

# BITScan

## Hyderabad Campus



## Celebrations on Foundation Day



The 17<sup>th</sup> Foundation Day of BITS-Pilani, Hyderabad Campus, was celebrated on 28 April, 2023. The ceremony was marked by the gracious presence of Prof. V. Ram Gopal Rao, Vice Chancellor, BITS-Pilani.

The Foundation Day ceremony was organised in the campus auditorium, where we commemorate the growth and metamorphosis of the institute over the last 16 years. A video of the phase-wise expansion of various campus facilities was presented to the audience, followed by an introduction of the new staff who have joined us over the last year. We also celebrated the student's achievements. The Vice-Chancellor addressed the gathering and articulated a vision to take the institution to greater heights. On this occasion, a special issue of the newsletter 'BITStory' was released by Prof. G. Sundar, Director, BITS-Pilani Hyderabad Campus.

The Vice Chancellor felicitated three senior faculty members, Prof. R. Gururaj, Prof. N. Jalaih and Prof. M. Srinivas, who have completed 15 years with BITS-Pilani, Hyderabad Campus. Women outsourced employees who had completed the two-wheeler training under the MOWO Social Initiatives (Empowered Women with Motor Training) were also felicitated by the Director and Vice-Chancellor.

## Confluence of Academic Ideas, Intellect and Information (Workshops / Conferences / Symposia)

### National Symposium on Convergence of Chemistry and Materials (CCM -2023), organized by the Department of Chemistry

The Department of Chemistry organized CCM-2023, the third edition of the National Symposium on Convergence of Chemistry and Materials (CCM) on the 6-7 January, 2023. It aimed to explore science at the interface of Material Science and Chemistry. It covered experiments and theory, and showcased recent technological advances in the field of materials chemistry. This symposium was conceived to bring scientists, researchers, and industrial partners working at the interface of materials and chemistry on the same platform with an eye towards great interactions and exchange of thoughts. Distinguished presenters at the Symposium included Prof. A. Ajaya Ghosh (CSIR-NIIST Trivandrum), Prof. M. Jayakannan (IISER-Pune), and Dr. R. Subasri (ARCI Hyderabad).

### The C-REx (Computer Science Research Exploration): A Symposium on Research Exploration, organized by the Department of Computer Science and Information Systems



C-REx 2023

The Department of Computer Science and Information Systems organized a one-day Symposium on Research Exploration, C-REx (Computer Science Research Exploration) on 16 April, 2023. The symposium aimed to provide young Computer Science students (final year

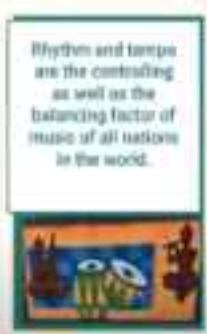
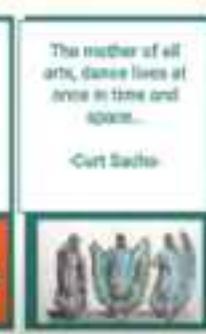
undergraduate, postgraduate as well as recently graduated) an opportunity to interact with researchers, academicians, and industry professionals from the field of Computer Science. The symposium facilitated exposure to a wide spectrum of research domains in academia and industry. The symposium featured sessions on several topics in the domain of Computer Science, along with showcasing the research conducted by the Department.

### Workshop on Artificial Intelligence for Automated Human Health-Care and Monitoring, organized by the Department of Computer Science and Information Systems

Dr. Abhijit Das from the Department of Computer Science and Information Systems organized a one-day national workshop titled 'Artificial Intelligence for Automated Human Health-care and Monitoring' at the 17<sup>th</sup> IEEE International Conference on Automatic Face and Gesture Recognition (FG 2023) on 5 January, 2023. It was a one-day summit to bring together the latest ideas in Computer Vision for Automated Human Health Monitoring. The goal of this event was to bring leaders in AI and healthcare together from across the globe. The keynote speakers included Dr. Vitaly Herasevich, Professor of Anaesthesiology & Medicine at the Mayo Clinic, Ziyah Wu, Senior Director of Vision and Robotics at UII America, Surangama Dasgupta, Medical Practitioner and dancer, and Dr. Suchanda Sangitalaya, Guest Professor at Justus Liebig University, Giessen, Germany. Along with this, four research papers were presented on two tracks on cognitive and physiological assessment. Around 50 participants from all around the globe participated in the event.



FG 2023



## **The 4<sup>th</sup> Annual Conference in Economics and Finance, organized by the Department of Economics and Finance**

The Department of Economics and Finance organized its 4<sup>th</sup> Annual Conference between 9-11 February, 2023. The aim of the conference was to encourage Doctoral Scholars in their pursuit of research and academia. The three-day conference was conducted in an offline mode, chaired by Prof. Vivekananda Mukherjee, welcomed research papers across various fields of economics and finance. The department hosted Prof. Sanjay Banerji (Nottingham University Business School), Prof. Arunava Sen (ISI, Delhi), and Nitya Nanda, Director (CSD), as its distinguished speakers to engage in topics including Markets, Agency Roles, and economic diplomacy of India and China.



Group Photo

## **Workshop on Teacher's Enrichment, organized by the Department of Mathematics**

The Department of Mathematics conducted a one-week Teacher's Enrichment Workshop on the topic 'Linear Algebra, Differential Equations, and Applications' from 9-14 January, 2023. It was sponsored by the National Centre for Mathematics, a joint venture of TIFR and IIT, Bombay.



Group Photo

## **Workshop on Process Simulation using Aspen HYSYS, organized by the Department of Chemical Engineering**

The Department of Chemical Engineering organized a Workshop on 'Process Simulation using Aspen HYSYS' under the convenorship of Prof. Vikrant Kumar Surasani and Dr. Arnab Dutta, on the 2-3 June, 2023. Dr. Sanjay Bhardwaj, (Scientist-G & Head Centre for Technology Acquisition and Transfer (CTAT), International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) – Hyderabad) was the chief guest for the event. The workshop had about 60 participants from industry and academia.



Group Photo

## **Training Programme for CIPLA Batch-II certification, organized by the Department of Electrical and Electronics Engineering**



Group Photo

The Department of Electrical and Electronics Engineering organized a 3-day Training Certification Programme (CIPLA batch II certification) from 9-11 January, 2023. This training by Cipla Industry was attended by 33 people and the training was given in the Department Labs.

## Celebration of International Mother Language Day, organized by the Department of Humanities and Social Sciences

The Department of Humanities and Social Sciences led the celebration of International Mother Language Day, on 21 February, 2023. The Department organized a roundtable discussion titled 'Education in Mother Tongue'. Four well-known linguists, Prof. Aditi Mukherjee (IIIT Hyderabad), Prof Duggirala Vasanta (Osmania University), Prof. Pingali Sailaja (University of Hyderabad) and Prof. Surabhi Bharati (English and Foreign Languages University), spoke on the need, relevance and benefits of mother tongue-based education during the discussion and responded to the questions of the participating students, research scholars, and faculty members from various departments. The speakers emphasized developing an empathetic attitude towards learners with respect to social class, caste, religion, gender, and a harmonious and non-hierarchical attitude towards the co-existence of multiple languages including English in the classroom.



Professor Pingali Sailaja, Head, Centre for English Language Studies, University of Hyderabad.

## The 1<sup>st</sup> Public Policy Workshop, organized by the Department of Humanities and Social Sciences

The Department of Humanities and Social Sciences organized the inaugural edition of the Public Policy Workshop on 25 March, 2023. It was a one-day event, featuring keynote speeches by Mr. Jayesh Ranjan, IAS, Principal Secretary, IT and Industries, Telangana government and Ms. K. Sujatha Rao, IAS, Former Secretary,

Union Ministry of Health on subjects of innovation in governance and public health policies in India. The event created an academic space for deliberation on the future of public policy as a field in India and the career alternatives it provides to young minds interested in solving complex problems with policy dimensions. Eminent speakers included Prof. Aseem Prakash, Dy. Director, TISS Hyderabad Campus, Dr. N. Vasanthi, Professor of Constitutional Law at the NALSAR University of Law, Hyderabad, Prof. Amir Ullah Khan, MCRHRDI, Government of Telangana and Mr. Sandeep Paidi, Managing Partner, KPMG, Hyderabad.



Mr. Jayesh Ranjan, IAS, Principal Secretary, IT and Industries, Telangana Government.

## Panel Discussion on the Teaching and Learning of Film Studies, organized by the Department of Humanities and Social Sciences



Professor Neepa Majumdar, Film and Media Studies Program, University of Pittsburgh.

