



Semester-I notes 2023-24

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Editorial

This semester was very special as the Hon'ble Vice President of India Shri Jagdeep Dhankar, along with Union Minister Shri Arjun Ram Meghwal, visited the Pilani campus. Shri Dhankar announced prospective collaborations with BITS Pilani during his visit and subsequently BITS signed an MoU with Indian Council of World Affairs (ICWA) in the areas of international affairs and Indian foreign policy. Further, an MoU was signed with the University of South Florida for a multifaceted partnership that includes students exchange, research collaboration, joint academic programs and internships. The G20 University Connect Leadership Conclave saw eminent leaders, experts and stakeholders from academia,



government, and industry discussing transformation through collaboration to enhance digital economy's role in shaping the global landscape. A state-of-the-art Rakesh Kapoor Innovation Centre with varied facilities for innovation and entrepreneurship has been inaugurated at the Pilani Campus. Various events including the National Pharmacovigilance Week, the World Pharmacists Day, National Entrepreneurship Day, international conferences and symposiums were organized this semester.

This edition features awards and recognitions such as the best faculty award, recognition in the "World Top 2% Scientists", faculty patents for innovations and significant research projects from reputed agencies.

Our students are also doing amazing job! Alt Carbon, a company by our recent graduate, has made a significant impact in combating climate change. It aims to permanently eliminate 5 million tons of CO2 by 2030, securing a sustainable future for generations to come. Another student has been awarded a patent on 'Thermoelectric Stove Generator'. Students' enthusiasm in successfully holding BOSM, OASIS, BITS Embryo is unparalleled.

Hope you enjoy reading the heart-warming stories of this edition!

Independence Day

BITS Pilani, Pilani campus celebrated the 77th Independence Day. The Programme began by recalling the achievements of India, post-independence, to mark the theme of this year's Independence Day, "Nation First Always First", as part of the larger "Azadi ka Amrit Mahotsav". Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, Prof. Sudhirkumar Barai, Director, Pilani campus, Col. Independence Day Celebrations

Soumyabrata Chakravorty (Retd.), Registrar, BITS Pilani, and Prof. S.K. Verma, Dean, Administration hoisted the National Flag, a moment of pride for all attendees. Patriotic songs were sung by the students and the National Pledge to shoulder responsibilities with rights was also being administered. The program ended with the National anthem sung with enthusiasm by all. The event was coordinated by Prof Shilpi Garg, Faculty In-Charge, Institute Functions.



Visit of the Vice-President of India

BITS Pilani was honored to host the visit of Vice President of India, Mr. Jagdeep Dhankar, along with Union Minister Mr. Arjun Ram Meghwal on September 27, 2023. The eminent gathering included Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, and Prof. Sudhirkumar Barai, Director, Pilani campus. The Vice President addressed a large assembly of approximately 200 students, faculty members and government dignitaries emphasizing the pivotal role of education as the cornerstone of success. Mr. Dhankar spoke passionately about India's meteoric rise as a formidable global power, now the fifth-largest economy, with a clear trajectory to become the third-largest. In his riveting discourse, Mr. Dhankar spotlighted the Chandrayaan 3 mission, symbolizing India's scientific prowess and advancement in space research. The Vice President accentuated the remarkable developments the nation has achieved in recent times and underscored the integral role that the youth, especially students from eminent institutions like BITS Pilani, play in shaping the future of the country.

In a landmark announcement that elicited enthusiastic responses, the Vice President unveiled two significant initiatives exclusively for BITS students:

Recurring Parliamentary Visits: Mr. Dhankar extended
a recurring invitation to BITS students to visit the Rajya
Sabha and other pivotal parliamentary buildings in New
Delhi. This initiative aims to provide students with a
firsthand experience of the newly developed infrastructure
and the functioning of the Indian parliamentary system. In

batches of 50-100, students will gain invaluable insights, fostering a deeper understanding and appreciation of the democratic processes that govern the nation.

Exclusive Internship Opportunities: Mr. Dhankar announced exclusive internship opportunities for BITS students at the Rajya Sabha, further enhancing student community and government interaction. Around five students will be granted the privilege of working directly with the Indian Administration, giving them a unique perspective on governance and administrative functioning. This initiative is poised to forge a stronger connection between academia and government, fostering mutual growth and learning.

These initiatives significantly strengthen the symbiotic relationship between the educational institutions and the government, nurturing informed, engaged, and responsible future leaders. The student body and faculty of BITS Pilani expressed their gratitude and excitement, looking forward to the myriad learning opportunities and experiences of these initiative promises.

Union Minister Mr. Arjun Ram Meghwal, Prof. Rao and Prof. Barai shared their insights and expectations, echoing the collective aspiration for a brighter and more prosperous India.

The visit by the Honourable Vice President and the subsequent announcements have invigorated the BITS Pilani community, reaffirming Institute's commitment to academic excellence and nation-building. The students are eager to embrace the opportunities and ready to contribute to India's continued growth and success on the global stage.

Visit of the Vice-President of India





G20 University Connect Leadership Conclave

The G20 University Connect Leadership Conclave, organized on August 25, 2023, was a collaborative event, bringing together eminent leaders, experts, and stakeholders from academia, government, and industry to discuss transformation through collaboration to enhance digital economy's role in

shaping the global landscape. The event featured an inspiring keynote lecture on "G20 & India" by Ms. Preeti Saran, member of the UN Committee on Economic, Social, and Cultural Rights, member of the Governing Council of Indian Council for World Affairs & ex-Ambassador, Vietnam, Ministry of External Affairs followed by a thought-provoking QA session. Ms. Saran

emphasized the significance of collaborative efforts in tackling global challenges and nurturing innovation. The highlight of the conclave was the panel discussions themed "Strengthening Global Prosperity through Collaboration between Universities, Governments, and Industries: A G-20 Perspective" chaired by Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, Prof. Rahul Banerjee, Director, LNMIIT, Prof. Neeraj Gupta, Central University of Rajasthan, Dr. Padmakumar Nair, Director, Thapar Institute of Engineering & Technology, Mr. Pradeep Sethi, CEO & MD, Corporate Insight. The panel engaged in deep conversations, exploring holistic development and emphasizing the strategic significance of partnerships. Another panel discussion, "Powering Global Prosperity: G-20 Strategies for Harnessing the Digital Economy" led by Prof. Sudhirkumar Barai, Director, Pilani campus featured Mr. Onkar Bagaria, CEO of Vivekananda Global University, Mr. Ajai Garg, Director, Digital Law and Compliance at Anand & Anand, Prof. Chandra Shekhar, the former Director, CEERI, and Senior Emeritus Professor BITS Pilani, the panel shed light on the intersection of technology and economics and covered topics such as nurturing digital skills, promoting entrepreneurship in the digital realm, and leveraging technology to navigate the challenges of the modern economy.

