Bulletin for March 2023
BITS Pilani, Dubai Campus

CONTENTS

I. Achievements and Activities of Departments

1. Department of Chemical Engineering

i. Industrial Visit to Star Cements Co. LLC Ras Al-Khaimah

On 15 February 2023, The Department of Chemical Engineering from Birla Institute Of Technology and Science, Pilani Dubai visited the Star Cement Co. LLC in Ras Al-Khaimah.
The tour began with an introductory presentation on the factory workings, the success of star cements, and the manufacturing process of various materials required to make cement and concrete. This was followed by the plantation drive conducted, acknowledging the CO_2 levels emitted by cement factories and adhering to their pledge of becoming carbon neutral by 2050. After the plantation drive, the students and faculty were given a tour of some of the facilities along with a visit to a nearby limestone mine.
We sincerely thank the COO Mr. TVS Chidambaram for granting us this opportunity and Mr. Rajeev Garg for taking their time out and providing us with an enriching experience, one that has aroused curiosity in the World of Cement. The students learned a lot about the manufacturing process and the department looks forward to many more visits in the future.

ii. Industry Advisory Panel (IAP) Meeting

The department organized the 1st Industry Advisory Panel meeting on 23 February 2023. The meeting was held in the presence of the following industry personals.

- Mr. Alok Srivastava (General Manager, Clear Water Solutions LLC (IAP-Chair))
- Mr. Shreyas Patwardhan (Sr. R&D Associate, Reckitt (RB) (IAP-Co-Chair))
- Dr. Senthil K. Kaliappan (Head - Research & Development Laboratories, Dubai Electricity & Water Authority – DEWA (IAP-Member))

The meeting included a series of discussions with the faculty members on different

topics which were primarily focused on the overall beneficial actions for the department (including curriculum, course structure, placements, internships etc.).

iii. Chemical Engineering Gathering

The gathering took place on 1 March 2023, to bring together all the Chemical Engineering students across all the batches and to perform activities (like games) to admire the spirit of team building and teamwork.

iv. Introduction to Promax

The Chemical department has installed PROMAX software which allows users to create, solve, and analyze the solution of optimization problems.
The software will be highly useful for the students to learn about optimization problems related to industries and determine ways to solve such problems.
The Department of Chemical Engineering, Birla Institute of Technology and Science, Pilani Dubai recently conducted a workshop, "Introduction to Promax" in association with Bryan Research & Engineering LLC, on 1 March 2023. Promax is a widely used simulation software used by chemical engineers to design, optimize and troubleshoot chemical processes. In today's technology-driven world, employers are seeking candidates with skills in the latest software and tools. By providing students with opportunities to learn and use the latest software, BITS Pilani, Dubai aims at imparting their students a competitive edge in the job market.
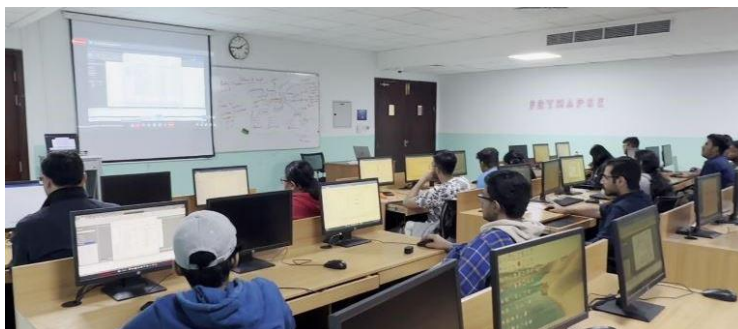
v. Atomic Rupture

Atomic rupture is a game organized by AIChE, from 15-17 March 2023. It involves tasks to solve using the clues given. The event was open to all students of BPDC which witnessed a huge participation. The task was to decode a mosaic and diffuse a bomb.

vi. Visit by Winchester School

The department gave a demo session to a group of school students from Winchester School on 21 March 2023. The aim was to inspire young minds towards STEM. Demo models (biofuel run engine, Light change detection using Arduino, Polymeric films for water filtration, Spherical fountain of photocatalyst, Chem-E-car, Absorption column etc.) were displayed for the students to have a 1-on-1 interaction. Students also participated in a short quiz based on their interaction with the demo models.

