 2019)' sponsored by MHRD-SPARC was hosted by BITS Pilani Hyderabad campus from 15<sup>th</sup> to 16<sup>th</sup> November, 2019. The workshop was jointly organized by BITS Pilani and Kyushu University, Japan. Eminent faculty delivered lectures on topics pertaining to civil and chemical engineering and sustainable materials and processing methods. The coordinators of the workshop were Dr. Srinivas Appari, Dr. Bahurudeen A and Dr. Prasant Kumar Sahu.





The workshop began with a welcome address by Dr. Srinivas Appari and was followed by an inaugural address by Prof. G. Sundar, Director, BITS Pilani-Hyderabad Campus. The speakers were Prof. Shinji Kudo, Associate Professor, Kyushu University, Japan; Prof. Koji Nakabayashi, Assistant professor, Kyushu University; Prof. Prakash Nanthagopalan, Associate Professor, IIT Bombay; Prof. Vinod M. Janardhanan, Professor, IIT Hyderabad; Dr. Piyush Chaunsali, Assistant Professor, IIT Madras; Prof. Radhakrishna G. Pillai, Associate Professor, BITS Pilani - Hyderabad Campus. The themes covered in the workshop

were Waste utilization, Concrete technology, Resource recovery and value creation, Thermochemical conversion, Value-added chemicals, Sustainable engineering and Circular economy. This international workshop was highly relevant to the 45 participants from academia (faculty, research scholars, and post-graduate students) and industry who are working in the fields of civil and chemical engineering.

#### A Winter School by the Department of Humanities and Social Sciences BITS, Hyderabad and NALSAR University of Law



A winter school on 'Fostering Research in Disability', the first of its kind in India, was jointly organized by the Department of Humanities and Social Sciences, BITS-Pilani Hyderabad Campus and Centre for Disability Studies, NALSAR University of Law, Hyderabad from 16th to 21st December, 2019. Professors Amita Dhanda (NALSAR) and Shilpaa Anand (BITS) served as program co-ordinators. The week-long Winter School engaged with questions of disability with a special focus on voice, representation and participation of disabled people in law-making and cultural processes. Thirty participants were selected out of the 130 applications received in June. Winter School attendees included research scholars and early to mid-career faculty members from different parts of the country and abroad, researching in the fields of Humanities, Social Sciences and Law. About fifty percent of the participants were people with disability.



Resource persons included disability scholars from the disciplines of Law, Literature, Sociology, Social Work and Anthropology. Speakers appraised participants of significant developments in the field of disability research and introduced them to topics within the field which merit research such as: a) legal and cultural disability exclusions and inclusions-legally embedded and culturally enabled; discourses of human rights and social justice; c) 'voice' and 'representation' within disability studies scholarship. Few research programs in the country cater to researchers in disability studies while the application pool demonstrated that there is a steadily growing number of academics interested in the field. As a response to this situation, the Winter School on disability research has been proposed as an annual collaborative event between the two institutions.

#### Workshop by the Department of Computer Science on Evolving Technologies in Network and Communication Systems (ENCoS)



The Department of Computer Science and Information Systems organized a two-day Workshop on Evolving Technologies in Network and Communication Systems (ENCoS), from 29th to 30th August, 2019 at BITS Pilani, Hyderabad Campus. The workshop focused on the fifth generation cellular network (5G) as a gambit of advanced technologies such as the use of carrier aggregation, network slicing, Cloud radio access network (C-RAN), and software defined radio (SDR). Eminent speakers discussed various heterogeneous technologies and key elements of the next generation networks like: architecture for the next generation converged network with the focus on 5G, millimeter waves, SDN/NFV as C-plane for network convergence, visible light communication/LiFi, etc.

# Faculty Development Programme on Refrigeration and Air Conditioning by the Mechanical Engineering Department

The programme was sponsored by ISHRAE-AICTE and organized by the Department of Mechanical Engineering, BITS-Pilani Hyderabad Campus from 16<sup>th</sup> to 20<sup>th</sup> December, 2019. The five-day programme aimed at bringing together academic and industrial experts to share their knowledge, which in turn was expected to promote research activity. In this programme, 30 academic delegates from 6 different states and 15 delegates from BITS Pilani, Hyderabad Campus participated.

Ten industry experts from Hyderabad, Bangalore, Chennai and Coimbatore were invited to share their knowledge, experience, and challenges faced by the HVAC industries. These industry experts delivered talks on various topics such as Low Energy Cooling Systems for Buildings, Solar Thermal and Waste Heat based solutions for Industries, Pumps and Pumping Systems, Air handling units and Fans, Cold Storages, Transport Refrigeration, Cold Chain, New refrigerants, Refrigeration Safety, Green Building Mandates, etc. This FDP programme was also of great importance to the budding researchers and research scholars working in the area of refrigeration and air conditioning.





## Department of Chemistry organized National Symposium on Convergence of Chemistry and Materials, CCM-2019



The second edition of the biennial conference 'National Symposium on Convergence of Chemistry and Materials (CCM)' was organized during 17th - 18th December, 2019 to bring scientists, researchers and industrial partners working at the interface of Materials and Chemistry on the same platform with a view towards promoting productive interactions and exchange of thoughts. The theme of the symposium encompassed research ranging from chemistry, physics, biology and many engineering disciplines. Vice-Chancellor Prof. Souvik Bhattacharya and Campus Director, Prof. G. Sundar inaugurated the event. Padmasri Prof. T. Pradeep, Department of Chemistry, IIT-Madras, delivered the plenary lecture. Renowned scientists like Professor Swapan Kumar Pati (Shanti Swarup Bhatnagar awardee, 2010) were invited to deliver lecture on the research progress in their respective fields. Students from various institutes and universities presented their work as posters. The Royal Society of Chemistry sponsored the poster awards in the best poster competition.

## Intensive Training Programme on LabVIEW by the Department of EEE

The Department of EEE, along with the WILP Division has conducted a seven day intensive training programme on LabVIEW (a product of National Instruments) with an objective to provide hands-on training in LabVIEW software and hardware - NI ELVIS III with RIO (Reconfigurable input and output) and DAQ (data acquisition board). The

programme saw a participants of 35 on-campus and off-campus faculty members and research scholars from various parts of the country. The training programme was divided into two slots i.e from 22<sup>th</sup> to 25<sup>th</sup> July 2019 which focused on four days of software training and from 19<sup>th</sup> to 21<sup>st</sup> August 2019 which focused on hardware training.

## Department of Pharmacy organized Current Trends in Pharmaceutical Sciences 2019

The 5<sup>th</sup> 'Current Trends in Pharmaceutical Sciences' was conducted from 19<sup>th</sup> to 20<sup>th</sup> October, 2019. During this event, pharmaceutical experts Mr. Showket Khan (Marketing Manager at Novonordisk), Dr. Dinesh Shenoi (R&D Head at NOVARTIS), Mr. Abhijit Sanyal (National Sales Manager, ALCON) and Dr. Sivacharan Kollipara (Principal Scientist at NOVARTIS) delivered talks on various topics. The session included a panel discussion with the audience which mainly focused on the scope of Pharmacy.



The Department of Pharmacy and SHIMADZU also organized a four-day workshop on Exploring Chromatography & Mass Spectrometry from 16<sup>th</sup> to 19<sup>th</sup> December, 2019. Experts from SHIMADZU and Spinco-Biotech delivered lectures and conducted hands-on training sessions on handling of LC-MS instrument of Central Analytical Lab. Research Scholars from Pilani and Hyderabad Campus attended this workshop.



#### International Visits by faculty (Jul-Dec 2019)

Prof. B. Mishra, Department of Maths delivered a talk on 'New Approach to Study the Dynamical Cosmic Behaviour in Extended Gravity' at 21st International Conference on Physical Interpretation of Relativity Theory, held at Bauman Moscow State Technical University, Moscow during 1st and 5th July, 2019.

Prof. P. K. Sahoo, Department of Maths delivered a talk on 'Phantom Energy as a Transient Phenomenon Avoiding Cosmic Doomsday in f(R) Gravity' at 22<sup>nd</sup> International Conference on General Relativity and Gravitation (GR22), from 7<sup>th</sup> to 12<sup>th</sup> July, 2019 at Valencia Conference Centre, Valencia, Spain.

Dr. Santanu Koley, Department of Maths delivered a talk on 'Wave Interaction with Flexible Porous Plate Invariable Water Depth' at The International Congress on Industrial and Applied Mathematics (ICIAM 2019), 15<sup>th</sup> - 19<sup>th</sup> July, 2019, Valencia, Spain.

Prof. P. N. Rao, Department of Civil Engineering presented his paper titled 'Settlement of Silty Soil Under Saturation Using Micro Synthetic Fibers', at 5<sup>th</sup> International Conference on Science, Engineering & Environment (SEE), Bangkok, Thailand, 11<sup>th</sup> – 13<sup>th</sup> November, 2019.