As a pre-conclave activity, a poster competition on the theme of G20, was organized for the students of BITS Pilani, which saw enthusiastic participation. Ms. Preeti Saran felicitated the winners of the poster competition. Another pre-conclave G20-themed event included a quiz competition. This event witnessed a massive participation of more than 250 students, accompanied by more than 15 faculty members from their respective institutes. The winners of the quiz competition were felicitated by Prof. Barai and Mr. Sukrit Joshi from RIS. The event concluded with a vote of thanks by Prof. Anupama Mittal, Department of Pharmacy, BITS Pilani, and Convenor of this G20 conclave, followed by the National Anthem. Students from BKBIET, Rakesh College, Indramani College Pilani, and class XI and XII students of Birla Balika Vidyapeeth and Birla Shishu Vihar, Pilani also attended the event.

G20 University Connect Leadership



Regional Science Congress

The Regional Science Congress of Jawahar Navoday Samiti was organized jointly at Jawahar Navoday Vidyalaya, Kaira. BITS Pilani and CEERI Pilani with participants comprising of 52 girls, 64 boys, 7 teachers and 2 Principals during September 11-15, 2023. The event was inaugurated by Prof. S.K. Verma, Dean Administration, Dr. Abhijit Karmakar, Chief Scientist, CEERI and Mr. Sanjay Kumar Yadav, Principal Jawahar Navoday Vidyalaya, Kajra. The event was graced by the presence of Prof. A. P. Singh, Dean, Academic Undergraduate Studies, BITS, and other dignitaries of BITS and CEERI, school Principals and Teachers. The students participated in various academic activities involving basic sciences and engineering lectures and lab visits at BITS and CEERI. Students also visited the Astro Club of BITS to watch Jupiter and its Moons. The event concluded at CEERI Pilani. The valedictory function was graced by Prof. Sudhirkumar Barai, Director, BITS Pilani, Pilani campus and Dr. Suchandan Pal, Chief Scientist, CEERI Pilani. The event coordinators, Prof. Navin Singh and Prof. Pawan Aimera, extended their heartfelt gratitude to all participants and dignitaries for their invaluable support and engagement in fostering a stimulating academic environment.

Regional Science Congress 2023



3rd National Pharmacovigilance Week

The BITS Pharmaceutical Society celebrated the 3rd National Pharmacovigilance Week on September 18, 2023, at BITS Pilani campus which left a lasting impact on all the attendees.

This initiative aims to develop a culture of patient-centricity and safety in the country. Pharmacovigilance monitors the effects of medicinal medications after they have been approved for use, intending to identify and evaluate previously unreported adverse reactions. Commencing the occasion, Prof. R. Mahesh talked about emphasizing the vitality of



pharmacovigilance in healthcare, urging students to be cautious about medication safety and its importance in patient care. Students, through multiple skits, demonstrated their creativity and dedication to raising awareness and portrayed the perils of practices like self-medication and non-adherence to the regimen. Many faculty members: Prof. Sandeep Sundriyal, Prof. Richa Srivastava, Prof. Pryaganshu Khare, and Prof. Sushil K. Yadav were present at the occasion. The event culminated with an address by Prof. Rajeev Taliyan, who explained the importance of pharmacovigilance in ensuring patient well-being. With these informative sessions, BITS fosters a new generation of healthcare professionals committed to protecting the community's health.

National Pharmacovigilance Week Celebrations



World Pharmacists Day

On the occasion of World Pharmacists Day with the theme "Pharmacy strengthening health systems", the Department of Pharmacy and BITS Pharmaceutical Society celebrated the event on September 25, 2023 that brought together students, faculty members, and professionals in the pharmacy field. The event was a testament to society's commitment to promoting the vital role of pharmacists in healthcare. The chief guest, Dr. Ajaya Prakash, Lead Auditor for NABL, Advisor Corporate, Quality and Audit at Win-Medicare Pvt. Ltd. delivered a talk regarding the essentials of good manufacturing practices in industrial applications.

World Pharmacist Day Celebration



The students remembered and emphasized the contribution of Mahadeva Lal Schroff, the father of Indian Pharmacy, who worked as the Principal at Birla College, and cherished a video regarding the journey of the Department of Pharmacy from its genesis and the endeavors of all the esteemed professors. The event was interactive, and the audience engaged through fun games based on medicines. On behalf of the Department

of Pharmacy and BPS, Professor Anil B. Gaikwad, Head, Department of Pharmacy felicitated the chief guest and Prof Rajeev Taliyan concluded the event.

27th International Symposium on VLSI Design and Test

VLSI Design & Test Symposium (V-DAT) promotes research and development in various fields of VLSI Design. VDAT began as a small workshop in 1998 and acquired the status of an international symposium in 2005. This symposium aims to bring industries, academics, researchers, startups, MSMEs, and related practitioners together to exchange ideas for leveraging in their respective fields. The 27th International Science Seminar on VLSI Design and Test (V-DAT) was jointly organized by Pilani and CSIR-Central Electronics Engineering Research Institute during September 29 - October 1, 2023. The technical sessions of the symposium were held at BITS Pilani campus and the concluding and discussion sessions were held at CEERI Pilani.

Dr. P.C. Pancharia, Director CEERI, Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, Prof. Chandra Shekhar, the former Director, CEERI and Senior Emeritus Professor, BITS Pilani, Dr. Devesh Dwivedi, Prof. Dinesh Sharma, Prof. G.S. Visvesvaran, Prof. M. Balakrishnan, Prof. Alpana Agarwal, Prof. Virendra Singh and Dr. Suchandan Pal participated in the panel discussion,

About 350 participants from industry, academic institutions, and research organizations participated in the two-day international symposium, and a total of 57 research papers were presented on the subject of VLSI design and microelectronics under the leadership of Prof. Chandra Shekhar.

VLSI Design and Test (V-DAT) Symposium



MoU between Indian Council of World Affairs and BITS Pilani.

Indian Council of World Affairs (ICWA), an institute of national importance under the ICWA Act, 2001 and BITS Pilani have agreed to collaborate in pursuit of their goal of expanding awareness and knowledge on international affairs and Indian foreign policy and signed an MOU on October 26, 2023 which

will be valid for three years. The objective of the MoU will be to organize studies and seminars on agreed topics on international affairs and Indian foreign policy. The Hon'ble Vice-President of India, Shri Jagdeep Dhankhar, who is the President of ICWA, announced an MoU of ICWA with BITS Pilani during his visit to BITS Pilani on September 27, 2023.