vii. Interns Joined the Department

Three school students from GEMS modern academy (Grade 11 and 12) joined the department of Chemical Engineering for internship from 20-30 March. The students have been doing active research with hands-on experiments under the guidance of Dr. Murchana Changmai and Dr. Nishant Pandya

- Punyah Jain-Introduction to surface coatings (Dr. Nishant Pandya)
- Lillian Joseph-Polymeric membrane preparation for water treatment (Dr. Murchana Changmai)
- Pragati Rajesh-Preparation of intelligent film (Dr. Murchana Changmai)

viii. Business Proposal to Dnata Cargo

Chemical Engineering Students Rishabh Somani, Krishna Sunil and Karthik Sairam (II year) participated and submitted a business proposal on March 2, 2023, to Dnata Cargo - UAE. During the air cargo build up activities in preparation for transport, plastic lashing materials are required to secure the freight. Thermal blankets are also used for temperature control of special shipments. Our students provided a business proposal to re-use / recycle these materials.

ix. Notable Achievements

✓ Dr. B G Prakash Kumar has been selected by University Grants Commission (UGC) as a reviewer for the fellowship/Research Grant Scheme and he has reviewed 2 research proposals for the same.

✓ Dr. Murchana Changmai was invited as a judge to the Shashtraprathiba-2023 contest (For school students in UAE) organized by Science India Forum (SIF) at Global Indian International School, Dubai UAE on 25 February 2023.

✓ Mr. Roshan Chandrasekhar (Undergraduate Biotechnology student) from SASTRA DEEMED UNIVERSITY, India joined the Chemical Engineering Department as an intern for the period of February-June 2023. He is working with Dr. B G Prakash Kumar on "Photocatalytic degradation of organics under natural sunlight".

✓ Dr. Nishant Pandya was invited as Guest editor of Materials Today proceedings, International Conference on Nanotechnology for Sustainable Living and Environment (ICON NSLE), Volume 76, Issue P2 (2023)

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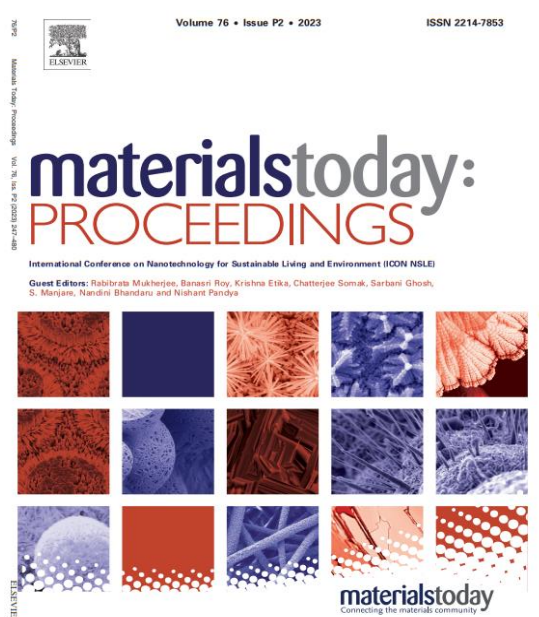
✓ Dr. Nishant Pandya was invited as a committee member for the scrutiny of the Best Ph.D. Thesis Award given by the Gujarat Technological University, Ahmedabad.

x. GDSC Student Challenge Ideathon 2023

Chemical Engineering students Priyanka Saginala (III year), Chandhini Muthukumar (PhD) participated in Google Developer Student Clubs (GDSC) Student Challenge Ideathon 2023 to build solutions in line with the UN's Sustainable Development Goals on 19 March 2023, held at University of Sharjah. They showcased their prototype - smart water treatment to degrade organics under sunlight irradiation. Also, our students got the amazing opportunity to interact with and form connections with the brightest minds from other universities.

2. Department of Civil Engineering

i. Research Publication

Global climate models (GCMs)/ Regional Climate models (RCMs) are the primary sources to assess the climate change impact on the water resources system. Simulated climatic variables from climate models often exhibit significant deviations from observations. In climate projections, different approaches were introduced to deal with systematic deviations and random model errors.

Dr. Brij Kishor Pandey and Dr. Vivek B, both faculty members of Civil Engineering, in a collaborative effort with Ayush Chandrakar of Intello Labs, have published a paper in the journal 'Acta Geophysica' (Springer publication) that demonstrates the intercomparison of four bias correction approaches.