Prof. A. Vasan, Department of Civil Engineering presented his paper titled 'Optimal Irrigation Planning and Operation of Reservoir Using Self-Adaptive Cuckoo Search Algorithm (SACSA)', at 3<sup>rd</sup> World Irrigation Forum organized by International Commission on Irrigation and Drainage (ICID) held at Nusa Dua Convention Centre, Bali Indonesia, 1<sup>st</sup> - 4<sup>th</sup> September, 2019.

Prof. NSK Reddy, Department of Mechanical Engineering presented papers on 'Tribological Characterization of Electrostatically Developed Al<sub>2</sub>O<sub>3</sub> Coated Cutting Tool Material'; 'Synthesis and Tribological Evaluation of Aluminum-Titanium Diboride (Al-TiB<sub>2</sub>) Metal Matrix Composite' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> - 22<sup>nd</sup> November, 2019.

Dr. Chandu Parimi, Department of Civil Engineering presented his paper titled 'Optimization of Culture Parameters of Pseudomonas Alcaligenes for Crack Healing in Concrete'. at 2<sup>nd</sup> International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2019), Dubai, UAE, 20<sup>th</sup> – 22<sup>nd</sup> November, 2019.

Dr. Mohan, Department of Civil Engineering presented his paper titled 'Performance of Low-cost Viscoelastic Damper for Coupling Adjacent Structures Subjected Dynamic Loads' at 2<sup>nd</sup> International Conference on recent Advances in Materials & Manufacturing Technologies (IMMT 2019), Dubai, UAE, 20<sup>th</sup> to 22<sup>nd</sup> November, 2019.

Prof. Sridhar Raju, Department of Civil Engineering presented his paper titled 'Performance of Reclaimed Asphalt Pavement (RAP) Material in Asphalt Mixtures' at 18<sup>th</sup> AAPA International Flexible Pavements Conference & Exhibition, Sydney from 18<sup>th</sup> to 21<sup>st</sup> August, 2019.

Dr. Anasua Guha Ray, Department of Civil Engineering presented her paper titled 'Stabilization of Expansive Soil Reinforced with Polypropylene and Glass Fiber in Cement and Alkali Activated Binder', at GeoMEast International Congress and Exhibition, Sustainable Civil Infrastructures, Cairo, Egypt, 10<sup>th</sup> - 14<sup>th</sup> November, 2019.

Prof SP Regalla, Department of Mechanical Engineering presented a paper titled 'Strength and Fracture Behaviour of Polymer Matrix Composite Layered Structures Made by Additive Manufacturing' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> - 22<sup>nd</sup> November, 2019.

Dr. Prasanta Sahu, Department of Civil Engineering presented his paper titled 'Identification and Evaluation of Key Determinants of Two-Wheeler Ownership Model in the Context of Developing Countries: A Case Study of Pune City, India', EASTS 2019, 13<sup>th</sup> International Conference of EASTS, Colombo, Sri Lanka, 9<sup>th</sup> – 12<sup>th</sup> September, 2019.

Dr. Bandhan Bandhu Majumdar, Department of Civil Engineering presented his paper titled 'Investigation on Risk Factors Influencing Crash Occurrence in Urban Context: A Case Study of Hyderabad, India', EASTS 2019, 13<sup>th</sup> International Conference of EASTS, Colombo, Sri Lanka, 9<sup>th</sup> - 12<sup>th</sup> September, 2019.

Dr. Mohan, Department of Civil Engineering visited USA as a part of University Exposure Abroad program to the University of California, Berkley. As a part of UAE program, Dr. Mohan S C visited Pacific Earthquake Engineering Research Center (PEER) and Department of Civil Engineering, University of California, Berkeley, USA during 6<sup>th</sup> June and 31<sup>st</sup> July, 2019.

Dr. Satyapaul A. Singh, Department of Chemical Engineering, presented a paper titled 'Trends in Thermo and Photo-Catalytic Processes: Mechanistic Aspects of PrOx, Scope for ALD Based Reactors' in World Summit on Catalysis Engineering and Technology (CatET-2019) 12<sup>th</sup> - 13<sup>th</sup> November, 2019 at Valencia, Spain.

Dr. Supradeepan Department of Mechanical Engineering presented a paper titled 'Effect of Material Property Variation on the Dynamic Response of a Flexible Splitter Plate Attached Behind a Square Cylinder Due to Flow Induced Loads' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> - 22<sup>nd</sup> November, 2019.

Prof. I. Sreedhar, Department of Chemical Engineering has gave a keynote speech at CN-BT-2019 in the 9<sup>th</sup> International Conference on Nanomaterials at Bangkok, Thailand, from 13<sup>th</sup> to 15<sup>th</sup> December, 2019 on 'Nanomaterials in CO<sub>2</sub> Methanation, a Two Edged Sword to Tackle Global Warming and Clean Energy Needs'.

Prof. Sarmistha Banik, Department of Physics presented a paper titled 'Stability Analysis of a Differentially Rotating, Hot, Hyper Massive Neutron Star Merger Remnant' in the 30<sup>th</sup> Texas Symposium on Relativistic Astrophysics, at University of Portsmouth, UK, during December, 2019.

Prof. B. Harihara Venkataraman, Department of Physics has presented a paper titled 'Influence of Transition Metal Ion Doping on Structural and Dielectric Properties of Sol-gel Synthesized Bismuth Ferrite Nanoceramics' in IEEE ISAF Conference at EPFL, Lausanne, Switzerland, 14<sup>th</sup> - 19<sup>th</sup> July, 2019.

Prof. Sarmistha Banik, Department of Physics presented the poster titled 'Properties of Isentropic Rotating Compact Stars with Exotic Matter' and the poster titled 'Rapid Differentially Rotating Hot Neutron Stars within Relativistic Model' at the International Nuclear Physics Conference (INPC 2019), held at Glasgow, UK in July, 2019.

Dr. Rahul Nigam, Department of Physics delivered a talk on 'Wind Noise Mitigation in LIGO India' in Stanford University and Georgia Tech during May-June, 2019 under university immersion.

Dr. Sudatta Banerjee, Department of Economics and Finance presented a paper titled 'Determinants of Women Empowerment as Measured by Domestic Decision Making: Perspective from a Developing Economy' and chaired a technical session in SIBR Conference on Interdisciplinary Business and Economics Research, held in Osaka, Japan during 4th and 5th July, 2019.

Prof. Chittaranjan Hota, Department of Computer Science and Information Systems presented a paper titled 'Code Tamper-Proofing using Dynamic Canaries' in APCC 2019, IEEEComSoc, at Ho Chi Minh City, Vietnam, during 6<sup>th</sup> - 8<sup>th</sup> November, 2019.

Dr. Lov Kumar, Department of Computer Science and Information Systems presented a paper titled 'Android Malware Prediction Using Extreme Learning Machine with Different Kernel Functions' in 15<sup>th</sup> Asian Internet Engineering conference 2019, at Phuket, Thailand, during 7<sup>th</sup> - 9<sup>th</sup> August, 2019.

Dr. Odelu Vanga, Department of Computer Science and Information Systems presented a paper titled 'IMBUA: Identity Management on Blockchain for Biometrics-based User Authentication' in BLOCKCHAIN 2019, at Avila, Spain, during 26<sup>th</sup> - 28<sup>th</sup> June, 2019.

Dr Ravishanker V, Department of Mechanical Engineering presented a paper titled 'Influence of Activating Flux Tungsten Inert Gas Welding on Mechanical and Metallurgical Properties of the Mild Steel' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> - 22<sup>nd</sup> November, 2019.

Dr Amit Nag, Department of Chemistry presented a paper titled 'Gold Nanoparticle-based Plasmon Enhanced Fluorescence of Polyallylamine Hydrochloride: An Efficient and Selective Sensor for Picric Acid in Aqueous Media' in ACS Fall 2019 National Meeting & Exposition in San Diego, CA, USA during 25<sup>th</sup> - 29<sup>th</sup> August, 2019.

Prof. Sanket Goel, Department of Electrical and Electronics Engineering presented a distinguished lecture, 'Biomicrofluidic Devices: Status and Scope for High-speed Vision' under ILDP program at the Hiroshima University during 2<sup>nd</sup> - 3<sup>rd</sup> July, 2019.

Dr Arshad Javed, Department of Mechanical Engineering presented papers on 'Numerical Evaluation of Topologically Optimized Ribs for Mechanical Components'; 'Experimental Characterization to Fabricate CO<sub>2</sub> Laser Ablated PMMA Microchannel with Homogeneous Surface'; 'Direct UV Laser Writing System to Photolithographically Fabricate Optimal Microfluidic Geometries' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> – 22<sup>nd</sup> November 2019.