Delegation from BITS Pilani meets PM Narendra Modi

A delegation of BITS Pilani students and staff met the Honourable Prime Minister of India at the G20 University Connect Finale. This experience will undoubtedly shape the future leaders of our nation.

Meeting the Prime Minister



Gandhi Jayanti and Lal Bahadur Shastri Jayanti

BITS Pilani, Pilani campus enthusiastically celebrated Gandhi Jayanti and Shri Lal Bahadur Shastri Jayanti on October 2, 2023. The program began with a traditional lamp lighting by Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, Prof. Sudhirkumar Barai, Director, Pilani campus and Col. Soumyabrata Chakraborty (Retd) Registrar, BITS Pilani. This was followed by mesmerizing bhajans sung by children of Blossoms Kids Zone and Gurukul students. The documentaries and the teachings of Gandhiji and Shastriji were also shown. The celebration closed with a floral tribute to Gandhiji and Shastriji, followed by the National Anthem. Prof. Shilpi Garg, Faculty-in-charge, Infant Care Centre and Institute Functions, coordinated the event.

Gandhi and Shastri Jayanti Celebrations



Rakesh Kapoor Innovation Centre

Rakesh Kapoor Innovation Centre was inaugurated on October 8, 2023, at Pilani Campus. The Centre is envisaged to be an integral facility for innovation and entrepreneurship. The Centre was inaugurated by Chief Guest Rakesh Kapoor. former Global CEO of Reckitt Plc. in the presence of Prof. V. Ramgopal Rao, Vice Chancellor, BITS Pilani, and Prof. Sudhirkumar Barai, Director, Pilani Campus. Kapoor, who studied at BITS Pilani from 1975 to 1980, gave BITS Pilani a donation of \$1.2 million for the creation of a state-of-the-art Centre of Innovation. The Centre, having an area of 40,000 sq. ft, will be the home to the business incubator Pilani Innovation and Entrepreneurship Development Society (PIEDS), which was set up with a grant from the Department of Science and Technology (DST). The center will have varied facilities for innovators and entrepreneurs, having a 150-seater co-working space with conference and meeting rooms. It will also possess multiple specialized labs such as Internet-of-Things, Artificial Intelligence, Machine Learning and Fin-Tech. It will also have space for administrative offices for professionals and faculty members involved in incubation activities. Renowned architect Hafeez Contractor designs the center.

Inauguration of Rakesh Kapoor Innovation Centre



Various alumni were felicitated during the event for their valuable contribution to the institute. Some of them include entrepreneurs such as Anuradha, Prashanth Palakurthi, Anurag Jain, Ross Perot Jr., Abhinav Asthana, Abhijit Kane, Chaitanya Kalipatnapu, Mukesh Sharma, Kiran Bhat, Aparna, Raghu Sethuraman, Rakesh Verma along with other alumni of 1989, 1993, and 1994 batches.

Training Program on Laboratory Animal Science

One-week training program on Laboratory Animal Science, which aimed to educate and empower researchers in ethical and responsible use of laboratory animals for scientific experiments, took place during October 28 – November 3, 2023. The program had seen active participation from 63 attendees representing 24 different states across India. Participants gained valuable insights into the ethical and legal dimensions surrounding using laboratory animals and best

practices for their care and handling. The curriculum covered various topics, including animal rights and welfare, alternatives to animal models, animal husbandry and health, ethical considerations in animal experimentation, and the roles and responsibilities of animal ethics committees

The training program was led by distinguished experts from BITS Pilani, CCSEA, and other esteemed institutions across India. The program's inauguration featured Dr. Hemant Dadhich, Pro Vice Chancellor, Rajasthan Veterinary University, as the chief guest and Dr. Vijay Pal Singh, President, LASA, as the guest of honor. Dr. Sushil Kumar Yadav, Department of Pharmacy, was the convener of the program. Prof. Sudhirkumar Barai, Director, Pilani Campus, Prof. S.K. Verma, Dean Administration, Prof. Gaikwad Anil Bhanudas, Head, Department of Pharmacy distributed certificates to the participants and recognized their successful completion of the program. Prof. Barai said that the training program was an innovative and commendable initiative by the Central Animal Facility, BITS Pilani, which is dedicated to promoting the responsible and humane use of laboratory animals in research.

Training Program on Laboratory Animal Science



MoU between BITS Pilani and University of South Florida

BITS Pilani and the University of South Florida (USF), a distinguished name in American academia, have come together in a historic move to strengthen global educational ties and foster collaborative initiatives. The MoU signing ceremony took place at the Pilani campus on October 30, 2023 heralding a new era of academic synergy.

Signing of MoU with University of South Florida (USF)



The event was graced by the presence of eminent dignitaries, including Dr. Kiki Caruson, Vice President of USF, Mr. Manish

Mohan, Chief Global Officer of KForce, and Ms. Aruna Dasgupta, Country Advisor for India at USF. The MoU lays the foundation for a multifaceted partnership that includes student exchanges, research collaboration, joint academic programs, internships and much more. With a shared vision of academic excellence, this partnership is poised to offer students and faculty unparalleled opportunities to expand their horizons and engage in cross-cultural learning experiences.

International Conference on Sports Engineering (ICSE-2023)

The 3rd International Conference on Sports Engineering (ICSE-2023) witnessed a glittering inaugural ceremony marked by the presence of distinguished luminaries and experts in sports technology. The event occurred at Shiv Ganga, Vidya Vihar campus during November 2-4, 2023. The 3-day conference drew participants worldwide to the panel discussion and research paper presentation. The conference brought together a diverse range of experts and enthusiasts in the field of sports engineering, fostering an environment for knowledge exchange, collaboration, and innovative ideas. The USA, UK, and Japan experts presented their research roadmaps. ICSE-2023 provided a unique platform to explore the latest advancements in sports technology, with sessions covering sports equipment, biomechanics, data analytics, and more. Attendees had the opportunity to gain insights from leaders in the field and networking with peers.