On 27 May, 2023 the Department of Humanities and Social Sciences organized an international online panel discussion on the teaching and learning of film studies on the anniversary of the publication of the textbook Film Studies: An Introduction (2022), co-edited by Dr. Spandan Bhattacharya. The speakers included prominent scholars in the field: Dale Hudson from New York University, Abu Dhabi; Debasree Mukherjee from Columbia University; Neepa Majumdar from the University of Pittsburgh; Ranjani Mazumdar from Jawaharlal Nehru University.

and Uma Bhrugubanda from the EFLU, Hyderabad. The panel discussed how to address several pedagogical questions and concerns related to teaching film studies which included the importance of textbooks in the Indian undergraduate curriculum, where instructional resources are limited and recent shifts in film theory pedagogy. The panel was followed by a question and answer session.

### **Two Day National Workshop on Challenges in Welding and Additive Manufacturing (2D NWWAM 2023), organized by the Department of Mechanical Engineering**

The Department of Mechanical Engineering at BITS-Pilani Hyderabad Campus organized a two-day national workshop titled '2-Day National Workshop on Challenges in Welding and Additive Manufacturing' (2DNWWAM 2023) jointly with the Indian Institute of Welding (IIW), India 9-10 February, 2023. It focused on the broad research areas of welding and additive manufacturing processes and technologies. It comprised of invited keynote talks by distinguished scientists and leadership from the national research labs (DRDO/DAE/ISRO/CSIR), faculty members from premier academic institutions, scientists from R&D laboratories, and selected industry talks by the consultants and equipment suppliers from different industries across the nation.



Group Photo

### **National Conference on Wind Engineering (NCWE 2023), organized by the Department of Mechanical Engineering**

The Department of Mechanical Engineering organized a two-day national workshop titled 'National Conference on Wind Engineering – 2023' (NCWE 2023) from 3-4 March, 2023 supported by the Indian Society of Wind Engineering (ISWE). The chief guest, Prof. Mahesh Tandon, President, ISWE, inaugurated the conference and it was followed by a Special Lecture by Prof. Prem Krishna, Former Head, Dept of Civil Engineering, IIT Roorkee & Former Vice President,

INAE. Several prominent speakers like Prof. Yukio Tamura (Director, Wind Engineering Research Center, Tokyo Polytechnic University), Prof. R. Panneer Selvam (University of Arkansas), and Dr. K. Suresh Kumar (RWDI), delivered keynote addresses. The conference themes ranged broadly from CFD, AI and ML studies, to safety of structures, to field measurements in the field of Wind Engineering. Five sessions were held across two days.



Group Photo

### **Seminar on Quality Management System (QMS) Regulatory Affairs and Software Innovations in Pharmaceutical Industry, organized by the Department of Pharmacy**

The Department of Pharmacy organized a one-day Integrated Seminar on 'Quality Management System (QMS) Regulatory Affairs and Software Innovations in Pharmaceutical Industry' on 27 February, 2023. The seminar was inaugurated by Dr. PV Appaji (Advisor to the Bulk Drug Manufacture Association of India as well as FICCI, Telangana chapter), followed by a keynote. The session was also addressed by Prof. Ahmed Kamal, Senior Professor Emeritus, BITS-Pilani Hyderabad Campus. The seminar comprised of two sessions and a total of six talks. Prominent speakers also included Dr. Muralidhara Babu Gavini, Former USFDA Auditor, Dr. VSS Murthi, Director, Quality, MASUU Global Solutions, Mr. Narendra Reddy Gangula, Head of Corporate Quality Operations of Suven Pharmaceuticals Ltd, and Dr. Ramesh Pennamareddy, Managing Director at MASUU Global Solutions. More than 450 participants across industries and various higher educational institutions across India attended the seminar.



Seminar on Quality Management System (QMS) Regulatory Affairs and Software Innovations

## International Conference / Seminar / Workshop

### Department of Biological Sciences

- Prof. Nishith Gupta delivered a talk on 'A Classic to Contemporary Tale of Phospholipids in *Toxoplasma gondii*' at the Global Virtual Symposium on Toxoplasmosis (TOXO-2023) hosted in the USA from 23<sup>rd</sup> to 24<sup>th</sup> January 2023.
- Dr. Shuvadeep Maity presented a paper with the subject 'Molecular signatures mark differences in ALS-resistant and sensitive motor neurons: A multi-omics approach' at the 11<sup>th</sup> Joint AOHUPO & 7<sup>th</sup> AOAPO 2023 hosted in Singapore from 8<sup>th</sup> to 10<sup>th</sup> May 2023.
- Prof. Nishith Gupta delivered a talk on 'Biogenesis and Functional Repurposing of Glycerophospholipids in *Toxoplasma gondii*' at the SickKids Hospital in Toronto, Canada on 26<sup>th</sup> June 2023, the Dalhousie University, Halifax, Canada from 16<sup>th</sup> to 17<sup>th</sup> June 2023 and the Institute of Neurology (Edinger Institute), Goethe University, Frankfurt in Main, Germany on 14<sup>th</sup> June 2023, and in the UAE, from 10<sup>th</sup> to 15<sup>th</sup> January 2023.
- Prof. Nishith Gupta went on a collaborative research visit to the SickKids Hospital in Toronto, Canada from 1<sup>st</sup> April to 30<sup>th</sup> June 2023, and to the Pasteur Institute in Paris, France to discuss 'Parasite-Host Interactions' from 1<sup>st</sup> to 4<sup>th</sup> June 2023.

### Department of Chemical Engineering

- Prof. D. Purnima delivered a talk on 'A Journey through Extraction of Biomaterials using Agricultural residue and their applications' at the International Conference on Advanced Materials for Health, Energy, and Environment (AMHEE-2023) hosted by JSS Science and Technology University and Sri Jayachamarajendra College of Engineering from 28<sup>th</sup> February to 2<sup>nd</sup> March, 2023.
- Dr. Debirupa Mitra delivered a talk on 'Tailoring Materials and Surfaces to Combat Antimicrobial Resistance' for Hyderabad-Soft Matter Day, 2023, at IIT Hyderabad on 13<sup>th</sup> May, 2023.

### Department of Computer Science and Information Systems

- Dr. Prajna Devi Upadhyay presented a paper titled 'Open Information Extraction with Entity Focused Constraints' at the 17<sup>th</sup> Conference of the European Chapter of the Association for Computational Linguistics in Dubrovnik, Croatia which took place from 2<sup>nd</sup> to 6<sup>th</sup> May, 2023.

### Department of Economics and Finance

- Prof. Mini Thomas conducted a Project Workshop on 'Global Trade and Economic Recovery in the Post-Pandemic World' at the ERIA (Economic Research

Institute for ASEAN and East Asia) from 22<sup>nd</sup> to 23<sup>rd</sup> March

- Prof. Rishi Kumar conducted a Research and Training workshop on the 'Co-Benefits of expanding water supply in urban India: Evidence from a quasi-experiment' in Dhulikhel, Nepal from 20<sup>th</sup> to 24<sup>th</sup> June, 2023.

### Department of Electrical and Electronics Engineering

- Dr. Chetan Kumar V. visited ETH Zurich, Switzerland for research exposure on 22<sup>nd</sup> May, 2023.
- Prof. Sanket Goel gave a guest lecture on 'Benchtop Laser Induced Miniaturized Sensors and Energy Harvesters' at Hiroshima University, on 14<sup>th</sup> March, 2023.
- Dr. Parikshit Sahatiya delivered a talk on 'Industrial Engineering' at Purdue University, USA, as part of time spent there for research exposure, from 1 to 2 June, 2023.
- Dr. Sayan Kanungo delivered a talk on 'Integrations of Two-Dimensional Materials in Nanoscale Fin-FET Design- Prospects and Challenges' at Hiroshima University, on 30<sup>th</sup> May, 2023.

### Department of Humanities and Social Sciences

- Prof. Lavanya Suresh presented a paper titled 'A polycentric framework to Understand small-scale irrigation in Andhra Pradesh, India' at the XIX Biennial IASC Conference on 'The Commons We Want: Between Historical Legacies and Future Collective Actions', held at the University of Nairobi, Kenya, from 19<sup>th</sup> to 24<sup>th</sup> June.

### Department of Mathematics

- Dr. Rohit Gupta presented a paper titled 'A class of permutation trinomials with Niho exponents' at the 15<sup>th</sup> International Conference on Finite Fields and Their Applications, held at Campus Condorcet, Paris, France, from 19<sup>th</sup> to 23<sup>rd</sup> June, 2023.

### Department of Mechanical Engineering

- Dr. Mrinal Ketan Jagirdar presented a paper at the International Conference on Modeling, Simulation, and Optimization of Energy Systems, held at Canadian University of Dubai, on 17<sup>th</sup> and 18<sup>th</sup> June 2023.