Paper Link: https://rdcu.be/c8f3A

ii. Award for PhD Candidate

Utpal Deka, a PhD candidate in the Department of Civil Engineering, under the guidance of Dr. Deepthi Mary Dilip and Dr Sharat Chandra Pillalamarri (RTA), was recognized as being one of the top 4 winners of the prestigious Station Access and Mobility Program (STAMP), led by Delhi Transport Department and Delhi Metro Rail Corporation, in partnership with the WRI India Ross Center and Toyota Mobility Foundation. The competition is aimed towards enhancing last mile connectivity in Delhi NCR.

Link about the competition:
https://www.linkedin.com/feed/update/urn:li:activity:7040970873943564289/

iii. Industrial Exposure

In a bid to integrate industrial experience as part of coursework, the Department of Civil Engineering conducted a technical site visit to Unger Steel Middle East, Sharjah. Third year civil engineering students, studying the 'Design of Steel Structures' course, were exposed to advanced automated technologies of fabricating members for large scale steel structures.

iv. Educational Tour

As part of its Sustainable Initiatives, the Department of Civil Engineering is pleased to have organized an educational tour to witness the construction of the upcoming grand BAPS Hindu Mandir, Abu Dhabi - a one-of-its-kind green architecture in the UAE.

Moving away from conventional design methodologies, all major structural members in the temple were uniquely designed completely devoid of traditional steel, with intricately hand-carved sandstone as its sole load carrying material. Students were also exposed to the importance of the massive stone foundation just 1.5 m below ground level - nature's gift which miraculously solved several geotechnical

engineering challenges for the temple.

3. Department of Computer Science

i. Industry Expert Panel (IEP)

The CS Department conducted the first Industry Expert Panel (IEP) discussion on 17 February 2023. The panel members for this interaction included the following members.

- Mr. Pillairkulam Parthasarathy, EVP & Chief Information Security Officer, First Abu Dhabi Bank, Abu Dhabi, UAE.
- Mr. Satish Krishnan Kutty Menon, Operations Manager, ESRI, Sharjah, UAE.
- Mr. Vivek Bhalla, Cofounder Intelpeek, Dubai, UAE.

The objective of the IEP is to see how to prepare our students to be better equipped to join the industry when they pass out of university and to look at possible industry-academia collaboration. The items on the agenda included discussion of the UG and PG curriculum and to get the industry perspective on how to restructure and improve the curriculum in terms of elective and projects as well as the scope for new minor programs being offered specifically minor in Cybersecurity.

The faculty members of the department had a engaging and insightful discussion with the panel members.

ii. Notable Achievements

- Keerthana S, Elakkiya R, Belqasem A, Srete N, Subramaniyaswamy V, and Indragandhi V. A Systematic Study on Reinforcement Learning Based Applications. Energies. 2023 Feb 3; 16, no. 3: 1512. IF 3.004 [SCI Expanded]
- Rajalakshmi E, Elakkiya R, Subramaniyaswamy V, Alexey LP, Mikhail G, Bakaev M, Kotecha K, Gabralla LA, Abraham A. Multi-Semantic Discriminative Feature Learning for Sign Gesture Recognition Using Hybrid Deep Neural Architecture. IEEE Access. 2023 Jan 2;11:2226-38. IF 3.367 [SCI Expanded]
- Jha, A.K., Muthalagu, R. & Pawar, Pranav.M. Intelligent phishing website detection using machine learning. Multimed Tools Appl (2023). https://doi.org/10.1007/s11042-023-14731-4
- Anagha, C.S., Pawar, P.M. & Tamizharasan, P.S. Cost-effective IoT-based intelligent irrigation system. Int J Syst Assur Eng Manag (2023). https://doi.org/10.1007/s13198-023-01854-y
- Dr Elakkiya R along with Dr. Nick Pears, Professor, University of York, United Kingdom, received an International Joint Research Grant entitled "Diagnosis of respiratory diseases from lung images using self-supervised deep learning" supported by Royal Society on 21st March for the duration of two years from 2023 to 2025.
- Dr Elakkiya R received a research project entitled "Cognitive Computer Vision Based Sign Interpretation and Generation Network for Signer Education" funded by BITS Pilani, Dubai Campus under Research Initiation Grant (RIG) on 14th March for the duration of two years from 2023 to 2025.
- Dr Elakkiya R organized an invited talk for the second year first degree students on the topic "Learning Innovative Data Structures" and invited Dr. Shriram KV, Lead- Technical Evangelist, Intel Corporation, Chennai on 20th March.
- Dr Elakkiya R delivered a guest lecture on "Application of AI Techniques in Electrical Engineering" at School of Electrical Engineering, Vellore Institute of Technology on 29th March.