The panel discussion included esteemed panelists Prof. A. K. Uppal, former Chancellor, Jiwaji University, former Dean LNIPE, India, Mr. Shiv Prakash Singh, MD, Shivnaresh Sports, Col. Raj Singh Bishnoi - Sr. Executive Director, NSNIS Patiala, Dr. (Ms) Sunil Dabas - Padma Shri & Dronacharya Awardee, Coach of the National Female Kabaddi Team, India, Prof. David James, M.D., Labosport, Ex-Professor at Sheffield Hallam University, UK, Prof. Sudhirkumar Barai, Director, Pilani Campus and Prof. Virender Kumar Dabas, retired Prof, LNIPE, Chief Coach, Para Swimming Team, India. Mr Sanand Salil Mitra, an ex-national level archer, has lent his support to the conference and future activities of the Sports Engineering Association (SAE).

Inauguration of ICSE 2023



National Entrepreneurship Day

A National Entrepreneurship Day, organized by the Institution's Innovation Council (IIC), PIEDS and BITS-TEC, was celebrated on November 9, 2023. The event had more than 100 participants including faculty members and students from BITS Pilani, BKBIET and School E-Cells. Distinguished guest speakers, Mr. Manish K. Prahlad, CEO-Verdant, and Ms. Rashi Anand, Founder & CEO, Lakshyam NGO graced the occasion, sharing their invaluable experiences and insights with the audience. Their engaging talks inspired and motivated the attendees to pursue their entrepreneurial dreams. Prof. Arya Kumar, Dean, Alumni Relations, BITS Pilani was the Chief Guest. The National Entrepreneurship Day celebration provided a platform for learning, networking, and fostering an entrepreneurial spirit among youth, one more step in BITS Pilani's commitment to innovate, achieve, and lead.

National Entrepreneurship Day celebrations



Academia: a confluence of ideas

Seminars/Conferences
Workshops/Training Programs
Enriching the Learning Experience:
Visits by Faculty

Prof. Shivi Agarwal, Department of Mathematics, attended and delivered a contributory talk on "Malmquist Productivity Index under Fuzzy Environment" at the 10th International Congress on Industrial and Applied Mathematics (ICIAM 2023) held at Waseda University, Tokyo, Japan during August 20-25, 2023.

Prof. Shivi Agarwal at ICIAM-2023



Prof. Trilok Mathur, Department of Mathematics, attended and delivered a contributory talk on "Dynamics of Fractional Order Crime Transmission Model with Fear Effect and Gangwar" and chaired a session at the 10th International Congress on Industrial and Applied Mathematics (ICIAM 2023) held at Waseda University, Tokyo, Japan during August 20-25, 2023.

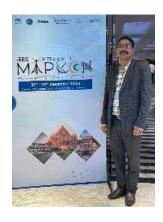
Prof. Trilok Mathur at ICIAM-2023



Prof. Kamalesh Kumar, Department of Civil Engineering, attended and presented a paper titled "Shear Wave Velocity Estimation of Pilani Soil Using Ultrasonics" at the International Conference on Creative and Innovative Solution in Civil Engineering (CISCE 2023) held at MNIT, Jaipur, Rajasthan during August 11-12, 2023.

Prof. Chennu Ranganayakulu, Department of Mechanical Engineering, attended and presented a paper titled "Establishment of Colburn *j* factor and Fanning friction *f* factor correlations for a compact heat exchanger having triangular plain fins using the CFD approach" at the 17th International Heat Transfer Conference (IHTC17) during August 14-18, 2023, Cape Town, South Africa.

Prof. Rahul Singhal, Department of Electrical and Engineering, **Electronics** attended and presented two papers titled "Electromagnetic Scattering Analysis Conventional Frequency Selective Surfaces for Terahertz Applications" and "Performance Comparison of Loop Based Polarization Dependent/ Independent Reflectors for



Microwave Frequency Bands" at.the 2023 IEEE conference on 'Microwaves, Antennas, and Propagation Conference (MAPCON)', held at Ahmedabad, India held during December 10-14, 2023. The first paper is felicitated with the Best Poster Award in one of the poster sessions, and the first author received a cash prize of Rs. 5000.

Accolades and Achievements: Academic attainments of Faculty

Prof. Srinivasan Periaswamy, Department of Mechanical Engineering, has been honored with the prestigious "Dr. CR Mitra Best Faculty Award". Established by the "Prof. VS Rao Foundation" in memory of Dr. CR Mitra, the former Director, BITS Pilani, this award recognizes outstanding faculty members at BITS Pilani. Dr. CR Mitra was instrumental in introducing innovative educational philosophies that set BITS apart in the realm of higher education.

Prof. Srinivasan Periaswamy



Prof. Anil Rai and Mr. Joyanta Sarkar (2019PHXF0103P),

Department of Humanities and Social Sciences, received a patent (45/2023) on An Artificial Intelligence (AI) based Musical Instrument on December 19, 2023. Al is being used in "Saroj Veena"





that can interact with the musician in real-time. The Indian government has recognized this instrument and the device has received recognition on a global scale.

Prof. Kamalesh Kumar, Department of Civil Engineering, has received certificates of excellence for peer reviewing prestigious journals such as the Asian Journal of Applied Chemistry Research, Journal of Geography, Environment and Earth Science International, Asian Research Journal of Current Science, Current Journal of Applied Science and Technology, and International Journal of Environment and Climate Change and improving the quality of the book Theory and Applications of Engineering Research. He also received the Best Researcher Award (Male) during the IAMRF AWARD 2023 by the Innovative & Advanced Multi-Disciplinary Research Foundation and Prerna Education Research Society in a ceremony held at B. M. Institute of Engineering & Technology, Sonipat, Haryana, on September 5, 2023.

Prof. Kamalesh Kumar



Prof. Gautam Singhvi, Department of Pharmacy, along with his team, has been granted an Indian patent (448589) for their innovative invention titled "A Lipid-Based Foam Nano Emulgel Composition for Topical Application" on August 31, 2023. Prof. Singhvi



has achieved recognition for the third consecutive time in 2023 as one of the "World Top 2% Scientists". Furthermore, his PhD students, Vamshi Krishna Rapalli and Tejashree Waghule, have also been acknowledged among the "World Top 2% Scientists" in the same year.

Prof. Amit Jain, Department of Chemical Engineering, received the Best Oral Presentation Award in the technical session on the theme "Biomass Valorization/Waste to Value-added materials/Products" at the 4th International Conference on 'Recent Advances in Bio-energy Research-2023



(ICRABR-2023)' for the paper titled "Enhanced Rhamnolipid Production using Waste Engine Oil with Hydrophilic Cosubstrate by *Pseudomonas aeruginosa* gi | KP 163922 | and its Characterization" held at Sardar Swaran Singh National Institute of Bio Energy (SSS-NIBE), Kapurthala, Punjab, India during October 9-12, 2023.