### Department of Physics

- Dr. Subhadeep Roy was an invited speaker at the Upscaling Porous Media workshop at the Norwegian University of Science & Technology (NTNU), Trondheim, Norway, from 30<sup>th</sup> April to 4<sup>th</sup> May 2023, and delivered a talk on 'Approaching the continuum limit: effective rheology during a two-phase flow'.

## Faculty Awards

### Department of Biological Sciences

- Dr. Shuvadeep Maity was awarded the Travel Award by DST-SERB on 6 April, 2023.
- Prof. Nishith Gupta received the International Senior Biomedical Scientist Fellowship by ICMR-DHR on 11 February, 2023.
- Dr. Shuvadeep Maity was appointed as a Member of the Selection Panel for the Proteomics Award at BITS-Pilani Goa on 18 March, 2023.
- Prof. Kavi Devraj received the Ramalingaswamy Fellowship by DBT on 24 July, 2023.
- Dr. Kirtimaan Syal received the NASI-Young Scientist Platinum Jubilee Award on 23 January, 2023
- Dr. Kirtimaan Syal was selected as INYAS-INSI constituent member on 1 February, 2023.

### Department of Chemistry

- Dr. Nilanjan Dey awarded the DST Young Scientist and Technologist (SYST) Award by SYST - Department of Science and Technology
- Dr. Himanshu Aggarwal was appointed as Associate Fellow by Telangana Academy of Sciences in 2023
- Prof. Sounak Roy was appointed as Fellow by Telangana Academy of Sciences in 2023
- Prof. Sounak Roy was appointed Fellow by Royal Society of Chemistry 2023
- Prof. Sounak Roy received the IFI Research Mobility Award by the Embassy of France in 2023

### Department of Civil Engineering

- Dr. G R Abhijith won Second Place in the Graduate Student Paper competition organized by the ASCE Environmental and Water Resources Institute
- Prof. Arkamitra Kar received an Invitation to the Technical Committee Membership of the Asian Concrete Federation
- Prof. Arkamitra Kar received 2023 Certificate of Reviewing by the International Federation for Structural Concrete Journal for fib members in April 2023
- Prof. Arkamitra Kar received 2023 Certificate of Reviewing, Construction and Building Materials published by Elsevier

### Department of Computer Science and

#### Information Systems

- Prof. Manik Gupta has been appointed as the Vice-Chair of ACM India Women for the years 2023-2025
- Prof. G Geetha Kumari was a core contributor to the BITS-BOSCH Center of Excellence (CoE) on Automotive Cyber Security. The CoE is being set up as part of the Telangana Mobility Valley - TMV initiative of the Telangana State Govt.

### Department of Electrical and Electronics Engineering

- Prof. Sanket Goel was announced as the Associate Editor, Microsystem Technologies, by Springer Nature in January, 2023.
- Dr. Chetan Kumar V was announced as a Member, Technical Program Committee, by IEEE VLSID-2023 in January, 2023.
- Dr. Sayan Kanungo was declared as a Golden Reviewer by IEEE EDS, in January, 2023.
- Dr. Parikshit Sahatiya was announced as Associate Editor, IEEE Access, by IEEE, in February, 2023
- Dr. Parikshit Sahatiya was appointed as Senior Chair of IEEE APSICON-2023, in January, 2023.
- Dr. Parikshit Sahatiya was appointed as a Visiting Assistant Professor, by Purdue University, in June 2023.
- Dr. Ponnalagu RN was announced as Associate Editor, IEEE Sensor Journal, by IEEE, in April, 2023.
- Dr. Pratyush Chakraborty was appointed as Session Chair of ICPEEEV3, in May, 2023.
- Dr. Parikshit Sahatiya was awarded the Distinguished Young Scientist Award & Medal Lecture, at the ICLED 2023, Singapore, in June, 2023.

### Department of Mathematics

- Prof. P. K. Sahoo received the Transilvania Fellowship from Transilvania University, for joining as a Visiting Professor, in March, 2023.
- Prof. P. K. Sahoo joined Transilvania University as a Visiting Professor, from 24 May, - 22 July, 2023.
- Prof. Manish Kumar received an international travel grant from NBHM, Government of India, for attending the 10<sup>th</sup> International Congress on Industrial and Applied Mathematics held on 9 February, 2023.
- Prof. Manish Kumar received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, held in Tokyo, Japan, which comprised of a registration fee waiver on 15 March, 2023.
- Prof. Santanu Koley received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, held in Tokyo, Japan, which comprised of a registration fee waiver on 15 March, 2023.

### Department of Pharmacy

- Prof. P. Yogeeshwari was a recipient of the 'Most Prominent Contributors to Innovation' award, presented at the World Innovation Congress 2023, at The Business Leader of the Year and World Sustainability awards, on 1 February, 2023.

# Student Awards/Achievements

## Department of Biological Sciences

- Vaishali Kumar received the International Travel Award from the Council of Scientific and Industrial Research during 8-10 May, 2023.
- Sharon Mariam Abraham received a travel award at the India EMBO Organoid Meeting 2023, held at the Institute for Stem Cell Science and Regenerative Medicine in STEM, Bengaluru from 6-9 February, 2023.
- Yogeshwar Devarakonda was selected for fully funded Workshop on Computational Biology at the Indian Institute of Science, Bengaluru that took place from 1- 6 June, 2023.

## Department of Chemistry

- Pranva Pramod Nayar received the Mitacs Globalink Research Internship on 13 February, 2023.
- T. Leelasree received a Poster Prize at the Journal of Material Chemistry-A at the National Symposium on Convergence of Chemistry & Materials (CCM-2023) hosted by Department of Chemistry, BITS-Pilani Hyderabad Campus on 7 July, 2023.
- T. Leelasree received the best poster award at CESC 2023: One-Day Conference on Crystal Engineering and Solid-State Chemistry hosted by IISER Thiruvananthapuram on 22 February, 2023.

## Department of Computer Science and Information Systems

- Harsha Varun Marisetty received a Research internship at DREAM: Lab, Department of Computational and Data Sciences, IISc, Bangalore from June-July 2023.

## Department of Economics and Finance

- Ms. Soumya Pal and Ms. Shreya Lahiri received the Best Paper Award in Economics Track Hosts Pilani Hyderabad Campus from 9-11 February, 2023.

## Department of Electrical and Electronics Engineering

- Nawin Ra received the IEEE Best Paper Award, by the IEEE Industry Applications Society, USA, in March, 2023.

## Department of Humanities and Social Sciences

- Krithika Nambiar received KCHR Financial assistance to Scholars, from the Kerala Council for Historical Research, along with an amount of Rs. 1,50,000, on 20 April, 2023.

- Nandana R. received the Research for Justice and Equity Award from the Disability History Association, along with an amount of USD 500.

## Department of Mathematics

- Simran Arora was invited to visit the 'CARMIN, IHP and Centre International De Mathématiques Pures et Appliquées (CIMPA)' by the Institut Henri Poincaré in Paris (IHP), France, from 9 January - 17 February, 2023.
- Kshama Trivedi received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, on 10 April, 2023.
- Vipin V received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, on 10 April, 2023.
- Santanu Kumar Dash received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, on 10 April, 2023.
- Kailash-Chand Swamy received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, on 10 April, 2023.
- Anya Ranjan Ray received the FS1 Financial Support Waiver from the Financial Support Committee of ICIAM 2023, on 10 April, 2023.
- Sunita Kumawat received the DST International Travel Award from DST ITS, on 18 January, 2023.
- Sayantan Ghosh was awarded the Young Relativist award by the Tensor Society of India, 18 - 20 May, 2023.

## Department of Pharmacy

- Asif Itto was awarded the first place for poster presentations by the Control Release Society (CRS-IC), on 25 February, 2023.

## Department of Physics

- K. Nobleson was part of an international collaborative team of astronomers, comprising of members from India, Japan, Europe, and USA, who utilized six of the world's most advanced radio telescopes, including India's largest radio telescope, the uGMRT and announced an early signature of nanohertz gravitational waves in June 2023. They have published 4 papers in 'Astronomy and Astrophysics'.

## Teaching Learning Centre

The TLC organized an Article Writing Competition in which the participants reflected on their pedagogic experiences and experiments in the classroom. The winners of the competition were announced on the 25 April, 2023 and they were - Prof. Chandu Parimi, Prof. Lavanya Suresh and Mr. Tony Sebastian.

## Alumni Relations

SARC, in collaboration with the Humanities Department, organised an enlightening IQ + EQ Talk for BITS-Pilani students on 20 February, 2023. Renowned speaker Mr. Bikram, drawing from his rich tech leadership journey spanning startups to Fortune 100 firms, shared insights at the intersection of intellect and emotion. This transformative session explored holistic growth, leveraging 35 years of experience, culminating in his present solopreneur venture in Advisory and Leadership Coaching. The event underscored the vital amalgamation of IQ and EQ in fostering personal and professional excellence, leaving an indelible mark on attendees' pursuit of balanced success.