Prof. Sajeli Begum, Department of Pharmacy presented a paper titled 'Small-molecule Inhibitors of Proinflammatory Cytokines (TNF- $\alpha$ , IL-6 and IL-1 $\beta$ ) Effective under Ipsinduced Mouse Endotoxemia Model' in Cytokines 2019 - International Cytokines and Interferon Society, Vienna, Austria during 20<sup>th</sup> - 23<sup>rd</sup> October, 2019.

Prof. Swati Biswas, Department of Pharmacy presented a paper titled 'Functionalized Photosensitizers as Nanoassemblies for Superior Photodynamic Therapeutic Effect' in 21<sup>st</sup> International Conference on Controlled Drug Delivery in Paris, France during 29<sup>th</sup> - 30<sup>th</sup> October, 2019.

Prof. Amit Kumar Gupta, Department of Mechanical Engineering presented papers on 'Optimization of Machining Parameters During Turning of Tungsten Heavy Alloys Using Taguchi Analysis'; 'Effect of Graphene Nanopatelets Incorporation on Microstructural and Tribological Properties of Aluminium Metal Matrix Composites'; 'Anisotropic Yielding Behaviour of Inconel 718 Alloy at Elevated Temperatures' at ASME-2019 (IMECE 2019) Salt Lake City-USA during 8th - 14th November, 2019.

Prof. Sandip S Deshmukh, Department of Mechanical Engineering presented a papers on 'Effects of Alternate Nutrient Medium on Microalgae Biomass and Lipid Production as a Bioenergy Source for Fuel Production'; 'Development of Machine Learning Based Predictive Algorithm for Thruster Orifice Diameter in Rocket Engine'; 'Selection of Suitable and Sustainable Clarification Method for Non-Centrifugal Sugar Production Using MCE' at IMMT 2019, BITS-Pilani, Dubai Campus, 20th - 22nd November, 2019.

Dr. Piyush C Verma, Department of Mechanical Engineering presented a paper titled 'Synthesis of Iron Boride Powder by Carbothermic Reduction Method' at IMMT 2019, BITS-Pilani, Dubai Campus, 20<sup>th</sup> - 22<sup>th</sup> November, 2019.

Dr. Lavanya Suresh, presented a paper titled 'A Policy Review of Environmental Governance in India' at the conference on 'Unpacking the Complexity of Regulatory Governance in a Globalised World' held at the Chinese University of Hong Kong during 4<sup>th</sup> - 6<sup>th</sup> July, 2019.

#### Faculty Awards / Achievements

Prof. B. Mishra, Department of Mathematics has been elected as a foreign member of Russian Gravitational Society.

Prof. P. K. Sahoo, Department of Mathematics has been elected as a fellow of Royal Astronomical Society, London.

Prof. P. K. Sahoo, Department of Mathematics has been elected as a foreign member of Russian Gravitational Society.

Prof. Suman Kapur, Department of Biological Sciences, has been appointed as a Scientific Adviser by the Government of India.

Dr. Anasua Guha Ray, Department of Civil Engineering was elected as an Executive Member of Indian Geotechnical Society, Hyderabad Chapter (2019-2021).

Dr. Bandhan Bandhu Majumdar, Department of Civil Engineering Received International Travel Support Grant from DST-SERB for attending and presenting technical papers in 99<sup>th</sup> Annual meeting of TRB, Washington DC, USA.

Dr. Satyapaul A. Singh, Department of Chemical Engineering won Prof. N.R. Kuloor Memorial Award for best PhD thesis, IISc Bangalore. (12<sup>th</sup> September, 2019)

Prof. P.K. Thiruvikraman, Department of Physics has authored a book titled 'A Course on Digital Image Processing with MATLAB', IOP Science ebooks, November, 2019.

Dr. Suvadip Batabyal, Department of Computer Science has been awarded the TUBITAK fellowship 2019, Govt. of Turkey, for visitingscientist position in the dept. of Computer Science & Engineering, Sabanci University, Turkey.

Dr. Lov Kumar, Department of Computer Science received Best Young Researcher Award (Male) (Below 40 years) for outstanding Research International Academic and Research Excellence Awards (IARE-2019).

Dr. Lov Kumar, Department of Computer Science received Best Researcher Award for outstanding research for the year 2018, by IOSRD.

Prof. Tathagata Ray, Department of Computer Science was awarded 'Best Professor in Information Studies' by Business School Affaire and Dewang Mehta National Education Awards (Regional Round) at Taj Banjara, Hyderabad on 15<sup>th</sup> November, 2019.

Dr Satish Kumar Dubey, Department of Mechanical Engineering won 'ILDP Faculty Exchange: under

International Exchange Program titled International Linkage Degree Program (ILDP) for Developing Innovators Transforming Advanced Technology to Social Goals, Hiroshima University in July, 2019.

Prof. Yogeeswari, Department of Pharmacy was awarded Shri B. K. Birla and Shrimati Sarala Birla Chair Professorship in 2019.

Prof. Sajeli Begum, Department of Pharmacy received 'International Travel Award' funded by Nectar Therapeutics Private Ltd., 2019.

Prof. Arti Dhar, Department of Pharmacy received Indra Parekh 50 women in Education Leaders World Education Congress 2019.

Prof. Sounak Roy was selected in the list of finalists for NASI Scoupus Award; November, 2019.

Prof. Manab Chakravarty's research work was recognized by Indian Sciences Wire (S&T News from India); October 2019.

#### **Patents Filed**

Prof. Srinivasa Rao Vutla and Srinivasa Prakash Regalla, Department of Mechanical Engineering Kannan Ramaswamy, Department of Physics, Hemair Systems Private Limited, 'Sustainable Microelectromechanical Systems (MEMS) Cleanroom', Provisional Indian Patent filed, Ref/App.No.:201941041293/TEMP/E-1/43749/2019-CHE, Dated:11/OCT/2019.

Prof. Sanket Goel, Department of Electrical Engineering patented A Microfluidic Electro-Viscometer to Determine Relative Viscosity of a Fluid, Sanket Goel and Puneeth S B, Indian Patent, filed, 201911049248, November, 2019.

Prof. Swati Biswas, Balaram Ghosh, Himanshu Bhatt, Sanhita Roy, A Muco-adhesive Polymeric Micellar Structure and process for preparing the same. Indian Patent Application Number. 201911034570. Filed on 27<sup>th</sup> August, 2019.

Prof. Yogeeswari P., Parameshwar Reddy A., Dwivedi S., Indian Patent Application No. E-136359/2019-DEL (28/08/2019): Compounds for the Treatment of Inflammation and process for preparing the same.

#### Student Awards / Achievements

Mr. Rajat Gupta (2015A1PS0465H), Department of Chemical Engineering won Padmasri Dr. B V Raju Memorial Best Merit Student Award. (7<sup>th</sup> July, 2019).

Nithin B. Kummamuru, Department of Chemical Engineering visited Sweden to present research work on 'Adsorption Study of Carbon Dioxide in 'L' Shaped Slit Pores at High Temperatures and Pressures using Monte Carlo Simulations', International Conference on Applied Energy, 2019, Sweden.

Mrinal Jha (2016B4A70501H), Murlikrishnan Tripathi (2016B4A70329H) and Pratik (2016B4A70549H), Department of Mathematics participated in Microsoft Codefundo and secured 1<sup>st</sup> position.

Anshuman Pati (2016B4A70470H), Department of Mathematics participated in Microsoft Codefundo and secured 3<sup>rd</sup> position.

Jaina Paresh Shah (2016B4A70496H) from the Department of Mathematics did an internship at Tel Aviv University in the field of Deep Learning Application in Cyber Security.

R. Harivallabha (2016B4A70519H) and Kothwal Khalid Riyaz (2016B4PS0483H), Department of Mathematics selected in Google Summer of Code (GSoC).

Mukundan Jayaraman (2016B4A70355H), Shivaank Agarwal (2016B4A70675H) and Prateek Gupta (2015B4A70482H), Department of Mathematics selected for MITACS.

Mr. Arunraj B, Department of Chemistry was selected to the final round of the Young Chemist Award conducted by METROHM-IIT Bombay during September 2019.

Mr Syed Mazhar, Department of Civil Engineering received the Best Presentation Award in Indian Geotechnical Conference 2019-GeoINDUS on 19<sup>th</sup> December, 2019.

Mr Syed Mazhar, Department of Civil Engineering received a cash prize for his paper under Soil Stabilization & Ground Improvement Theme at SVNIT-Surat on 20<sup>th</sup> December, 2019.

Mr. Madhusudhan Kulkarni, PhD Scholar, Department of Electrical Sciences was awarded TCS Research Scholar Program Scholarship (Cycle 15) - July, 2019.