Prof. Manoj Kumar Soni, Department of Mechanical **Engineering**, was a Jury member of 6th VDMA Manufacturing Excellence Award (Energy Efficiency & Conservation) given at the 12th VDMA Mechanical Engineering Summit organized by Verband Deutscher Maschinen und Anlagenbau (VDMA) India on October 13, 2023. He was invited as a panelist in the "Workshop Solar Thermal Technologies India," organized by the Ministry of New and Renewable Energy (MNRE) on September 13, 2023. Prof. Soni has been appointed as a member of the Advisory board for the ArcelorMittal Nippon Steel India - Academy for Skill Development. Prof. Soni is awarded a patent (474154) "A Liquid-Cooled Hybrid Solar Energy Collector" (the inventors are Gakkhar Nikhil, Soni Manoj Kumar, Jakhar Sanjeev) on November 29, 2023.

Prof. Manoj Kumar Soni along with other Jury members



Invited Lectures/Talks by Faculty

Prof. Chennu Ranganayakulu, Department of Mechanical Engineering, delivered a talk on "Advances in Environmental Control Systems and Compact Heat Exchangers for Aerospace Applications" at Tshwane University of Technology, Pretoria during August 21–22, 2023, South Africa.

Prof. Pratik N. Sheth,
Department of Chemical
Engineering, delivered a talk
on "Modeling of Bio-Energy
Systems" at the 4th International
Conference on Recent
Advances in Bio-Energy
Research (ICRABR) organized



by Sardar Swaran Singh National Institute of Bio-Energy, Kapurthala (an autonomous institute of the Ministry of New and Renewable Energy, Govt. of India) on October 10, 2023.

Prof. Pramod Eyyunni, Department of Mathematics, delivered a talk (online) on "A new generalization of the minimal excludant arising from an analogue of Franklin's identity" at Ahmedabad University on November 8, 2023.

Prof. Nishant Bhargava, Department of Civil Engineering, delivered a talk on "Microsurfacing Application Aspects for Rural Roads" at the Indian Institute of Technology, Guwahati on November 23, 2023, for the training program on Planning, Design, Construction, and Maintenance of Low-Volume Rural Roads on Hilly Terrain for rural road engineers.

Prof. Manoj Kumar Soni, Department of Mechanical Engineering, was invited as a Guest of Honour to deliver a keynote address at the 6th International Conference "Empowering Entrepreneurs IT & Effective Management (IC-

EEITEM 2023), on December 2, 2023 organized by Jagaran Institute of Management (JIM), Kanpur. He also delivered a keynote address at the 9th International Conference on Advances in Energy Research (ICAER), organized by the Department of Energy Science and Engineering, IIT Bombay, Mumbai, December 12-14, 2023.

Prof. Manoj Kumar Soni during IC-EEITEM 2023



Prof. Shivi Agarwal, Department of Mathematics, delivered a talk on "An Extended Assignment Model under Fuzzy Environment" in the International Conference on Computational Modeling and Sustainable Energy (ICCMSE-2023) held at Pandit Deendayal Energy University, Gandhinagar, Gujarat during December 15-17, 2023.

Prof. Trilok Mathur, Department of Mathematics, delivered a talk on "Fractional Calculus Based Backpropagation Algorithm and Applications" and chaired a session in the International Conference on Computational Modeling and Sustainable Energy (ICCMSE-2023) held at Pandit Deendayal Energy University, Gandhinagar, Gujarat during December 15-17, 2023. He also delivered a talk (online) on "Introduction to Fractional Order Neural Networks and their Applications" in the Refresher Course on Mathematical Insight into Real-World Problems held at Department of Mathematics, University of Rajasthan, Jaipur on December 22, 2023.

Distinguished Lectures

- **Prof. R. D. GARG, IIT Roorkee,** delivered a lecture on "Application of GIS" at the Department of Civil Engineering on August 1, 2023.
- **Dr. Mathias Bayer, PicoQuant, Berlin, Germany,** delivered a lecture on "Time resolved confocal microscopy" by at the Department of Chemistry on August 12, 2023.
- **Prof. Yoshiro Azuma, IIT Delhi,** delivered a lecture on "Post Collision Interactions (PCI) and photoelectron recapture: The entangled game of catch between photoelectrons and Auger electrons studied with synchrotron radiation" at the Department of Physics on September 4, 2023.
- **Prof. Yoshiro Azuma, IIT Delhi** delivered a lecture on "Science and higher education in Japan and in India: Historical perspectives, current issues, student cultures and tips for exchange" at the Department of Physics on September 5, 2023.
- **Dr Vidya Devi Negi, IISER, Mohali** delivered a lecture entitled "Host-pathogen Interaction and its Consequences During Salmonella Infection" during a series of research talks by eminent scientists/researchers working in India or abroad under the endeavor 'Excitement in Science: Insights and Perspectives' at Department of Biological Sciences on October 21, 2023.
- **Dr. Vijay Pal Singh, CSIR-IGIB, New Delhi,** delivered lectures on "Introduction to laboratory animal science animal welfare and ethics" and "Video & ethical discussion on animal

- experiments" at the Department of Pharmacy on October 28 2023.
- **Prof. Suresh Zirawl, RAJUVAS, Bikaner**, delivered a lecture on "Laboratory Animal Ophthalmology: An Overview" at the Department of Pharmacy on October 28 2023.
- **Dr. Vivek Tyagi, Senior Consultant, CCSEA**, delivered a lecture on "Legislation and ethical committee in India On lab animal science & experimentation", at the Department of Pharmacy on October 28, 2023.
- **Dr. Inderjeet Yadav, NBRC, Manesar, Gurugram**, delivered lectures on "Introduction to Anatomy and physiology of laboratory animals" and "Preparation of protocol for ethical evaluation by IAEC and importance of animal experimentation" at the Department of Pharmacy on October 29, 2023.
- **Prof. Vera Baumans, Karolinska Institute, Stockholm, Sweden**, delivered a lecture on "Introduction to laboratory animals", at the Department of Pharmacy on October 29, 2023.
- **Dr. Yogesh Kulkarni, SVKM's NMIMS, Mumbai**, delivered a lecture on "Animal models of diabetic complications", at the Department of Pharmacy on October 29, 2023.
- **Dr. Vijay K Bharti, DRDO-DIHAR, Chandigarh**, delivered a lecture on "Animal physiology in extreme climates of high altitude: How important is it in animal experimentation and husbandry care" at the Department of Pharmacy on October 29, 2023.
- **Dr. Anupama Kumari, ILBS, New Delhi**, delivered a lecture on "Severity assessment and humane endpoints" at the Department of Pharmacy on October 30, 2023.
- **Dr. Shital Suryavanshi, TIFR, Mumbai,** delivered a lecture on "Import, Breeding Strategies, supply and Identification of Laboratory Animals for Experiment and Trade" at the Department of Pharmacy on October 30, 2023.
- **Dr. Sahazada Asad, Revvity Healthcare**, delivered a lecture on "Brightening up biology: Advances in multimodality for in Vivo imaging" at the Department of Pharmacy on October 31, 2023.
- **Dr. Vinod Tiwari, IIT-BHU, Varanasi**, delivered a lecture on "Role of animal models in neurodegenerative disorders" at the Department of Pharmacy on October 31, 2023.
- **Dr. Artabandhu Sahoo, Director, ICAR- NRCC**, delivered a lecture on "Feeding and nutrition to laboratory animals" at the Department of Pharmacy on October 31, 2023.
- **Dr. Suresh Poosala, AAALAC**, delivered a lecture on "Alternatives to laboratory animals and enrichment" at the Department of Pharmacy on November 1, 2023.