Mr. Bikram Kumar Gupta

## International Programmes & Collaborations Division (IPCD)

- IPCD conducted an open house session for students on 25 January, 2023 on International student exchange programmes.
- Organized an information session with Ms. Divya Dave, Northeastern University for students on 27 January, 2023 on Masters' Degrees at Northeastern University.
- Organized a session with Ms. Padma from DAAD for students on Masters, Ph.D & funding opportunities in Germany on 31 January, 2023.
- Organized an information session with Prof. Yutaka Tanaka, University of Fukui, on Master's programme at Fukui University on 1 March, 2023.
- Organized an information session with Dr. Brett Duarte, Arizona State university, United States.

- Interactive session on Research: All Summer Long with Ms. Arjita Nema, Ms. Vidhi, Ms. A Sanjana, Mr. Chirag Jaju for students on 4 May, 2023.
- Talk on Masters in Management Programme with Mr. Deekshith Pachipulusu, HEC, Paris on 11 June, 2023.

## Centre For Innovation, Incubation And Entrepreneurship (CIIIE)

- E-CELL hosted the annual e-Summit, Launchpad '23, featuring impactful business plan competitions. With active participation from over 300 startups across the nation, innovative ideas were presented on various scales.
- The Innovation Cell conducted a Workshop on the topic 'Microcontrollers & IoT' on 22-23 April, 2023. The whole workshop was conducted by a team of students with experience in the field of Microcontrollers and IoT. The participants were given a hardware kit and given challenges to complete.
- TBI, BITS-Pilani Hyderabad Campus invited Mr Neel Mehta, CEO & Co-founder of Studio Carbon. During his visit, he had one-on-one interaction with start-ups followed by a very informative talk for BITS-Pilani Hyderabad campus community on 'Innovating the Future and the Expanding Role of Design'.



Mr Neel Mehta, CEO & Co-founder of Studio Carbon

## PRACTICE SCHOOL DIVISION

The Practice School Division invited Mr. Dhaval Shah (MD) for a talk on the topic 'Introduction to Forex Risk Management' on 21 April, 2023. The talk was attended by students of the institute, where they learned about Practice School-II Opportunities.

## Invited Lectures by Faculty

### Department of Biological Sciences

- Dr. Kirtimaan Syal delivered a talk on 'Regulation of (p) ppGpp synthesis by Rel' at IISER-Bhopal on 23 May, 2023
- Dr. Kirtimaan Syal delivered a talk on 'Bacterial persistence' at PGIMER, Chandigarh from 13-14 January, 2023.
- Prof. Kavi Devraj delivered a talk on the 'Role of blood-brain barrier in health and CNS disease' at the National Animal Resource Facility for Biomedical Research (NARFBR-ICMR), Hyderabad on 13 July, 2023
- Prof. Nishith Gupta delivered a talk on 'Functional Repurposing of Cyclic Nucleotide Signaling in Toxoplasma gondii' at the Exploring New Horizons in Biotechnology (ENB-2023), BHU, Varanasi on 11 February, 2023
- Prof. Nishith Gupta delivered a talk on 'Metabolic Basis of Intracellular Parasitism' at BITS, Dubai Campus on 12 January, 2023

### Department of Civil Engineering

- Prof. Mohan S. C. delivered a talk on 'Structural Health Monitoring - Scope and Applications' at Mahindra University, Hyderabad on 24 May, 2023
- Prof. Arkamitra Kar delivered a talk at the National Conference 'On Innovations in Civil Engineering through sustainable technologies' (NICEST 23) hosted by MGIT Hyderabad in June 2023
- Dr. Raghu Piska delivered a talk on 'Wave propagation analysis of nanobeams using nonlocal strain gradient theory' at BITS-Pilani, Dubai campus from 20-23 June, 2023
- Prof. K. Srinivasa Raju delivered a talk on 'Multi objective Optimization in Irrigation Management' at the National Institute of Technology, Hamirpur on 27 February, 2023
- Prof. K. Srinivasa Raju delivered a talk on 'Machine Learning Algorithms for Flood Susceptibility Assessment- Applications of Artificial Intelligence & Machine Learning in Civil Engineering' at SR Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh on 23 February, 2023
- Prof. K. Srinivasa Raju delivered a talk on 'Fuzzy Logic-based Decision-Making Algorithms in Water Resources'

at Zeal College of Engineering and research (ZCOER), Narhe, Pune on 14 February, 2023

- Prof. K. Srinivasa Raju delivered a talk on 'Flood Susceptibility based Building Risk Assessment for Urban Floods under Climate Change' at National Institute of Technology, Warangal on 3 January, 2023
- Prof. K. Srinivasa Raju delivered a talk on 'Machine Learning Algorithms for Assessment of Flood Susceptibility' Anurag University, Hyderabad on 6 July, 2023

### Department of Computer Science and Information Systems

- Dr. Dipanjan Chakraborty served as the Chief Guest for a college event and delivered a talk on 'Tech Optimist→Tech Pessimist→Tech Realist' at Geethanjali College of Engineering on 3 April, 2023.
- Dr. Dipanjan Chakraborty delivered a talk on 'Tech Optimist→Tech Pessimist→Tech Realist' at the Pre-PhD Symposium and Post-PhD Consortium hosted by IIT Bombay from 28-29 January, 2023.
- Dr. Prajna Devi Upadhyay delivered a lecture on 'Techniques used to construct knowledge bases' at the Centre for AI and Robotics (CARE), DRDO on 25 January, 2023.
- Dr. Aritra Mukherjee delivered a lecture on 'Anomaly detection: Recent trends and applications' in video surveillance systems at MCEME Secunderabad on 27 May, 2023.
- Dr. Abhijit Das delivered a lecture on 'Attention for deepfake detection' at MCEME Secunderabad on 27 May, 2023.

### Department of Electrical and Electronics Engineering

- Dr. Amit Kumar Panda delivered a lecture and conducted a one-day workshop on 'Evolution of Electronic Computing and Future Roadmap in VLSI & Digital System Design using Verilog HDL on FPGA' at Berhampura University, Odisha, on 10 January, 2023.
- Dr. Amit Kumar Panda delivered a lecture on the 'Recent trends of FGPA Design' at Centurion University, Odisha, on 12 January, 2023.

- Dr. Joyjit Mukherjee delivered an invited talk on RTMCDS, on the topic 'Dynamics and Control of Serpentine Robots', at NIT, Rourkela, on 23 June, 2023.
- Dr. Pratyush Chakraborty delivered an invited talk on 'Analysis of Solar Energy Aggregation under Various Billing Mechanisms', at IIEST, Shibpur, on 30 June, 2023.
- Dr. Pratyush Chakraborty conducted a workshop on 'Protection and stability of renewable-dominated power grid', at IISc, Bangalore, on 4 January, 2023.

### Department of Economics and Finance

- Prof. R. Raghunathan delivered a talk on 'Leadership for Healthcare Professionals' at the 73<sup>rd</sup> NHB IMA TNSB Conference (North Zone), hosted by IMA Tambaran, Chennai on 30 June, 2023.
- Prof. R. Raghunathan delivered a lecture on 'Motivating Employees: The Basics' for the Academic Lecture Series, hosted by Rajiv Gandhi Cancer Institute and Research Center, Delhi on 14 June, 2023.
- Prof. Vivekananda Mukherjee delivered a talk on 'Lightening Burden of Trust in Exchange Relations: Analyzing the Role of the Government and the Informal Violence' at FLAME University, Pune on 15 March, 2023.
- Dr. Shreya Biswas delivered a talk 'G20 and Indian Economy' at IIT Bhilai on 30 June, 2023.
- Prof. Vivekananda Mukherjee delivered a talk on 'Industrialization, Migration and Urbanization' at the University of Calcutta on 18 January, 2023.
- Dr. Bheemeshwar Reddy A delivered a lecture titled 'Graded Inequality and Graded Schooling' at FLAME University, Pune on 29 March, 2023.

### Department of Humanities and Social Sciences

- Prof. Santosh Mahapatra conducted a session on 'Promoting Learner Autonomy with Emerging Digital Tools' at the Post-Graduate Department of English, SDNBV College for Women, Chennai, on 30 May, 2023.
- Prof. Santosh Mahapatra conducted a session on 'Classroom communication' at the Commissionerate of Collegiate Education, Govt. of Andhra Pradesh, on 21 May, 2023.