Mr. Prakash Rewatkar, PhD Scholar, Department of Electrical Sciences received the best paper award at 13<sup>th</sup> IEEE Nanomed (21–24 November 2019, Korea).

Mr. Mandan Naresh, a PhD student of Department of CSIS, has been selected for the TCS Research Scholar Program in August, 2019.

Mr. Himanshu Gupta, Department of CSIS won Best Paper Award for An Empirical Framework for Code Smell Prediction using Extreme Learning Machine, 9<sup>th</sup> Information Technology, Electromechanical and Microelectronics Conference (IEMECON 2019), Jaipur, India.

Ms. Kirti, Ph.D Scholar, Department of Pharmacy received 'Meilstein Travel Award' of \$1,200.00 USD to present paper in International Conference Cytokines 2019 in Vienna, Austria.

Ms. Pragya Paramita Pal, Ph.D Scholar, Department of Pharmacy received CSIR-Travel Grant for attending International Conference Cytokines 2019 held in Vienna, Austria.

G. Roy, Department of Pharmacy received Travel Fellowship from CRS - India Chapter to present poster at CRS Annual Meeting, Valencia, Spain, 21 July 2019. G. Roy also received 2<sup>nd</sup> Best Poster Award at CRS - India Chapter Annual Meeting.

Rahul Midha (2016B3A70923H) was selected in Mitacs Globalink Research Internship Programme in which he will be going to Canada for a research internship at Thompson Rivers University, Kamloops under Prof. Roger Yu from May to August, 2019.

## Mantra Award Winners – 2018-19 - Hyderabad Campus

- Outstanding Leadership (Male): V. V. S. Bharadwaja
- Outstanding Leadership (Female): Aakruti Jain
- Entrepreneur of the year: Rajat Bansal
- Social Leadership: Nanda Kishore Burla

#### **BITSAA Travel Award Winners**

Keval Marabia 2015A7TS0143H (Annual Conference of the North American Chapter of the Association for Computational Linguistics, Minneapolis, Minnesota).

Sulake Sandeep Kumar 2015A4PS0315H (ASME Summer Heat Transfer Conference, Bellevue, Washington, USA).

Amritanshu Tripathi 2016AAPS0246H (6<sup>th</sup> International Conference on Instrumentation, Control and Automation, Bandung, Indonesia).

Sriharshini Goli 2017A5PS1192H (Autumn Immunology Conference, Chicago, USA).

## Sanctioned Projects during January - June, 2019

S. No.	Title of the Project	Name of the Principal Investigator	Department	Co-PI	Department	Funding Agency	Amount	Sanc- tioned date
1	Development of Pedestrian Facility Assessment Tool for Improving Pedestrian's Safety Condition in Hyderabad	Dr. Bandhan Bandhu	Civil engineering	NA	NA	AIA	100000	16 <sup>th</sup> Mar, 2019
2	Machinability Assessment and Material Characterization of Tungsten Heavy Alloys Used in Defense Applications as KE Penetrators	Dr. Amrita Priyadarshini	Mechanical Engineering	NA	NA	DRDO ARB	1478900	14 <sup>th</sup> Jul, 2019
3	Experimental and Computational Studies of Surface Water Quality Parameters from Morphometry and Spectral Characteristics	Dr. Jagdeesh Anmala	Civil engineering	Dr. Murari R R Varma & Rajitha K	Civil Engi- neering	CSIR	4198080	22 <sup>nd</sup> Jul, 2019
4	Modelling the Capacity Loss in Lithium Ion Batteries During Cycling	Dr. Balaji Krishna Murthy	Chemical Engineering	Dr. Vikranth Kumar S	NA	CSIR	1800000	24 <sup>th</sup> Jul, 2019
5	Waste Minimization and Carbon Capture with Coal Flyash Doped Sorbents- A Two Edged Sword	Dr. I Sreedhar	Chemical Engineering	NA	NA	CSIR	2000000	24 <sup>th</sup> Jul, 2019
6	Rainfall-Runoff Modelling for Lower Godavari Basin in a Changing Climate	Dr. K S Raju	Civil engineering	Dr. Nagesh Kumar	Civil Engi- neering	CSIR	1600000	24 <sup>th</sup> Jul, 2019
7	Quality Control in Road Works	Dr. Sridhar Raju	Civil Engineering	NA	NA	Govt of Telangana Roads & Buildings Dept	990000	1 <sup>st</sup> Aug, 2019

S. No.	Title of the Project	Name of the Principal Investigator	Department	Co-PI	Department	Funding Agency	Amount	Sanc- tioned date
8	Financial Sanction of Research Project on Li Ion Battery	Dr. Sujith R	Mechanical Engineering	NA	NA	HBL	1190000	1 <sup>st</sup> Aug, 2019
9	Pharmacokinetic Evaluation of Ocular In-Situ Gelling Systems Loaded with Treatment of Posterior Uveitis	Dr. Punna Rao	Pharmacy	NA	NA	BMS	340000	1 <sup>st</sup> Aug, 2019
10	Automation of Sample Preparation Process for Pharmaceutical Applications	Dr. Y V D Rao	Mechanical Engineering	Dr. Arshad Javed	Mechanical Engineering	Aizant Drug Research Solutions Pvt. Ltd	1548000	1 <sup>st</sup> Aug, 2019
11	Cosmic Acceleration with Observation Constraints of the Universe in Modified Gravity	Dr. Pradyumn Kumar Sahoo	Mathematics	NA	NA	CSIR	2040528	2 <sup>nd</sup> Aug, 2019
12	Cardiac-Organ-On- Chip: Integrated Microfluidic Cardiac C18:K18 Platform for Drug Screening and Toxicity Detection	Prof. Sanket Goel	EEE	NA	NA	DST	4375800	19 <sup>th</sup> Aug, 2019
13	Functional Role of Histone Deacetylase 6(HDAC6) in the Progression of Oral Squanous Cell Carcinoma: Regulation of Li Beta Expression /Autophagy and Epithelial Mesenchymal Transition	Dr. Onkar Kulkarne	Pharmacy	NA	NA	ICMR	3500000	4 <sup>th</sup> Sept, 2019
14	A Solar Assisted Combined Cooling, Heating and Energy Source: An Alternative Energy Source for Rural India	Dr. Santanu Prasad Datta	Mechanical Engineering	NA	NA	DST	3840496	16 <sup>th</sup> Sept, 2019

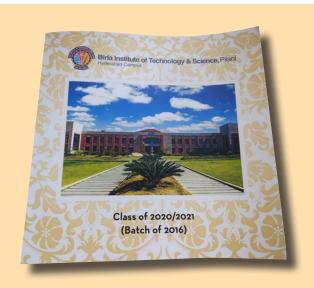
S. No.	Title of the Project	Name of the Principal Investigator	Department	Co-PI	Department	Funding Agency	Amount	Sanc- tioned date
15	Seismic Certification for our Range of Racks Based on Certification of 3 Step 2 Tier Rack	Dr. Mohan SC	Civil engineering	NA	NA	HBL	118000	14 <sup>th</sup> Oct, 2019
16	Network Coding for Multipath Transport	Dr. Paresh Saxena	CSIS	NA	NA	AnsuR Technologies AS, Oslo Norway	547200	21 <sup>st</sup> Oct, 2019
17	Synthesis of Highly Stable Zr-Based Mixed -Linker Metal Organic Frameworks (MOFs) for Humidity Control and Gas Separation	Dr. Himanshu Aggarwal	Chemistry	NA	NA	DST	2198183	30 <sup>th</sup> Oct, 2019
18	Impact of Modern Organized Multi Brand Retail Trade on Street Vendors Case Study of Two Capital Cities	Dr. Archana Srivastava	Economics and Finance	NA	NA	ICSSR	450000	31 <sup>st</sup> Oct, 2019
19	Interpretation of Tuberculin Reaction using Medical Photography and Computer Aided Diagnosis	Dr. Jabez Christopher	CSIS	NA	NA	DST	983400	19 <sup>th</sup> Nov, 2019
20	Pharmacokinetic and Pharmacodynamic Evaluation of New Chemical Entities for Ocular Diseases	Dr. Nirmal J	Pharmacy	NA	NA	Incilia Therapeutics Pvt.Ltd	814200	19 <sup>th</sup> Nov, 2019
21	Designing of Potential Adsorbents Via Molecular Modelling and Simulations for the High Temperature Carbon Dioxide Capture	Dr. Angan Sengupta	Chemical Engineering	NA	NA	DST	2195220	26 <sup>th</sup> Nov, 2019