- **Dr. Ravi Kumar NIPER, Mohali**, delivered a lecture on "Good laboratory practice Genesis achievements made & importance in the Indian context" at the Department of Pharmacy on November 1, 2023.
- **Dr. Kamal Purohit CVAS, Udaipur**, delivered a lecture on "Pathological changes in common diseases of laboratory animals" at the Department of Pharmacy on November 1, 2023.
- Dr. Mahima Swami, Principal Investigator and Sir Henry Dale Fellow, MRC Protein Phosphorylation & Ubiquitylation Unit at the University of Dundee (Alumni, Batch 2003), delivered a lecture on "Regulation of Intestinal Intraepithelial T Lymphocytes (IEL)" at Department of Biological Sciences on November 8, 2023.
- **Prof. Subhendra Mohanty, Visiting Professor, IIT Kanpur,** delivered a lecture on "Looking for gravitons in gravitational waves" at the Department of Physics on November 9, 2023.

- **Dr. Sunil Maheswari, alumni, 1991 batch, Director, State Utility Forecasting Group USA,** delivered a lecture on "Insights from a quarter-century of work experience in the US energy industry" at the Department of Economics and Finance on November 15, 2023.
- **Dr. Sandeep Kataria, Shanghai Jiao Tong University,** delivered a lecture on "The Formation and Evolution of Bars, and Its Impact on Galaxy Dynamics" at the Department of Physics on November 16, 2023.
- Prof. Sandeep Kumar, Former Professor, Raman Research Institute, Bangalore and Professor, Nitte Meenakshi Institute of Technology, Bangalore, delivered a lecture on "Discotic NanoComposites as Advanced Materials for Optoelectronics" at the Department of Physics on December 27, 2023.

Significant Projects

S.No.	Principal Investigator	Co-PI	Department	Title of the Project	Funding Agency	Amount in Lakhs
1	Institute Wide	-	-	SATHI	DST	6000
2	Department of Pharmacy		Pharmacy	FIST	DST	203
3	Dr. Syamantak Majumder	Dr. Praphulla Chandra Shukla, IIT Kharagpur	Biological Sciences	Exploring epigenetic regulation of Shelterin proteins and their role in Cardiovascular Diseases	SERB	64.05
4	Dr. Ashis Kumar Das	-	Biological Sciences	Understanding Vir Genes: Potential Mediators of Cyto- Adherence in Severe Malaria from <i>Plasmodium vi</i>	ICMR	50.36
5	Dr. Aniruddha Roy	Dr. Inamur Rahaman Laskar	Pharmacy	Development of a tumor- microenvironment responsive, cancer theranostic nanodots for photodynamic-immunotherapy	SERB	49.28
6	Dr. Meetha V Shenoy	Dr. Kamlesh Tiwari and Dr Ashutosh Bhatia	EEE	Multisensor Fusion Toolbox for Edge- AI, computing to support IoT and MIoT driven building automation and management applications	TIH-IIT Bombay	45.74
7	Dr. Deepak Chitkara	-	Pharmacy	Novel non-viral vectors comprising functionalized-lipids and amphiphilic polymers for delivery of mRNA-based Therapeutics	SERB	40.25
8	Dr. Rita Sharma	-	Biological Sciences	Investigating the role of long non- coding RNAs in phytohormone- mediated autonomous seed development in Arabidopsis	DST	39
9	Dr. Gaikwad Anil Bhanudas	-	Pharmacy	Novel Pharmacological interventions against chronic kidney disease using	SERB	36.12

S.No.	Principal Investigator	Co-PI	Department	Title of the Project	Funding Agency	Amount in Lakhs
				clinically approved inodilators, ET-1A antagonists and bisphosphonates: Drug repurposing approach		
10	Dr. Sajal Mukherjee	-	Physics	Probing compact objects with gravitational waves	DST	35
11	Dr. Dalip Kumar	Dr. Madhushree sarkar	Chemistry	Design and Synthesis of Supramolecularly- functionalized Porphyrin-based efficient photosensitizers	BRNS	33.39
12	Dr. Hemant Jadhav	Dr. Gaikwad Anil Bhanudas	Pharmacy	Design, synthesis, and evaluation of novel dual inhibitors of Angiotensin-II type 1 receptor and Neprilysin for the treatment of diabetic cardiomyopathy	SERB	33.02
13	Dr. S Murugesan	Dr. KVG Chandrasekhar BITS Pilani Hyderabad Campus	Pharmacy	Design, synthesis, and evaluation of novel Thiochromene analogs as potential anti-leishmanial agents	SERB	29.52
14	Dr. Subhasis Pradhan	Dr. Mukund Lahoti	Civil	Innovative Accelerated Carbonation Process for the Preparation of Ready- mix Recycled Aggregate Concrete	SERB	28.21
15	Dr. Avik Kumar Pati	-	Chemistry	Excited state (anti)aromaticity-guided charge transfer fluorophore research for biological imaging	SERB	27.96
16	Dr. Durgesh Vikram	-	Civil	Modeling Travel Time for Two-lane Highways	SERB	27.21
17	Dr. Selva Balaji M	-	Civil	Experimental and Numerical Study of Saltwater Intrusion Control Measures under Tidal Influence	SERB	25.78
18	Dr. Murali Monohar Pandey	Dr. Deepak Chitkara	Pharmacy	Nose-to-brain (N2B) delivery of in-situ gel containing rotigotine-loaded hybrid nanoparticles for Alzheimer's disease	SERB	25.78
19	Dr. Jay Pandey	-	Chemical	Investigating membrane degradation and its mitigation for enhancing the performance for green hydrogen powered proton exchange membrane fuel cell (PEMFC)	SERB	25.01
20	Dr. Nishant Roy	-	Civil	Influence of Rainfall on Landslide Susceptibility of Soil-Rock Slopes	SERB	18.83
21	Dr. Balakumaran Chandrasekar	-	Biological Sciences	Elucidating the dynamics of photosynthesis and cell wall remodeling in E salsugineum, an extremophilic plant during abiotic stress and subsequent recovery phases for crop improvement in the scenario of climate change	SERB	18.15
22	Dr. Rahul Kumar	Dr. Atul Gaur	Mathematics	On φ-rings	SERB	17.97