- Prof. Santosh Mahapatra, along with Prof. Richard Smith of the University of Warwick, conducted a session on 'Michael West's contributions to ELT in Bengal and beyond: Construction of textbook materials', for the Bangladesh English Language Teachers Association (BELTA), in collaboration with the University of Warwick, on 10 May, 2023.
- Prof. Santosh Mahapatra conducted a session on 'Alternative Assessment in the Language Classroom', at the Centre for English Language Studies, University of Hyderabad, on 1 March, 2023.
- Prof. Santosh Mahapatra conducted a session on 'Translingual Practices in Content-based Language Instruction' at the University of Kerala, on 25 February, 2023.
- Prof. Santosh Mahapatra conducted a session on 'Fairness and Ethics in Language Assessment' at the Centre for English Language Studies, University of Hyderabad, on 16 March, 2023.
- Prof. T. Vijay Kumar conducted a training session for officers of Central Services on 'Writing skills in English', at Dr MCRHRDI, Hyderabad, on 14 February, 2023.
- Prof. T. Vijay Kumar delivered a talk on 'Translation in the Indian Context', at UGC-HRDC, Osmania University, on 7 February, 2023.
- Prof. Shilpaa Anand delivered a lecture on 'Literary Cultures of Disability' at Kashmir University, on 15 April, 2023.
- Prof. Shilpaa Anand delivered a plenary talk on 'Clinical Encounters: Tracing the 'medical model' through literary events and narrative expositions' at EFLU University, Hyderabad, on 28 April, 2023.
- Prof. Shilpaa Anand delivered a lecture at the 'Perspectives on Disability' workshop on the topic 'Historical and Philosophical Approaches to Studying Disability' at TISS, Hyderabad, on 13 March, 2023.
- Prof. Shilpaa Anand delivered a lecture on the occasion of Women's Day on the topic 'Women and Adaptive Workplace Environments' at the Indian Association of Conservative Dentistry and Endodontics, on 9 March, 2023.

- Prof. Shilpaa Anand delivered a lecture at the Research Methodology Workshop on the topic 'History, Historiography, Genealogy' at the NALSAR University of Law, Hyderabad, on 4 March, 2023.
- Prof. Shilpaa Anand delivered a plenary lecture at the conference Embodied Identities: The Body in Cultural Spaces, titled 'Crowdsourced Pity: Staging Medical Vulnerability in New Media', at Farook College, Kerala, on 21 February, 2023.
- Prof. Shilpaa Anand delivered a lecture on 'Disability Studies: An Overview' at the Faculty Development Programme, at Bharatidasan University, on 18 February, 2023.

### Department of Mathematics

- Prof. Bivudutta Mishra delivered a lecture at the conference National Conference on Advances in Mathematical Sciences and its Application on 'Constraining gravity from dynamical system analysis' at Acharya Nagarjuna University, Guntur, held on 17-18 March, 2023.
- Prof. Bivudutta Mishra delivered a lecture at the conference 2<sup>nd</sup> International Conference on Recent Advances in Mathematical Sciences and Interdisciplinary Areas' on 'Dynamical system analysis of teleparallel gravity model and the cosmological implications' at GLA University, Mathura, held from 22-24 June, 2023.
- Prof. P.K. Sahoo delivered a lecture at the conference International Conference on Differential Geometry and Relativity (ICDGR-2023), on the topic 'Wormhole geometry: Is it science or science fiction?', at the Department of Mathematics, SSI University, Almora, held from 18-20 May, 2023.
- Prof. Santanu Koley delivered a talk at the workshop International Workshop on Mathematical and Computational Methods in Science and Engineering (IWCMSE 2023) on the 'Boundary Element Method', at IIT Ropar, held from 2-13 June, 2023.

### Department of Mechanical Engineering

- Prof. Sujith R. delivered an invited talk on the topic 'Exploring silicon oxycarbides in lithium-ion batteries', at IIT Madras, on 8 March, 2023.
- Prof. Pavan Kumar P. delivered an invited talk on the topic 'Surface engineering in additive manufacturing', at University of Hyderabad, Telangana, on 28 March, 2023.
- Prof. C. P. Kiran delivered an invited talk on the topic 'Assessment of sustainability of a system' at Narayana Engineering College, Gudur, between 17-21 March, 2023.
- Prof. Supradeepan K. delivered a talk on 'Compressible flows', at MCEME, Hyderabad on 2 May, 2023.
- Dr. Jayaprakash K.S delivered a talk at HydSoft 2023 on the topic 'Can droplet emulsion mimic a minimalistic living system?' at IIT Hyderabad, on 13 May, 2023.
- Dr. Sayan Das delivered a talk at HydSoft 2023 on the topic 'Coexisting sliding states of active particles near walls of a confinement' at IIT Hyderabad, on 13 May, 2023.
- Dr. R. Parameshwaram delivered a talk on 'Thermal Energy Storage using Advanced Materials' at Lakireddy Balireddy College of Engineering (Autonomous), Andhra Pradesh, on 23 June, 2023.
- Dr. Sayan Das delivered a talk at the SMYIM 2023 (Soft Matter Young Investigators Meet), on the topic 'Coexisting sliding states of active particles near walls of a confinement', at IIT Kanpur, on 14 June, 2023.

### Department of Pharmacy

- Prof. P. Yogeeshwari spoke at the Hyderabad Life Sciences Innovation Cluster Meet, organized by FABA, ICMR NAFBR, and Rx Propellant, on the 'Biomedical Research profile of BITS-Pilani Hyderabad Campus', on 23 February, 2023.
- Prof. P. Yogeeshwari delivered a talk on 'Design, thinking, and innovation', at R.B.V.R.R Women's College, on 3 February, 2023.

## Sanctioned Projects (SRCD) During January-June 2023

Sl. No	Project Name	PI-Name	PI-Dept	Co-PI-Name	Co-PI-Dept	Funding Agency	Sanctioned-Amount (Rs)	Sanctioned date	Project Duration (Months)
1	Understanding the novel role of PERK in the context of ER-mitochondrial communication in NAFLD	Shuvadeep Maity	Biological Sciences	Pragya Komal and Kirtiman Syal	Biological Sciences	ICMR - 1	42,48,280	06 January, 2023	36
2	Development of polymeric microneedle device for the targeted delivery of therapeutics to the posterior segment of eye	Vamsi Krishna Venuganti	Pharmacy	NA	NA	DSR-PRISM	20,00,000	05 January, 2023	22
3	Miniaturized MIP Nano material Enhanced Electrochemical Devices for Insulin Detection	Sanket Goel	EEE	NA	NA	DST Indo-Austria	10,30,500	06 January, 2023	24
4	Tailor-made, Tumor-Targeted Vitaprotein Nanoparticles of Lapatinib and Letrozole as Nano Chemo-Cocktail for Hormone-Receptor-Amplified Advanced Metastatic Breast Cancers Treatment	Swati Biswas	Pharmacy	Balaram Ghosh	Pharmacy	ICMR	28,82,000	09 January, 2023	36
5	Development of an integrated software and hardware-based system to estimate the axial stresses in hangers used in network arch bridges	Amit Kumar Gupta	Mechanical	Sabareesh G R and Brajesh K	Mechanical	Ms. Poddar Infratech Pvt. Ltd., Delhi	17,65,280	10 January, 2023	6
6	Biomimetic corneal patch for treating fungal keratitis	Nirmal J	Pharmacy	Sanket Goel and Prashant Garg	EEE and LVPEI	ICMR	24,98,280	10 January, 2023	36
7	Performance Evaluation of Soft Soil Treated with a Novel Geopolymer of Microbially Induced Calcium Carbonate Precipitation in Waste Material for Sustainable Development	Anasua Guharay and Toshiro Hata	Civil and Hiroshima University, Japan	NA	NA	India-Japan Cooperative Science Programme (IJSCP)	7,53,500	11 January, 2023	24
8	Development of a meta-material-based vibration isolation frame for housing fuel bundles	Sabareesh Geetha Rajasekharan	Mechanical	Brajesh Panigrahi & Kundoan Singh	Mechanical	DAE BRNS	25,69,600	23 January, 2023	36
9	Residual life Estimation of Metallic/ Composite Structures Such as PCB's Used in Aerospace Systems Subjected to Dynamic and Thermal Loading	Sabareesh Geetha Rajasekharan	Mechanical	Sudha Radhika	EEE	ORDO ARMREB	39,27,928	23 January, 2023	36