S. No.	Title of the Project	Name of the Principal Investigator	Department	Co-PI	Department	Funding Agency	Amount	Sanc- tioned date
22	Development of A Comprehensive Methodology to Improve Traffic Safety in Indian Urban Roadways Based on Advanced Statistical Techniques	Dr. Bandhan Bandhu	Civil Engineering	NA	NA	DST	1139880	26 <sup>th</sup> Nov, 2019
23	Structured Dialogues for Sustainable Urban Water Management (SDSUWM)	Dr. Suchismita Satpathy	Humanities and Social Sciences	Dr Biswanth Dash	Humanities and Social Sciences	DST	5726400	28 <sup>th</sup> Nov, 2019
24	Using A Geo- Composite Drainage Layer (GDL)	Dr. Sridhar Raju	Civil engineering	NA	NA	CSR	400000	13 <sup>th</sup> Dec, 2019
25	Understanding the Commercialization of Brease Milk From Sociological Perspective	Dr. Suchismita Satpathy	Humanities and Social Sciences	NA	NA	AIA	187000	16 <sup>th</sup> Dec, 2019
26	Integrated Smart Phone and IOT Enabled Microfluidic Sensor for Real Time Qualification of Soil Macronutrients Conductivity and pH	Dr. Satish Kumar Dubey	Mechanical Engineering	NA	NA	DST	1871408	19 <sup>th</sup> Dec, 2019
27	Harvesting Energy from Underwater Ocean Currents Through Coupled Vortex-Induced Vibration, Flapping Dynamics, Electromagnetic Induction and Piezoelectric Effects	Dr. Pardhasaradhi G	Mechanical Engineering	NA	NA	DST	2735370	23 <sup>rd</sup> Dec, 2019
28	Micro-Plasma Transistor for High Temperature Applications	Dr. Karumbaiah C	EEE	NA	NA	DST	2563070	28 <sup>th</sup> Dec, 2019

#### **Alumni Relations Meet**

An interaction session with the Distinguished Alumni Awards (DAA) winner - 2019, Mrs. Akila Krishnakumar was arranged on 3<sup>rd</sup> August, 2019. The Distinguished Alumnus Award in the category of Corporate Leadership was awarded to Ms. Akila Krishnakumar, in recognition of her outstanding contributions to the society, as a Corporate Leader during Convocation on 4<sup>th</sup> August, 2019.

The interaction session had her recollecting her days in Pilani, and then the journey and challenges she had faced along the path. The interaction ended with a very lively question answer session that was also joined in by her spouse Mr. Krishnakumar, Co-founder of Mindtree.



#### Yearbook

Alumni Relations for the first time brought out the Yearbook for the joining batch of 2016 to help students remain connected to one another. It was distributed to all the students who attended the Graduands Party.

#### **Graduands Party**

On the 28<sup>th</sup> November, 2019, final year students from first degree and higher degree, all those who would graduate in 2020, joined the faculty members for the Director's Farewell Dinner. This year, the Student Alumni Relations Cell (SARC), had also arranged for a photo booth so that all attendees could get their photos clicked solo and in groups that would go into their yearbook. The event saw speeches from members of the student fraternity as well as faculty members and heartful words were exchanged. The wonderful evening concluded with a memorable dinner.



#### **Rotaract Club Meet**



Rotary International is an international service organization whose stated purpose is to bring together business and professional leaders in order to provide humanitarian service and to advance goodwill and peace around the world.

BITS Pilani alumni, Mr Sharath Choudhary ('81 batch) and Mrs Anukhendry ('83 batch), who are now members of the Rotary club of Hyderabad Deccan, came to campus to educate the students regarding their club, what they do, and how it can help not just the members, but the general society as well. The idea of starting a chapter on campus was pitched and students responded positively, with a generous number showing interest. A Chapter of the Rotaract Club

of BITS, Hyderabad Campus was formally established on campus on 23<sup>rd</sup> November, 2019. This club will act as a platform to improve leadership skills of the students and to meet like-minded Rotarinas from all over the world. The club's main aim revolves around coming up with innovative solutions to some of the most pressing problems in the world.

Student Alumni Relations Cell (SARC) along with Rotary Club of Hyderabad Deccan organized two blood donation camps on campus on 15<sup>th</sup> and 22<sup>nd</sup> September, 2019.

The official installation of the Board Members of the Rotaract Club of BITS, Pilani Hyderabad Campus took place on 23<sup>rd</sup> November, 2019. The event was well attended and featured past District Governor, Rtn. Suresh Chandrasekhar as Chief Guest.

#### Photography 101

by Pratik Mehta (2012B3A3610H)

The Student Alumni Relations Cell, along with Photog (the Photography club at BITS Pilani, Hyderabad Campus) organised a workshop by Pratik Mehta, an alumnus of the 2012 batch of Hyderabad Campus





who is currently a part of an award-winning photography team, Knots by Amp which was started by another BITSian from Pilani campus. The workshop, conducted on 14<sup>th</sup> September, 2019, encompassed tips and tricks on ways to make the best out of a phone's camera, and also conducted a photo walk on the campus.

#### **BITSians Day**



BITSians day was celebrated on 2<sup>nd</sup> August, 2019. BITS Embryo along with Student Alumni Relations Cell arranged talks by two of our alumni, Mr. Ajay Chaturvedi and Mr. Avesh Singh, to take us back to their days at BITS when they had their share of happiness, sadness, fun and experiences. They spoke about invaluable the BITSian tag has been and how it has helped in their journey in the real world. Mr. Ajay Chaturvedi (a 1995 Pilani graduate), the founder of HarVa - an Indian business process outsourcing

organization and an author, who was honoured by WEF as a Young Global leader and has many other accolades on his name, shared his experiences as a BITSian. Mr. Avesh Singh (a 2017 Pilani graduate), currently a core team member of I-PAC (Indian Political Action Committee) and formerly working in various roles at InMobi, spoke about his days in BITS Pilani and his journey to the current position.

#### **Library Book Festival**

The Library organised a week-long Annual Book Festival in association with the Campus Book Store between 14<sup>th</sup> and 20<sup>th</sup> October. This was the 11<sup>th</sup> edition of Book Festival in the campus which aimed to further improve the reading culture among the community on the campus. More than 20 leading publishers participated in this event, around 25k books on various subjects including self-help, books for competitive examinations and children's books were on display. Faculty and students were encouraged to recommend the books from the display to the library. From the exhibition, over 2000 books were recommended to the library. Apart from the students and the faculty, the community on the campus also showed keen interest in purchasing the books during the book festival. More than 4000 people visited the Book Festival.





#### International Programmes & Collaborations Division (IPCD)



Delegation of Australian National University.

Seventeen students completed their off-campus thesis abroad: the universities chosen by our students for offcampus thesis were, National Technological University, Singapore; National University of Singapore, Monash University, Australia; Wright State University, USA; University of California, LA; Eugene Applebaum College of Pharmacy & Health Sciences, Michigan, Israel institute of Technology, Harvard Univ., Shafiee Lab, Max Planck Institute for Informatics, Germany, University of Michigan, Politecnico di Milano, University of Liverpool, Mirror Lab, Colorado School of Mines, Cornell University, Carnegie Mellon University, Macquarie University. Two students, Mr. Jainik Kruse and Mr. Daniel Krogmann, spent two months in the Institute under DAAD-RISE scheme and another student, Mr. Omoregie Frank Osarumwense, spent a semester in the campus. Two students did their off campus thesis at Macquarie University under the Women in STEM program. Four BITS-Pilani students have already been selected for FRT 2020 grant to undertake collaborative research project in 2020 at Australian National University.

There were several international visitors who visited the campus, delivered talks, interacted with the students and faculty members. Important visitors from abroad to the campus are: Prof. Sanjay Gupta, Eli & Edythe L. Broad Dean, Broad College of Business, Michigan State University delivered a talk on The Digital Economy: Challenges and Opportunities for Business schools. A delegation from Australian National University consisting of Prof. Peter Bouwknegt, Director, ANU Mathematical Sciences Institute, Prof. Penny Brothers, Research School of Chemistry, Prof. Jong Chow, ANU Research School of Physics and Engineering, Prof Kiaran Kirk, Dean, ANU College of Science visited the campus and delivered talks in their respective departments. A delegation from University of Queensland Prof. Aleksandar D. Rakic, Associate Dean, External Engagement, Dr. Abisekhlyer, Institute for Molecular Biosciences interacted with the students on 3+2 program and also interacted with HoDs of Engineering and Science departments and team IPCD.

Prof. Patrick Phelan, Mechanical & Aerospace Engineering, Arizona State University delivered a talk on 'The future of sustainable buildings'. The delegation consisting of Prof. B. Shanker, Electrical and Computer Engineering, Prof. Thomas C. Voice, Civil and Environmental Engineering, Prof. Neeraj Buch, Civil and Environmental Engineering of Michigan State University made a focus discussion with team IPCD on the 3+2 program and joint Ph.D. Program.