S.No.	Principal Investigator	Co-PI	Department	Title of the Project	Funding Agency	Amount in Lakhs
23	Dr. Gaurav Watts	-	Mechanical	Blast Response of Functionally Graded Auxetic Sandwich Structures with Tunable Material Properties	SERB	17.3
24	Dr. Rajesh Kumar	Dr. S.N. Patel	Civil	Development of Semi-Analytical Methodology as a Design Aid for Small-Scale Structures using Non- Classical Continuum Mechanics .	SERB	14.78
25	Dr. Sujan Yenuganti	-	Biological Sciences	Development of a resonant glucose sensor prototype using smart hydrogels	DBT	14.27
26	Dr. Shailesh Trivedi	-	Mathematics	Classification of m-isometries admitting Wold-type decomposition	SERB	12.68
27	Dr. Shashank Gupta	Dr. S.N. Patel and Dr. Gautav Watts	CSIS	Development of Low-Cost Federated Learning Empowered Digital Twin Framework for Structural Health Monitoring (SHM) of Roads and Bridges built under PMGSY	IITBHU	11.88
28	Dr. Rahul Kumar	Dr. Sandeep Joshi	EEE	A Ga2O3-HEMT Biosensor-based Non-invasive Intelligent and Portable Diagnostic System	IIT Roorkee	11
29	Dr. Anupam Singhal	Dr. Srikanta Routroy	Civil	Eco-Friendly Solution with Metal Recovery and Value Added Products from Stainless Steel Spent Pickle Liquor: A Zero Waste Business Model	Jindal Steel	10
30	Dr. S. B. Singh	-	Civil	Behavior of SHCC elements under Shear Loading	DST-Indo Japan	8.22
31	Dr. Paul Atish Tulshiram	-	Pharmacy	Building a Nature Intelligence Platform, a repository of novel species of microbes found in extreme climatic regions through the application of novel biotechnological tools	Xenesis	8
32	Dr. Mohammad Faraz Naim	-	Management	Sustainable development of Honey industry: A Value chain based study of select districts in Rajasthan	Ch. Charan Singh National Institute of Agricultural Marketing, Jaipur	7.75
33	Dr. Praveen Goyal	Dr. Udayan Chanda,	Management	Value Chain Analysis of Isabgol in select districts of Rajasthan	Ch. Charan Singh National Institute of Agricultural Marketing, Jaipur	7.31
34	Dr. KVG Chandrasekhar	Dr. S Murugesan	Chemistry	Discovery and Biological Evaluation of Novel Dual Inhibitors of DprE1 and InhA as Potential Anti Tubercular Agents	SERB	6.05
35	Dr. Pratik N Sheth	-	Chemical	Biomass pellets/ Briquattes Assessment in Gujarat & Maharashtra States	Sardar Patel Renewable Energy Research Institute, Anand Gujrat	3.24
36	Dr. Gautam Singhvi	-	Pharmacy	Design and evaluation of sustained release tablets of herbal extract	Emami Limited	2

Student round up

BITS Embryo

Established in 2006 by a group of six visionary alumni from BITS Pilani in the Silicon Valley, BITS Embryo stands as an institute body guided by the principle of "borderless classrooms, bottomless resources." The overarching vision of Embryo is to enhance the learning experience at BITS Pilani. Embryo organizes various online and offline talks and panels throughout the year.

Notable among its established panels are "CAT Champs," "Gateway to GRE," and "Perspectives Unfolded." Embryo takes pride in hosting distinguished chief guests for the fests Oasis and BOSM. Over the years, it has welcomed a stellar

lineup of celebrities, including Imtiaz Ali, S.S. Rajamouli, Shabbir Boxwala, Saharsh Kumar Shukla, Yogeshwar Dutt, Tigmanshu Dhulia, Tania Sachdev, Jitu Rai, and many others. Embryo's commitment to fostering innovation is exemplified by its role in organizing the Kernel event of Apogee, the APOGEE Innovation Challenge (AIC). This challenge offers participants a unique opportunity to engage with real-life problem statements provided by companies.

Embryo has also ventured into conducting professional shows, with highlights like hosting Suhani Shah, the Mentalist, during APOGEE 2023. Notably, during the 50th edition of Oasis, Embryo presented The Tabla Guy as an opening act during the EDM Nite Prof Show. This dynamic and forward-thinking approach exemplifies Embryo's dedication to enriching the academic and cultural landscape at BITS Pilani.