Sl. No	Project Name	PI Name	PI-Dept	Co-PI Name	Co-PI-Dept	Funding Agency	Sanctioned-Amount (Rs)	Sanctioned-date	Project Duration (Months)
10	Improving the Machinability in Drilling of Solid and Porous Bone Cements to Mitigate the Problems during the Re-surgery of Bone Cancer Patients.	Amrita Priyadarshini	Mechanical	Hima Kanth L	Sonshine Hospital	DST SERB CRG	31,88,776	24 February, 2023	36
11	Digital twin based solutions for improving reliability and efficiency of multi-stage wind turbine gearboxes	Sabareesh Geetha Rajasekharan	Mechanical	NA	CBIT Hyderabad	DST SERB CRG	28,08,696	02 March, 2023	36
12	Precinical and phase 0/1 clinical investigation of minimally invasive microneedle sclera patch for effective chemotherapy in retinoblastoma	Vamsi Krishna V	Pharmacy	Vishal Raval	LVPEI	ICMR	15,00,000	06 March, 2023	36
13	A novel phase field framework for microstructure driven crack propagation in polycrystalline materials	Amol Vuppuluri	Mechanical Engineering	Raghu Piska	Civil Engineering	DST SERB CRG	18,94,200	10 March, 2023	36
14	Design and development of portable addosis kit for the rapid,trace-level detection of Ketone bodies in biological samples	Nilanjan Dey	Chemistry	Balaram Ghosh	Pharmacy	ICMR	34,35,600	10 March, 2023	36
15	Understanding the role of PERK and MAM signaling during HD condition	Shuvadeep Maity	Biogocial Sciences	Debabrata B and Pragya Komal & Kirimaan Syal	Biogocial Sciences	ICMR - 2	38,23,000	13 March, 2023	36
16	Industrial-scale thermophilic biomethanation of food waste and sewage sludge for production of bioenergy and biofertilizer	Sankar Ganesh	Biological Sciences	Ankur B and Supradeepan	EEE and Mechanical	DBT ATGC	28,10,560	13 March, 2023	24
17	Study of late-time cosmic acceleration in curvature-less and torsion-less theories of gravity with recent observations	Pradyumn Kumar Sahoo	Mathematics	NA	NA	DST SERB CRG	21,48,696	14 March, 2023	36
18	Elucidating the role of Transforming Growth Factor- $\beta$ (TGF- $\beta$ ) regulated long non-coding RNAs (lncRNAs) in Epithelial to mesenchymal transition (EMT) and as therapeutic targets for Oral Cancer	Vivek Sharma	Biological Sciences	NA	NA	ICMR	24,72,000	15 March, 2023	NA

S. No	Project Name	PI-Name	PI-Dept	Co-PI-Name	Co-PI-Dept	Funding Agency	Sanctioned-Amount (Rs)	Sanctioned date	Project Duration (Months)
19	Exploiting Adaptive Data-Rate Technique for Longer Network Lifetime & Resource Allocation of LoRa based IoT Applications	Nikumari Choudhury	CSIS	NA	NA	DSTTIH (Technology Innovation Hub) - IoT Chankya Fellowship	23,75,000	20 March, 2023	41
20	Development of Performance Grade (PG) Bituminous Binder Classification system for India	Sridhar Raju	Civil	Dr. Akshay Gundia	Civil Engineering	MoRTH - Ministry of Road Transport & Highways	1,55,10,000	28 March, 2023	36
21	Design and Development of flexible thermoelectric devices (TEDs) for various applications	Sanket Goel	EEE	Satish Kumar Dubey and Arshad Javed,	Mechanical	DRDO	34,34,000	01 May, 2023	24
22	Development of an Efficient Solar Distillation Apparatus	Sandip S Deshmukh	Mechanical	NA	NA	PRISM DSIR	8,34,587	19 May, 2023	24
23	The co-benefits of expanding water supply in urban India - Evidence from a quasiexperiment	Rishi Kumar	Economics and Finance	Vastav Ratra	Economics and Finance (BE Student in BITS)	SANDEE + CIMOD	2,055,830	25 May, 2023	24
24	Development of an integrated software and hardware-based system to estimate the axial stresses in hangers used in network arch bridges	Amit Kumar Gupta	Mechanical	Sebareesh G R and Brajesh K	Mechanical	Ms. Poddar Infratech Pvt. Ltd., Delhi	17,65,280	10 June, 2023	3
25	CatCE2: Catalysis for Circular Economy towards Sustainable Energy	Sounak Roy	Chemistry	NA	NA	CATCE2 Workshop (Indo-German bilateral conference)	30,00,000	21 June, 2023	4 days
26	Development, optimization and evaluation of stable multidose injectable formulation of anticancer drug	Akash Chaurasiya	Pharmacy	NA	NA	Areva Pharma (US based MNC)	21,44,000	21 June, 2023	24
27	Meshfree Aboint Based Sensitivity Analysis for 3D Aerodynamic Design	N Anil	Mathematics	Keshav S M	CSIR, NAL, Bangalore	CSIR	22,50,000	28 June, 2023	36

## Distinguished Talks / Lectures organized by Departments

Guest lecture by	Organization	Topic of the Talk	Date	Department
Dr. Manish Jaiswal	TIFR, Hyderabad, India.	Genetic screens: targeting mitochondrial shape size and numbers.	23 January, 2023	Biological Sciences
Prof. Shamik Chakraborty	BITS-Pilani, Pilani campus.	Selenium centered hydrogen bonding interaction: A matrix-isolation IR study	09 January, 2023	Chemistry
Dr. Krishna R. Nandipati	Heidelberg University	Molecular Electronic Ring Currents and Cavity Jahn-Teller Polaritons	10 January, 2023	Chemistry
Dr. Sukalyan Bhadra	CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar	Catalytic Proximal-Selective Functionalization of Common Organic Building Blocks	11 January, 2023	Chemistry
Prof S. Lakshmi Narayanan	National University of Singapore	Deciphering Causal Network Models from Time Series Data	12 January, 2023	Chemical Engineering
Dr Disha Bhatia	University of Sao Paulo, Brazil	Model independent explorations of the dark matter	16 January, 2023	Physics
Dr. Mahita Iarjapu	La Jolla Institute for Immunology, California, USA	Investigating biomolecular recognition through an interdisciplinary lens: Lessons from proteins of the immune system	20 January, 2023	Chemistry
Prof. Ajit Kembhavi and Prof. Ninan Sajeeth Philip	Pune Knowledge Cluster, University of Pune	AI for ABC	20 January, 2023	Physics
Dr Pallab Basu	Senior lecturer, School of Physics, University of Witwatersrand, South Africa	Machine learning, spin models, and statistical mechanics	23rd January, 2023	Physics
Prof. Bharat Bhushan	Academy Professor (San Jose, CA)	Nano tribology and bridging the scales	February, 2023	Mechanical Engineering
Lt Gen JS Sidana	Commandant, MCEME	Projects related to defense, DRDO, Centre of Excellence	02 February, 2023	Electrical and Electronics Engineering
Dr. Ramya Enganti	Howard Hughes Medical Institute, Departments of Biology and Molecular and Cellular Biochemistry, Indiana University, Bloomington, USA	Complete sequence assembly of ribosomal DNA arrays in <i>Arabidopsis thaliana</i> : rDNA epigenetic regulation and recombination.	03 February, 2023	Biological Sciences
Dr. Banasree Sadhukhan	KTH Royal Institute of Technology, Stockholm, Sweden	Topological transport in Weyl semimetal	6 February, 2023	Physics
Dr. Tanay Nag	Uppsala University, Sweden	Dynamical construction of Quadrupolar and Octupolar topological superconductors	7 February, 2023	Physics
Dr. Shanta Leishram	Indian Statistical Institute, New Delhi	On a Conjecture of Erdos on squares in Arithmetic Progress	7 February, 2023	Mathematics

Guest Lecture by	Organization	Topic of the Talk	Date	Department
Dr. Vijayeta Malla	National Institute of Construction Management and Research (NICMAR)	Project Management and Job Opportunities	09 February, 2023	Civil Engineering
Sanjay Banerji	University of Nottingham	Can Skilled Experts in BOD Enforce Better Governance? Role of Incentives and Reputation	10 February, 2023	Economics and Finance
Arunava Sen	ISI Delhi	Matching Pairs of Agents and Tasks	11 February, 2023	Economics and Finance
Nitya Nanda	CSD	Why Economic Reforms Produced Different Outcomes in India and China?	11 February, 2023	Economics and Finance
Prof. Kentaro Toyama	University of Michigan	How Can AI Be Used for Social Good?	16 February, 2023	Computer Science and Information Systems
Dr. Soumyananda Chakraborti	National Institute of Malaria Research, New-Delhi, India	Structural and biochemical characterization of key olfaction protein responsible for plasmodium recognition.	20 February, 2023	Biological Sciences
Dr. Ashish Arora	IISER, Pune	Experiments on semiconductors using light under magnetic fields	27 February, 2023	Physics
Dr. Kavi Devraj	Goethe University, Frankfurt, Germany.	Blood-Brain Barrier in Health and CNS diseases.	27 February, 2023	Biological Sciences
Dr. Sarang Bakle	Sai Krishna Neuro Hospital, Hyderabad, India	A neurosurgeon in neuroscience research	27 February, 2023	Biological Sciences
Prof. Ram D. Sriram	National Institute of Standards and Technology, Gaithersburg	Artificial Intelligence and Machine Learning in Manufacturing: An Overview	March, 2023	Mechanical Engineering
Prof. Przemysław Gorka	Warsaw University of Technology	Maximal Operator on Non Standard function spaces	3 March, 2023	Mathematics
Prof. William R. Bishai	The Johns Hopkins University School of Medicine, Baltimore, Md, USA.	Host directed therapies for TB: Old and New	21 March, 2023	Biological Sciences
Mrs. Kavitha Subramiam	Upstox	Transforming the Indian trading landscape	22 March, 2023	TBI
Mr. Varun Sridhar	Paytm Money	Unleashing the future of investing	22 March, 2023	TBI
Mr. Shyam Prabhakar Mardikar	Reliance Jio	5G and future of telecommunications	22 March, 2023	TBI
Dr. Shanta Thoutam	Government Of Telangana	Importance of innovation	24 March, 2023	TBI
Mr. Pranjal Kamra	Finology	How to achieve financial success and security in today's rapid changing world	25 March, 2023	TBI