The team from Macquarie University Prof. Richard de Grijs, Associate Dean, Global Engagement, Faculty of Science, Prof. Deborah Richards, Department of Computing, Dr. Kaushik Venkatesan, Department of Molecular Chemistry, Dr. Fatemeh Salehi, Department of Mechanical Engineering have interacted with students on the program 'Women in STEM' and delivered talks in their respective departments.

Mr. Chigozie Okocha, Vice Consul, U.S. Consulate General, Hyderabad, Mr. Suheillmtiaz, Advisor, Education USA, and Mr. Venkat Ventaka Rajan, Consular Team Lead, U.S. Consulate General, Hyderabad visited the campus and spoke to our students on student visa application and procedure to apply for Engineering studies at US universities.

A team of faculty members and Ph.D. students from BITS-Pilani, Hyderabad Campus participated in the Graphene Camps organized by the Graphene Engineering Centre, Graphene Companies and UK Universities. Associate Dean, IPCD participated in the seminar organized by British Council of Higher education and British Consulate and interacted with the officials of UK consulate and the representative of UK universities for possible collaboration.



Delegation of Macquarie University



VC with BITS-Pilani, Hyderabad Campus students and the officials of Macquarie University at Macquarie

## Distinguished Talks / Lectures

Guest Lecture by	Organization	Topic of the Talk	Date
Prof Sundara Ramaprabhu	IIT Madras	Carbon Nanomaterials for Advanced Energy Related Applications	4 <sup>th</sup> July, 2019
Prof P Sreenivasa Kumar	IIT Madras	Ontologies and Applications	2 <sup>nd</sup> August, 2019
Dr Nikhil Varma	Anisfield School of Business, Ramapo College of New Jersey	Managing Blockchain	16 <sup>th</sup> August, 2019
Prof J Ramkumar	IIT Kanpur	Introduction & Recent Advances In Micro-Manufacturing	16 <sup>th</sup> August, 2019
Dr Dinesh Shenoy	Novartis Pharmaceuticals	Expectation of pharmaceutical industry from academics	18 <sup>th</sup> August, 2019
Prof Jayant Murthy	Indian Institute of Astrophysics	To the Moon and Beyond: A Neil Armstrong Retrospective and Perspective	20 <sup>th</sup> August, 2019
Dr Veera Reddy	IICT, Hyderabad	Organometallic and Photocatalytic	27 <sup>th</sup> August, 2019
Prof Penelope Brothers	School of Chemistry, Australian National University	Lighting up Sugars and Other Adventures with Boron Pyrrole Ligands	5 <sup>th</sup> September, 2019
Dr Anjeneya Swami Kare	University of Hyderabad	Parameterized Algorithms for Graph Partitioning Problems	9 <sup>th</sup> September, 2019
Dr Parnika Das	Variable Energy Cyclotron Centre, Kolkata	Penning Ion Trap	18 <sup>th</sup> September, 2019
Dr Pradeep Nirgude	UHV Research Laboratory, Central Power Research Institute (CPRI), Hyderabad	Advancement in the Field of High Voltage Engineering	21 <sup>st</sup> September, 2019
Prof Amir Ullah Khan	Professor, MCRHRDI Visiting Faculty at ISB, NALSAR and the Foreign Service Institute	Recession in the Auto Sector: Lessons Learnt	23 <sup>rd</sup> September 2019
Mr Rajkumarlyer	Qubole, Bangalore	<ul> <li>A Brief history of Distributed Data Management Systems</li> <li>Transactions in Distributed Databases</li> </ul>	24 <sup>th</sup> to 25 <sup>th</sup> September, 2019

Guest Lecture by	Organization	Topic of the Talk	Date
Prof Anand Srivastava	IIIT Delhi	An interaction session with faculty for research collaboration	2 <sup>nd</sup> October, 2019
Mr K Sitaramanjaneyulu	Pavement Evaluation Division, CSIR - Road Research Institute, New Delhi	Placement Management System	12 <sup>th</sup> October, 2019
Dr Pravata Mohanty	Tata Institute of Fundamental Research, Mumbai	Recent discovery results from GRAPES-3 cosmic ray observatory	16 <sup>th</sup> October, 2019
Dr Prabhat Pujahari	IIT Madras	An Odyssey through Our Universe – from the 'Big Bang' to the 'Little Bang'	17 <sup>th</sup> October, 2019
Dr Y V Reddy	Ex- RBI Governor	Interaction on Indian and Global Economy	19 <sup>th</sup> October, 2019
Mr Thomas Mathew	CoE Gasification, Reliance Technology Group, RIL – Mumbai	Technological Advances on Coal and Pet Coke Gasification	24 <sup>th</sup> October, 2019
Mr I V Madhusudhana Reddy	Mega Wide Consultant	Airport Pavement Design	25 <sup>th</sup> October, 2019
Prof Parama Bhaumik	Jadhavpur University	Universal Intelligent Problem Solver: A Concept of AGI	25 <sup>th</sup> October, 2019
Mr Manjunath Rao Ramakrishna	M/s Atkins Limited Bangalore	Highway Geometric Design	1 <sup>st</sup> to 2 <sup>nd</sup> November, 2019
Dr Balakrishna P	GE Hyderabad Technology Center, Hyderabad	Technology Pillars from Generation to Utilization Towards Efficient and Reliable, 'Smart Grid'	13 <sup>th</sup> November, 2019
Prof Nimmi Rangaswamy	IIIT Hyderabad	Perspectives on the Intersections of HCI and the Social Sciences	14 <sup>th</sup> November, 2019
Dr Shinji Kudo	Institute for Materials Chemistry and Engineering, Kyushu University, Japan	Sustainable Processes in Civil & Chemical Engineering (SPCCE 2019)	15 <sup>th</sup> to 16 <sup>th</sup> November 2019
Dr Koji Nakabayashi	Institute for Materials Chemistry and Engineering, Kyushu University, Japan	Sustainable Processes in Civil & Chemical Engineering (SPCCE 2019)	15 <sup>th</sup> to 16 <sup>th</sup> November, 2019

Guest Lecture by	Organization	Topic of the Talk	Date
Mr Jagadeesh Babu Kothamasu	Sree Lakhyam Fin Analytics, SEBI Registered Investment Advisor, Visiting Professor – NMIMS	Introduction to Technical Analysis	16 <sup>th</sup> November, 2019
Prof Anirudha Joshi	IIT Bombay, Industrial Design Centre	Designing Technology for Adoption by Emergent Users	19 <sup>th</sup> November, 2019
Prof Richard de Grijs	Macquarie University, Australia	Is Bigger Always Better? The Quest for the Next-Generation Extremely Large Telescopes	21st November, 2019
Prof Deborah Richards	Macquarie University	Intelligent Virtual Agents for Education, Training and Health	21st November, 2019
Dr Fatemeh Salehi	Macquarie University - Australia	The Use of Computational Fluid Dynamic (CFD) Simulations for Clean Energy Technologies	21st November, 2019
Dr Kaushik Venkatesan	Department of Molecular Sciences, Macquarie University, Australia	Conceptual Design Approaches to Next Generation Electronic and Optoelectronic Materials	21st November, 2019
Prof S Sampath	IISc Bangalore	Electrocatalysis Using Nitrides, Carbides and Layered Chalcogenides	21st November, 2019
Dr Fatemeh Salehi	Macquarie University, Australia	Computational modelling of particle and droplet flows	21st November, 2019
Dr Prasad Rao Rangaraju	Department of Civil Engineering, Clemson University, USA	Interaction with the faculty and the research scholars	21 <sup>st</sup> December, 2019

#### Student Events

#### **ATMOS 2019**

With daily proshows, dozens of events and competitions throughout the day and a couple of workshops aimed at highlighting trends in technology, ATMOS 2019 was organised by students between 18th and 20th October. As a part of Proshow, artists including Anand Bhaskar, The Yellow Diary, Shaan and Bonka performed on the second and third days of the fest. The first day of ATMOS began with a comedy night, featuring comedians Rahul Dua and Azeem Banatwala. This edition of ATMOS also saw many well known public figures coming in to campus to speak, including Flipkart CEO Kalyan Krishnamurthy and former RBI Governor, Dr. Y Venugopal Reddy. When it comes to tech, our campus played host to Dr. Jitendra Nath Goswami, the Chief Scientist behind Chandrayaan 1 at ISRO, and also organised a telepresence talk by Rajat Monga, one of the Tech Leads for Tensorflow at Google. This ATMOS also saw the third edition of the entrepreneurship panel, JumpStart 3.0, where panelists Bhagavan K (Founder of Quantico Computacao), Rohit Sen (Co-founder of NIRA), Amod Malviya (Co-founder of Udaan), and Priyanshi C (Co-founder of InstaCar) talked about their entrepreneurial journey.