BITS-Embryo Activities during August-December 2023

S.No.	Name of the Speaker	Description of the Speaker	Topic of Talk	Day the Talk was Held
1	Dr. Satya Gupta	Dr. Satya Gupta is a BITS alumnus with a bachelors in Electrical Engg, a Masters in Comp Sci from IIT Delhi and a PhD in neural networks from Old Dominion University, Norfolk. He is the current President of the VLSI Society of India	India's Semiconductor Mission	August 19, 2023
2	Nitin A. Gokhale	Nitin A. Gokhale is one of South Asia's leading Strategic Analysts. He has forty years of rich and varied experience behind him as a conflict reporter, Editor, author and now a media entrepreneur who owns and curates two important digital platforms, BharatShakti.in and StratNewsGlobal.com focusing on national security, strategic affairs and foreign policy matters	India's Foreign Policy Priorities	August 27, 2023
3	Raju Reddy	Raju Reddy is a BITS alumnus with a bachelors in Electrical Engg. He is the founder and former CEO of Sierra Atlantic. Other board roles include Eltropy, SciSpace, Redbus, Gray Orange, Hitachi, etc.	Building A Successful Global Business	September 3, 2023
4	Anil Agrawal	Anil Agrawal is a BITS Alumnus who started out as a software engineer in 1984, but shifted to IPS and served as DGP of UP Police. He went on to establish ONDC, thus democratizing e-commerce. He was awarded the President's Police Medal for Distinguished Service and Police Medal for Meritorious Service	Fostering Entrepreneurship Through Public Policy	September 9, 2023
5	Vinay Dubey	Vinay Dubey is the CMO of Wint Wealth, Assistant Vice President India P&L at WhiteHat Jr., and Head of Growth Marketplace at Shop 101.	Marketing Perspective of Growing a Start-Up	October 22, 2023
6	Alok Misra	Alok Misra is the COO and Operating Partner of General Atlantic, the world's 9th biggest private equity firm. He was Group Chief Financial Officer of MphasiS BFL Group (now part of the Hewlett-Packard Company) and served in a number of accounting and finance roles at other firms, including I.T.C. Limited and PwC. He is a Fellow Member of the Institute of Chartered Accountants of India.	AMA on Investment Banking	November 9, 2023
7	Dr. Aditi Sen DE	Prof Aditi Sen De is known for her research on quantum information and computation, quantum communication including quantum cryptography, quantum optics and many-body physics. She is the first female physicist to be awarded the Shanti Swarup Bhatnagar Prize for Science and Technology for her contributions to physical sciences in 2018.	Myth to Math: Impact and Applications of Quantum Computing	November 18, 2023
8	Anupam Purwar	Anupam is a BITS alumnus with an MBA from ISB. He is a senior research scientist at Amazon Development Center (India). With an expertise in ML, IoT and computational design, he has more than 20 peer reviewed articles with over 200 citations.	Harnessing GENAI & ML: Turning Data into Solutions	November 26, 2023

BOSM 2023

The 36th edition of the BITS Open Sports Meet (BOSM) held during September 23-25, 2023 illuminated the campus with energy, teamwork, and sporting fervor. The main auditorium and Gym grounds bore witness to the grand inauguration. The chief guest Mr. Devendra Jhajharia, one of India's most decorated Paralympians, Prof. Sudhirkumar Barai, Director, Pilani Campus graced the occasion and delivered motivational speeches, setting the stage for the oath-taking ceremony. Aditya Sriram, the Sports Secretary, administered athletes the oath of sportsman spirit. The evening unfolded with captivating performances by Gurukul musicians and an original anthem by KalamVansh, embodying the indomitable spirit of the athletes. The BOSM commenced with the torch-lighting ceremony and

an electrifying band performance by the girls of Birla Balika Vidyapeeth, infusing the Gym Grounds with pulsating energy, marking the beginning of thrilling competitions and unforgettable experiences.

BOSM Inauguration



Glimpses of BOSM









Oasis 2023

Oasis, the annual cultural extravaganza of culture, artistry, and creativity with the theme "Grimoire Galore" took place during October 27-31, 2023. The spectacular inaugural ceremony showcased students' talent and creativity in various forms such as dance, drama, literature, comedy, fashion, and music performances. Guest speakers, R. Balakrishnan and Deepika Mahajan, shared their experiences and inspired the audience with their wise words. Prof. Sudhirkumar Barai, Director, Pilani campus and Nimish Prabhu, CIO, BoostGrad, addressed the audience, emphasizing the importance of education, culture, and growth.

Performances during OASIS 2023









This vibrant festival included music, dance, literature, and art performances by students from various prestigious educational institutions. Oasis is not just a festival but a vibrant platform that attracts artistic talent and enthusiasm from every corner of the nation. The festival continues to grow in stature every year, attracting participants of all age groups to perform and participate in cultural and creative arts. This year, the Oasis had seen the prestigious duo Vishal-Shekhar, rap artist Krishna, Indian EDM pioneer Nucleya, and many other eminent artists performing in the festival.

A solar cooked food stall, with a socio-environment cause, by Prof. Manoj Kumar Soni, Department of Mechanical Engineering, members of the Renewable Energy Club and students registered in Renewable Energy ourse, in collaboration with Solar Energy Society of India (SESI) was an attraction during the extravaganza. They donated INR 8100/-, the profit earned during the event, to Nirmaan, an NGO run by BITS Pilani students.

Solar cooked food









Students' Achievements

Shrey Agarwal (2018B2A40707P), a BITS alumnus, has recently started a company, Alt Carbon. It has achieved a significant milestone in combating climate change by raising an impressive USD 550K from institutional investors, positioning itself as India's inaugural



permanent carbon removal entity. Backed by strategic investors and notable alumni, Alt Carbon, aims to permanently eliminate 5 million tons of CO2 by 2030, securing a sustainable future for generations to come. Alt Carbon's engineered process of accelerated silicate weathering not only generates high-quality carbon removal credits but also empowers

farmers by enhancing their yields and annual income. By empowering farmers, boosting agricultural yields, and restoring soil health, they're creating a ripple effect that benefits the environment, communities, and food security.

Aastha Sinha (2022B3A30553P), published a paper titled "Digital Technology Improving Financial Inclusion in India: Post Covid Evidence" in Asian Journal of Economics, Business and Accounting.

Pranjal Srivastava (2023B1PS0858P), has been awarded a **p**atent (475855) for "Thermoelectric Stove Generator" on November 30, 2023. The invention received first prize in the Asia Innovation Competition along with prize money of \$1500.



Introducing new faculty

S.No	Name of Faculty	Designation	Department	
1	Nishant Bhargava	Assistant Professor, Gr-I	Civil Engineering	
2	Satanik Mitra	Assistant Professor, Gr-I	Management	
3	Sukriti Garg	Visiting Assistant Professor	Electrical & Electronics Engg	
4	Aritra Banerjee	Assistant Professor, Gr-I	Physics	
5	Upendra Mohan Bhatt	Visiting Assistant Professor	Electrical & Electronics Engg	
6	Dinesh Rano	Visiting Assistant Professor	Electrical & Electronics Engg	
7	Bhavesh Jaikumar Chauhan	Assistant Professor, Gr-I	Physics	
8	Arpan Das	Assistant Professor, Gr-I	Physics	

Editorial team

Editor



Dr. Anupam Yadav, Humanities and Social Sciences

Student Member



Gaurang Rathi (2020A8PS1800P)



Chinmay Gupta (2020A3PS0448P)

Special Thanks



Prof. Gajendra Singh Chauhan Faculty In-charge, Publications and Media Relations



Mr. Ramesh Sharma
Publications and Media Relations



BITS Pilani Pilani Campus

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