Guest lecture by	Organization	Topic of the Talk	Date	Department
Mr. Anand Srinivasan	Akasa Air	Aviation's next Adventure	25 March, 2023	TBI
Mr. Vijay Mamtani	Microsoft	Latest trends and development in AI and ML	25 March, 2023	TBI
Mr. Tarun Katal	Coto	Power of Innovation	25 March, 2023	TBI
Mr. Bipin Chandra	Ducati India	Exploring Innovation in the field of racing with Ducati	26 March, 2023	TBI
Dr. Serene Ho	RMIT University	Supporting Climate Resilience among the Urban Poor: Experiences from Honiara, Solomon Islands	28 March, 2023	Humanities and Social Sciences
Mr. Surendra Kumar	Former Lab Director and Outstanding Scientist- Armament Research and Development Establishment	Future prospects in the Defence Industry	April 2023	Mechanical Engineering
Dr. R. Santhanam	Defence R&D Organisation (DRDO), Ministry of India	Development of Models for SMA Spring Based Actuators and their Experimental Validation	April 2023	Mechanical Engineering
Prof. Sanyog Jain	Centre for Pharmaceutical Nanotechnology DEPT of Pharmaceutics (NIPER)	Dual Drug therapy of cancer using Nano technology	04 April, 2023	Pharmacy
Dr Paromita Nath	Rowan University	Probabilistic Digital twin for decision making in additive manufacturing	10 April, 2023	Civil Engineering
Vadrevu Samhita	United Airlines	GPUS for Optimisation	11 April, 2023	Mathematics
Vadrevu Samhita	United Airlines	Solving Large Scale integer Programs using GPU Accelerated Algorithms	11 April, 2023	Mathematics
Dr. Haripriya Narasimhan	Department of Liberal Arts, Indian Institute of Technology, Hyderabad	A Disease of Globalisation? A Qualitative Study of Diabetes in Tamil Nadu	12 April, 2023	Humanities and Social Sciences
Prof. Siva Kumar (Associate Director)	Australian National University	Research Collaboration	21 April, 2023	Electrical and Electronics Engineering
Jai Undurti	Freelance Journalist and Graphic Novelist	World-building in Graphic Fiction	21 April, 2023	Humanities and Social Sciences
Dr. Chiranjeeb Singha	SINP Kolkata	Black hole thermodynamics and strong cosmic censorship conjecture.	9 May, 2023	Physics
Dr. Sampurna Chatterjee	Massachusetts General Hospital (MGH)	Career and Country Hopping from Hotdogs to Biomarkers and Everything in Between	28 June, 2023	Pharmacy

## Student Events

### Verba Maximus'23

On the 28-29 February, 2023 our college campus buzzed with excitement as Verba Maximus, our annual Literary Fest, began. After years of wait and a call-off in 2022, the fest finally unfolded its vibrant celebration of language and culture. With a treasure trove of 18 engaging events, including the headlining spectacles like Sherlocked, the fest catered to diverse interests and passions, witnessing massive participation from schools and universities nearby. Above all, the fest increased its share of entertainment on the evening of the 28<sup>th</sup> with a breaking comedy night featuring celebrity Anshu Mor. Additionally, esteemed journalist Prabhu Chawla graced the occasion, courtesy of BITS Embryo.

The celebration extended beyond the event, with a delectable array of food stalls for the students. Verba Maximus 2023 truly infused the spirit of unity, creativity and celebration, leaving indelible memories in the hearts of all in attendance.



Amphitheatre, LTC

### Arena'23

Arena '23 was scheduled from 2-5 February, 2023. It is the National Annual Sports Fest of BITS-Pilani, Hyderabad Campus. It presents opportunities to athletes from all around India to come and showcase their skills and be awarded for their achievements. The fest featured competitions in various sports, with athletes from multiple colleges coming and participating. The fest also hosted events with organisations like NBA, MTV and artists like Gurleen Pannu and Joel D'Souza performing for the event. Attendees witnessed some of the finest athletes battle it

out to win their sport, with passions running high as the college came together to support their teams. Interactive events like Obstacle Courses, Capture The Flag, Square Four, and E-Sports competitions were conducted for college students. Open Mic Nights and open-air movie nights were also shown, and the fest ended with the college spirit running high, with the football team bringing home the trophy and a DJ night to end the fest on a bright, victorious note.



Basketball



Prize distribution

### International Women's Week

The Women's Week events were kick-started with a ceremony that opened with the debut performance by our resident band – Saaz. Their musical renditions of some of the crowd's favourites serenaded the audience.

On International Women's Day, the NSS chapter at BPHC organized a food stall run by the women of Anthaipally. The total profit made by the stall went to these women, which will help them support their families and invest in their future.

We also had a special poster-making event with an exciting cash prize hosted by the Gender Champions of our campus. Posters could be made by hand or online, and participants used an array of diverse materials to make the posters. The competition focused on a theme of great modern relevance: 'Rights are always contested with duties'. Various groups from all across the campus participated in the events and actively contributed to making International Women's Week 2023 a success.



NSS - food stall run by the women of Anthaipally

## Holi

The vibrant festival of colours, Holi, was celebrated on 8th March in a grand manner on campus grounds at BITS-Pilani Hyderabad. Students enjoyed the joyous celebration, playing with colors and dancing their hearts out as the music played on, accompanied by a rain dance too! The Sangam Regional Association, accompanied by LSD, helped organize a fantastic afternoon for the students, bringing the community together and promoting the rich cultural diversity on campus.



Holi Celebrations by students

## Pearl'23

The weekend of 31 March - 2 April, 2023 invited the biggest fest of the academic year. It starts off with a formal inauguration, which was followed by an informal inauguration, where various cultural clubs and associations showcased stellar performances on the auditorium stage, perfectly amping us up for the next three days of the fest.

The weekend witnessed a slew of talks, competitions, workshops and games hosted by all the cultural clubs and other student bodies.

From mono acting to poster designing, neon parties to quizzes, there was something in store for everyone. A memorable highlight of the weekend was the BITS Embryo organized awe-inspiring talk by filmmakers Anurag Kashyap and Hansal Mehta.

For the comedy night, it was Ashish Solanki's turn to leave the crowd at the auditorium in fits of laughter, a good end to day one of Pearl. The spirits were high on the second night as our students grooved to the up-and-coming Bangalore-based band Manga and the ever iconic Amit Trivedi.



Street Play



Amit Trivedi



Astish Salanki Comedic Pro Show



Hansal Mehta and Anurag Kashyap, Embryo Talk

## Rixa'23

After the biggest fest of the year, students were eager to display their aptitude in the avenue of sports, and 'Rixa' – our Inter Bhawan Sports Meet – fueled their enthusiasm. 'Rixa' was conducted from the 15 -19 April, 2023. Several tournaments pitting hostels against each other made people show up in droves to watch the matches with excitement and vigour, with the sportsmen and sportswomen battling it out with matching enthusiasm.

Several tournaments were then conducted; teams represented their bhawans in cricket, football, badminton, tennis, carrom, chess, volleyball, basketball, table tennis and kabaddi, and different bhawans emerged victorious. Everyone eagerly went to cheer on their peers, excited to watch matches where they displayed true skill and expertise.

## Renaissance'23

To feed the exhilaration persisting after the biggest fest of the year, the inter-bhawan cultural competition, 'Renaissance', was conducted from the 15-19 of April. The student's competitive spirits emerged, and the chance to represent their hostels in the fierce yet friendly competition got everyone ready to cheer on their favourites in an ultimate showdown of wits, skills and creativity. The only goal was to make sure their bhawan came out on top of the leader board. Various tournaments were conducted, which allowed students to showcase their talents in dance, music, drama and more.