Event Jumpstart









Stand-up comedian, Mr. Rahul Dua performing during the event

#### SPICMACAY Performances



Society for the Promotion of Indian Classical Music and Culture Amongst Youth (SPICMACAY), a non-profit organisation, organised events on campus in association with the campus's chapter of the NSS. The first performance, organised on 11<sup>th</sup> September, 2019 in our auditorium, played host to renowned Bihu performer Ranjit Gogoi, who has performed with his troupe across the globe. Bihu is a folk dance form that has its origins



in Assam. The second event this semester was organised on 1<sup>st</sup> November 2019, a carnatic music performance by Padma Shree and Sangeetha Kalanidhi awardee, Avasarala Kanyakumari. This performance included renditions of many famous pieces including Vaathapi Ganapathim, Samaja Vara Gamana, Endharo Mahanubhavulu and Raghu Vamsa Sudha.

#### Sanskriti 2019

Sanskriti or Ethnic Day 2019 was conducted on 17<sup>th</sup> November, 2019. With dance, drama, music and song performances by all the regional associations, BITS Hyderabad became a bit more colorful for a day as most people decided to don traditional attire. This Sanskriti also played host to Street Violator and Rapbox, who performed a fusion rap in a mix of three languages - English, Hindi and Telugu. With more than six hours of performances which covered the cultures and art forms of all of India, Sanskriti 2019 was a pretty fun break from monotony for the average BITSian.

#### Yes !+ Workshops

The on-campus Art of Living Students' Chapter organizes the YES!+workshop every semester. This workshop teaches effective breathing techniques which help students lead a balanced life ahead, effectively handle academics and clubs and other extra-curricular activities, improve time management skills, enhance enthusiasm and creativity, improve productivity and enjoy every moment with a smile. This workshop also develops leadership and team management skills and enhances self-confidence.

Between July and December 2019, YES!+ was organised in August, September with 80, 45 participants respectively.



#### Mind & Body Well-Being

#### **BPHC Chapter of Heartfulness**

The idea of inner peace is one that has always fascinated the human race, and Heartfulness is a practice which aimed to help a person get closer to achieving marked self-improvement and, ultimately, attain the focus that's important to life. The Heartfulness Chapter of BITS-Pilani Hyderabad Campus began in 2014, and activities have been conducted since then, keeping the aim in mind. At the beginning of the previous semester, Masterclasses were conducted to introduce the Heartfulness method to all those interested, which had a participation of about 100 members.

Apart from such initiatives, there are weekly sessions for new and regular practitioners alike. Individual sessions are held every Thursday, while group sessions are held every Saturday. Newer initiatives are continually being planned so that more people benefit from Heartfulness'.





#### Social Initiatives by NIRMAAN

Nirmaan, BITS Pilani Hyderabad Chapter has organised many thoughtful and innovative events last semester along with team of 150 volunteers.

The volunteers made a great head start by making some adorable friends at an orphanage - Grace Social and Educational Society on friendship day to stay motivated to do their part for the betterment of society.





#### **Educational Initiatives**

#### Project Parishkar

Project Parishkar, an educational initiative started in 2018-19 academic year, was resumed again with 20 non-teaching staff's children. It was thought of as an efficient method to provide free educational support since it involved no transportation and hence better participation from the volunteers. These one-to-one sessions conducted every day are very beneficial to the students since it helps them study at their own pace in their comfortable language. A quantitative feedback was also taken from the children and parents time to time to track their progress and improve our methods of teaching. Various engaging activities were organised on children's day for the kids to encourage an all-round development along with studies.



#### Food 4 Thought

In the 1st semester, Nirmaan partnered with 'Food 4 Thought Foundation' to provide nearby government schools with functioning libraries, with an aim to impart a reading culture in the selected schools. The initiative aims to inculcate the habit of reading and reciting skills in students which they otherwise fail to receive in their regular school hours. Sixteen dedicated volunteers spent their Saturday afternoons assisting these kids read various books in language of their choice.



#### Other Activities



#### Health camp

On 31st October, 2019, Nirmaan in collaboration with Lions Club, Hyderabad organised an eye and diabetes checkup for the villagers of Pothaipally. A total of 103 residents belonging to different age brackets were benefitted from the health camp. Twenty six of them received spectacles from Lions club along with 7 villagers undergoing free cataract surgeries.



#### **Ganesh Chaturthi**

#### Green Ganesha

To promote eco-friendly practices and avoid the hazardous plaster of paris idols on campus, an innovative idea was taken up by Nirmaan volunteers. Around 30 green ganeshas — clay ganeshas which later turned into beautiful saplings, were sold to both student body and faculty. This small attempt at promoting green and reducing pollution was greatly encouraged by both the faculty and students.







#### Clay Ganesha workshop - at schools

To educate the kids about celebrating an eco-friendly festival, a clay Ganesha workshop was organised in three schools in Pothaipally, Upperpally and Malkaram villages which were adopted by Nirmaan. It was a delight for the volunteers watching and helping the kids make their own idols with their entire soul and heart.

#### Manthan '19

The annual NGO conference, organised every year during out technical fest – ATMOS was conducted this year too with great vigour. This year's Manthan observed active participation from 10 NGOs from different colleges in both conference followed by case study competition. The event also had inspiring talks by the chief guests - Mr. Mayur Patnala, Co-founder of Nirmaan and alumnus of BITS Pilani, Ms. Anuradha Reddy, Co-convener if INTACH and Guest of Honour, Prof. Kannan Ramaswamy. The conference ended with a mindful of creative ideas, changed perspectives and a hope to bring change in the community.



#### Joy of Giving Week

Joy of Giving Week, also called the DaanUtsav was organised on campus, in the first week of November. The week-long event comprised of various activities, all with an aim to celebrate giving and spreading love. The events included a talk by Mr. Prasant Lingam, founder of bamboo

house, a star gazing session for students of Project Pariskhar in collaboration with Ad Astra - astronomy and science club of our campus, visit Krishna Sadan Old age home - a retirement home meant for the senior citizens, spend time and organise lunch for kids at Sanhitha Home for Girls and the week ended with a Sports events organised for the primary kids of Upperpally Government school. Message of Joy, a headliner event of the week, providing a platform to the student community to express their compassion and gratitude to fellow students on campus. Personal letters for all the faculty from Nirmaan were slid into their cabins to express their heartfelt gratitude and thank them for their constant support and guidance.



Sports activities at Upperpally school



Old age home visit



Star gazing session for project Pariskhar kids



Visit to Sanhitha girls home



Message of joy stall

#### Activities Conducted by the Community Welfare Unit



#### **Independence Day 2019**

Independence Day began with an early morning 1.7k and 3.4k run organised by the Student Welfare Department, which saw participation from students and staff. Flag hoisting was organised at Stage 2 lawns, where Director Dr. G. Sunder hoisted the flag. The flag hoisting was followed by a slam poetry performance by members of the student organisation, Hindi Tarang and patriotic song performance. This program, organised by the Community Welfare Unit, ended with prize distribution for the winners of the marathon and distribution of sweets to all the attendees.







#### Children's Day

Children's Day was celebrated at BITS Pilani Hyderabad Campus on 16<sup>th</sup> October, 2019. Sports and fun activities for children of all age groups were included for the event.

#### Janmashtami Celebrations

Janmashtami was celebrated at BITS Pilani Hyderabad Campus for the first time on 24<sup>th</sup> August, 2019. All the community kids actively participated in the festival. The function was followed by a procession of small kids dressed as little Krishnas and little Radhas, Garba Dance and Dahi Handi.

#### Bathukamma Festival



Bathukamma. the colorful floral festival of Telangana State, was exuberantly celebrated in the campus in the first week of October with exquisite and elaborate flower arrangements. Along with the rhythmic dance, folk songs were sung enthusiastically by the participants signifying the spirit of the festival.

#### Durga Puja





Durga Puja was also celebrated at BITS Pilani Hyderabad Campus for the first time from 4<sup>th</sup> to 8<sup>th</sup> October, 2019. Navaratri, the nine nights which celebrates the divinity within each individual and all around in nature was celebrated with great enthusiasm in the campus. Various forms of Mother Divine as a protector, nourisher and bestower of knowledge was invoked and revered. Most of the community members joined the festivities and actively took part in the celebrations. The Puja concluded with Sindur Khela and Pratima Visarajan on 8<sup>th</sup> October, 2019.

#### **Ganesh Utsav**







Ganesh Utsav was celebrated at BITS Pilani Hyderabad Campus from 2<sup>nd</sup> to 8<sup>th</sup> September, 2019. Apart from cultural events, art exhibition was conducted on 7<sup>th</sup> September, 2019 by faculty and staff. The Puja was concluded with Lakshmi Ganpati Homam and Ganesh Visarajan on 8<sup>th</sup> September, 2019.