## Techweek

TechWeek was hosted from 20 - 23 April 2023, a four-day event that immersed participants in a world of innovation and learning. This enriching affair, organized by various tech clubs, encompassed a spectrum of activities that fostered technical prowess and insight.

The event featured a diverse range of technically oriented workshops, such as an ATV workshop, Linux fundamentals, CAD exploration, and an introduction to competitive coding. Esteemed speakers shared their knowledge during talks, which included discussions on Google Summer of Code (GSoC) and the transformative deCipher internship program. Additionally, an array of food trucks was organized to tantalize the taste buds.

TechWeek exemplified our campus's dedication to nurturing holistic innovation and technical excellence, equipping participants with skills that transcend the classroom



Techweek

## Batchsnaps

Considered one of the most iconic and memorable milestones in the life of a student during their stay at BITS, Batchsnaps'23 was successful in delivering the same levels of zeal and fervour as its predecessors, this time for the 2020 batch. The lawns overlooked by the academic block glittered with a thousand beaming smiles of the faculty, the 2020 batch and their juniors as they spent their evening cherishing their shared moments, immortalized by the lens of DOPY and PHOTOG club. The polaroid stall set up by SARC captured the dazzling sarees and the dapper suits against a beautiful backdrop of pink sky and the waterfall. Even the student clubs, bodies, departments and associations took the opportunity to click pictures; a memorabilia of their tenures.



Batchsnaps

## Community Welfare Activities

### Republic Day Celebrations

The 74<sup>th</sup> Republic Day was celebrated on 26 January, 2023 in BITS-Pilani, Hyderabad Campus. The Republic Day began with an early morning 3.0k run organised by the Student Welfare Department, which saw participation from students and staff. Prof G. Sundar, Director, BITS-Pilani Hyderabad Campus hoisted the National Flag. The flag hoisting was followed by patriotic song and dance performances by the community members. 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.



Republic Day Celebrations



## Annual Community Sports UDAAN

The annual community sports Udaan was organised for all faculties, staffs and their family members from March to May. An approximate number of 500 members participated in the sports events. The winners and runners up were appreciated with medals / trophies and certificates, and participation certificates were given to all.



Annual Community Sports



## Women's Day Celebration

International Women's Week was celebrated in BITS-Pilani Hyderabad Campus from 1 – 11 March, 2023. The program started with inter-hostel competitions, jam night and yoga and self-defense training of girl students. A workshop was conducted on 4 March with invited lectures on 'Women Health, Hygiene and Self Care' by Dr. E.P. Chandrakala (Gynecologist) and 'Women Nutrition' by Dr. Pooja (Nutritionist, Rainbow Hospitals). On 6<sup>th</sup> March, 2023 a vehicle training session was conducted for all female outsourced employees by Ms. Jaya Bharathi (JB) Founder & CEO-Mewo Social Initiatives. On 9 March, 2023 a short program was arranged for all faculty and staff of the institute, which included panel discussions and fun games. A hands-on training session was also conducted for female outsourced employees on 'How to use Mobile Phones'.



Women's Day Celebration

## Medical Camps by Medical Centre

The Medical Centre conducted medical check-up camps for Bone Marrow Density Test, along with doctor consultation (orthopedic) for around 78 faculty and staff on 24 February, 2023. The tests were carried out by a medical team from Intas Pharma and Dr. Sudhakar (Orthopedician) from Rhea Hospital as a precautionary measure for early detection of osteoporosis or osteopenia.



Medical Camps

## Joining Hands (MoUs)

Name of Organization	Date of Signing	Short Description of the MoU signed
Putte Knowledge Cluster (PKC)	17 April, 2023	An MoU has been signed recently between PKC and BITS-Pilani to foster an interdisciplinary cooperation in various areas of science and engineering where Big Data and Artificial Intelligence can be used extensively. PKC will support our students (mainly from Physics, Chemistry, Biology, Chemical engineering & Computer Science) for research & paid-internships, at the undergraduate, post graduate and doctoral levels.
University of Toulouse Paul Sabatier (UT3), Toulouse, France	14 March, 2023	An MoU was signed to work together on the Indo-French project 'Development of a sustainable eco-friendly concrete material with complete replacement of traditional ingredients with waste materials (WASTECRETE)', sponsored by the Indo-French Centre for the Promotion of Advanced Research (CEFIPRA).
University of Fukui, Japan	02 March, 2023	For exploring the possibility for Collaboration Meetings with faculty at BITS Hyderabad campus.
Australian national University, Australia	21 April, 2023	For exploring the possibility for Collaboration Meetings with faculty from BITS campuses.

## Patents Filed

Title	Inventors	Patent No.	Department	Month	Status
Title: Methods of treating cancer using bacteria expressing c-di-AMP	William R. Bishai, Ruchi Jain Dey, Bappaditya Dey, Laurene Cheung	US11590177	Biological Science	February 2023	Granted
An inhibitory compound against lumazine synthase and a method of preparing the same	Ruchi Jain Dey, D Sriram, Monica Singh	202311005039	Biological Science	January 2023	Filed
A method of making metal and laser induced graphene (metal-LiG) nanocomposite	Sanket Goel and Nishchitha N K	202311029011	Electrical and Electronics Engineering	April 2023	Filed
Monolithic Multilayered Microfluidic Device and the Fabrication Method Thereof	Pavar Sai Kumar and Sanket Goel	202311012926	Electrical and Electronics Engineering	February 2023	Filed
Hydrogen Fuel Cell, Methods of Fabricating Fuel Cell and an Electrode	Vanmathi S, Jayapiriyam US and Sanket Goel	202311011380	Electrical and Electronics Engineering	February 2023	Filed
Graphene bioelectrode comprising polydopamine coated gold nanoparticles, method of synthesis and biosensor system thereof	Mrunali Wagh, S K Sahoo and Sanket Goel	202311002716	Electrical and Electronics Engineering	January 2023	Filed
Microneedle-device based collection of interstitial fluid for diagnostic purposes	Venkata Vamsi Krishna Venuganti, Shreya Shashank Chauhan	202311013171	Pharmacy	February 2023	Filed
A chemotherapeutic composition for treating malignant tumors and a method for preparing the same	Swati Biswas, Balaram Ghosh, Vishnu Kiran Rompiccharla	201711028012	Pharmacy	March 2023	Granted
Benzamide based HDAC3 selective inhibitors for the treatment of cancer and the process of making thereof	Balaram Ghosh, Swati Biswas, Ganesh Routholla, Sravani Pulya		Pharmacy	February 2023	Published
Polymeric amphiphilic nanomicelles for aerobic chemo photodynamic therapy and method of preparing the same	Swati Biswas, Balaram Ghosh, Milan Paul	202111032226	Pharmacy	January 2023	Published
A chemical solution deposition system and method for practical device applications	Waseem Ahmad Wani, Kannan Ramaswamy and S. Harihara Venkataraman	432422	Physics	May 2023	Granted

## Student Artwork



Anshika



Aditya Sharma



Kusumita



Snehal



Simran



YSN Kiran



Shradha



Esha

## Introducing New Faculty (Jan- June 2023)

The new faculty members who have joined between Jan-June 2023.

SRN	Name of the Faculty	Designation	Department	Date of Joining
1	Subhadeep Roy	Assistant Professor, Gr-I	Physics	02 January, 23
2	Ishant Sharma	Assistant Professor, Gr-I	Civil Engineering	06 February, 23
3	Yuvraj Singh	Assistant Professor, Gr-I	Pharmacy	06 February, 23
4	Akshay Gundla	Assistant Professor, Gr-I	Civil Engineering	06 February, 23
5	Rickmoy Samanta	Assistant Professor, Gr-I	Physics	27 February, 23
6	Sesha Sai Raghuram Ammavajala	Assistant Professor, Gr-I	Civil Engineering	03 March, 23
7	Anirudh Udupa	Assistant Professor, Gr-I	Mechanical Engineering	20 March, 23
8	Arnab Guha	Assistant Professor, Gr-I	Mechanical Engineering	28 March, 23
9	Sourav Bag	Assistant Professor, Gr-I	Chemistry	01 May, 23
10	Suvadip Das	Assistant Professor, Gr-I	Physics	09 May, 23
11	Niladri Das	Assistant Professor, Gr-I	Electrical & Electronics Engineering	29 May, 23
12	Tanay Nag	Assistant Professor, Gr-I	Physics	26 June, 23

## Editorial Team



Mr. Prasad Inturi

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Credits and thanks to The Department of Photography (DoPY) for some of the pictures