Painting Exhibition











Cultural performances by community

Cookery contest organised during the occasion

## Introducing New Faculty (1st July - 31st December, 2019)

Full Name	Designation	Department	Date of Joining
Brajesh Kumar Panigrahi	Assistant Professor, Gr-I	Mechanical Engineering	15 <sup>th</sup> Jul, 2019
Manik Gupta	Assistant Professor, Gr-I	Computer Sci & Information Sys	15 <sup>th</sup> Jul, 2019
Dipanjan Chakraborty	Assistant Professor, Gr-I	Computer Sci & Information Sys	15 <sup>th</sup> Jul, 2019
Ankur Bhattacharjee	Assistant Professor, Gr-I	Electrical & Electronics Engg	29 <sup>th</sup> Jul, 2019
Amit Ranjan Azad	Assistant Professor, Gr-II	Electrical & Electronics Engg	30 <sup>th</sup> Jul, 2019
Pankaj Kumar	Assistant Professor, Gr-II	Chemical Engineering	31 <sup>st</sup> Jul, 2019
Ved Prakash Mishra	Visiting Professor	Chemical Engineering	1 <sup>st</sup> Aug, 2019
Sabyasachi Dey	Assistant Professor, Gr-I	Mathematics	10 <sup>th</sup> Aug, 2019
VuppuluriAmol	Assistant Professor, Gr-I	Mechanical Engineering	13 <sup>th</sup> Aug, 2019
Kundan Kumar Singh	Assistant Professor, Gr-I	Mechanical Engineering	3 <sup>rd</sup> Sept, 2019
K Bhargav Kumar	Assistant Professor, Gr-I	Mathematics	4 <sup>th</sup> Sept, 2019
Jaideep Chatterjee	Professor	Chemical Engineering	1 <sup>st</sup> Oct, 2019
Srimath Tirumala Pallerlamudi Srinivas	Assistant Professor, Gr-II	Electrical & Electronics Engg	25 <sup>th</sup> Nov, 2019
Venkatakrishnan Ramaswamy	Assistant Professor, Gr-I	Computer Sci & Information Sys	2 <sup>nd</sup> Dec, 2019
Rakesh Pandey	Assistant Professor, Gr-II	Computer Sci & Information Sys	20 <sup>th</sup> Dec, 2019
D V N Siva Kumar	Assistant Professor, Gr-II	Computer Sci & Information Sys	28 <sup>th</sup> Dec, 2019



#### BITS in Media



#### **BITS** Pilani test methods to tackle dengue

EXPRESS NEWS SERVICE

RESEARCHERS from the BITS Pilani Hyderabad have tested a cost-effective way of tackling the burden of vec-tor-borne diseases like den gue, using a combination of entomological survey, data analysis of the survey' analysis of the survey findings and mapping of po-tential sources of the dis-ease using GPS technology and Google Earth Pro. The methodology used by BITS Pilani Hyderabad re-

searchers involved under taking an entomological survey at six villages in Shameerpet.

#### Poor awareness

Awareness among villagers



జవహర్నగర్: జవహర్నగర్ బిట్స్ ఫిలానీ క్యాంపస్లేలో నిర్మాత్ సంస్థ ఆధ్వర్యంలో నిర్వహి స్తున్న ఇగ్మెట్-2020 కార్యక్రమం 2వ రోజు ఇస్ వారం సందడిగా సాగింది. విద్యార్థులు ఆట పాటలతో ఉల్లాసంగా గడిపారు. ఈ సందర్భం

గా నిర్వహించిన వలు క్రీడా పోటీల్లో విద్యా ర్థులు సత్తావారు: కాగితపు బొమ్మల తయారీ, గా సర్వవారంలు ర్థలు సత్తాదారు. కాగితపు బొమ్మం తయారీ, ఫాటోమాట్, రోజో టిక్ (పదర్శన ఎంతగానో ఆకట్టుకుంది. మంచి చెదుల మధ్య వ్యత్యాసం తెలియజేన్నూ ప్రదర్శించిన నాటకాలు ఎంతారు గానో ఆలోచింపజేశాయి. అనంతరం విద్వారు



జట్మ్ లో ఖోఖో ఆడుతున్న విద్యార్థులు

లకు వైద్య పరీక్షలు నిర్వహించి రక్తహీనఓ గురించి తెలియజేశారు.



'అట్కాస్' అదుర్గ్

#### Curtains come down on BITS social fest

SPECIAL CORRESPONDENT HYDERABAD

The eighth edition of Ignite, the annual social fest of Nirmaan Organisation of Pilani-Hýderabad Campus, which saw participation of children from schools and orphanages, concluded on Sunday.

A star-gazing session for students of classes 1-3 was conducted where the tots got to observe stars and the moon in the sky.

Further, various interactive sports activities and a self-defence workshop were organised to empower the kids and make them feel protected in adverse situations.

A health check-up was undertaken for the girls of higher classes where the importance of personal hygiene and health problems associated with low blood levels and anaemia were discussed.

A public speaking workshop was organised for class 9-10 students while a life skills and poster making workshop was held for those from senior classes.

The fest got under way on Friday and was presided over by G.Sundar (director), Suman Kapur (faculty) and B.V. Pattibhiram, who was the guest of honour



to a life of learning

రు పురస్కాలతో సత్యలిస్తున్న ప్రాఫిసర్ గోవర్గన్ మెప

ప్లిఫ్**కార్దు** 

ఇన్స్టోట్యూట్ ఆఫ్ టెక్నాలజీ అండ్ సైన్స్ హైదరాబాద్ క్యాంపస్లో శుక్రవారం ంచిన '2019 అట్మాన్' మూడు రోజుల వేడుకల ప్రాంధభ్రమానికి ద్రపంచ దేశాలు డిజిటల్ రంగం వైపునకు first degrees, 146 students రాగణంలో నేటి యువత వాటిని అందిపుచ్చుకోవాల్సిన అవ eceived their higher దన హాజరై మాట్లాడుతూ.. ఎల ఎ ఎ... కేస్టిన పలు సాంస్కృతిక కార్యక్రమాలు కాండ్రిక్ల ప్రాంత్స్ అధ్యాప్త legrees and 31 PhD schol rs received PhD degrees విద్యార్థులు దేశాభివృద్ధికి సహకారం అందించాలి ాపరుల





జమార్జనగర్: పబ్బభారులైన విద్యార్థులు వివిధ రంగాల్లో రాజిస్సు దేశాయిస్పరికి తమ వంతు సహకారం అందించాలని ప్రాపెనక్, రసాయన శాస్త్ర విభాగం అధి పతి ఆవార్య గోవ్వక్ మోహకాకా వీలుపునిర్వారు. అది వారం జమార్జనగోవలోని బిట్స్ వీలానీ క్యాంపస్తిలో

8వ ప్రాతకోత్సవ కార్యజ్రమానికి ముఖ్య అతిథిగా విప్పే సీచ జంకువ విధాయలకు పటాలను అందటేశారు. ఈ కవి న్యాతికాత్సం కార్యణమాలు ముఖ్య అలంజా పార్ట పేప ఆయన విద్యార్థులకు పట్టాలను అందజేశారు. ఈ పేప అయన జర్వారుత్తు మన దేశంలో పుస్త లమైన అవకాశాలు ఉన్నాయని, విద్యార్థులు వీటివి పద్విరియోగం చేసుకోవాలన్నారు. విద్యార్థులు తమ

ప్రాఫెసర్ గోవర్ధనన్ మోహత కొని భ్రమంకంలో అత్యున్నతమైన స్వేనాలకు, సూచిందారు. వైస్ డాన్బలర్ స్టానికి కట్టాబార డుతూ పట్టభడ్రులు సమాజానికి ఉపయే మంచి మార్కాల్లో నదు స్వా అనుకున్నది సా న్నారు. విట్యే విలానీ హైదరాబాద్ క్యాంవస్ డాక్టర్ సుందర్, అధాయకు...

921 students were awarded

degrees, of which 744

students received their

బ్, అధ్యాపకులు, మార్క్లు 921మందికి పట్టాలు.. 921 మందికి పేశ్వలు... దర్శ్ పిరాన్ హైదరాబ్ క్యాంకులో 82 మంది ప్రార్థలు పట్టాతులు అయింది. అద్ది మంది పిద్దార్థలు పట్టాతులు అయింది. అదికే మార్గులు పట్టాతులు అయింది. 144, మీపాద్ 13 మ్మే ఇంటి లేదక్క లక్ష్ములకు 145, కింటి 135, ఇంటి లేదక్క లక్ష్ములకు 155, క్షాంట్లు 135, క్షాంట్లు



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