iii. Publications

- Shreejeet Sahay, Pranav Pawar, An Optimal Approach to Vehicular CO_2 Emissions Prediction using Deep Learning, 5th IEEE International Conference on Emerging Smart Computing and Informatics ESCI-2023, Pune, India, (2023). (In collaboration with Atidiv Pvt Ltd, Pune).
- Sapna Sadhwani, Avani Verma, Raja Muthalagu, Pranav M. Pawar, Network Intrusion Detection: A Study on Various Learning Approaches, IEEE International Conference on Computational Intelligence and Knowledge Economy (ICCIKE'2023), Dubai, UAE (2023).
- Samay Kalpesh Patel,Sapna Sadhwani, Raja Muthalagu, Pranav M. Pawar, Deep Learning Based Intrusion Detection Systems Techniques in IoT - Survey, IEEE International Conference on Computational Intelligence and Knowledge Economy (ICCIKE'2023), Dubai, UAE (2023).
- Mohammed Abdul Hafeezkhan, Hrishikesh Sabnis, J. Angel Arul Jothi, J. Kanishkha and A. M. Deva Prasad, "Classification of Microstructure Images of

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Metals using Transfer Learning" Eighth International Conference on Modelling and Development of Intelligent Systems, Sibiu, Romania (MDIS 2022), CCIS, vol 1761. Springer, Cham. https://doi.org/10.1007/978-3-031-27034-5_9

- Anurag Jha, Kabita Choudry, Sujala D. Shetty, Deep Learning Based Text Translation and Summarization tool for hearing impaired using Indian Sign Language: 12th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2023), Deep Learning Based Text Translation and Summarization tool for hearing impaired using Indian Sign Language: included in registration,22nd-24th February 2023, Lisbon, Portugal.

- Hanan Hussain and P. S Tamizharasan. 2023. The Impact of Cascaded Optimizations in CNN Models and End-Device Deployment. In Proceedings of the 20th ACM Conference on Embedded Networked Sensor Systems (SenSys '22). Association for Computing Machinery, New York, NY, USA, 954–961. https://doi.org/10.1145/3560905.3568299

iv. Review

- Dr. Sujala D. Shetty has been selected by the University Grants Commission (UGC) as a reviewer for the fellowship/Research Grant Scheme and she has reviewed a research proposal for the same.

- Dr. Sujala D. Shetty reviewed a paper titled "Estimation in Deregulated Environment by using Spark and Big Data Analytics for Real Power Tracing" for *Electrical Engineering*, Springer Nature.

v. Talk:

- Tamizharasan P S has delivered a keynote talk on "Hardware Optimization for Edge Inference" in the Embedded Systems & IoT track of International Conference on Emerging Trends in Industry 4.0 and Sustainable Concepts organized by School of Engineering, Avinashilingam Institute for Women, Coimbatore, India, 25 February 2023.

vi. ACM:

a) ML BOOTCAMP

ACM BPDC conducted a machine learning bootcamp for students to get familiar with ML concepts which will help them in their future jobs, as the whole world is moving towards technology. The boot camp had 4 sessions which were covered for a span of 4 weeks. Around 40+ students attended the bootcamp on a weekly basis.

b) Capture The Flag

ACM BPDC conducted its most awaited Capture the Flag competition on campus. Students were to form teams or play individually to decode a hidden message. Winning teams were also given cash prices. A total of 52 students took part in the competition.

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c) ACM TALKS

ACM hosted a talk with its very own alumni and ex-ACM President Neetesh Bhati. He is currently pursuing his master's degree in software engineering. It was a very useful session for all the students as he spoke about higher education and job opportunities. Topic focused on how to crack software jobs in top tech companies.

d) ACM TEACH

Under the social initiative of Teach Program by ACM BPDC, on 10 March, our council members, Avani, Kayan, Sstuti, Sanvit, Vignesh and Firas visited Dubai International Academy and conducted Python programming workshops. The idea was to spread awareness about Computer Science among school students.

e) Emirates Robotics Competition

Team ACM BITS from BITS Pilani, Dubai Campus has won third place at the Emirates Robotics Competition held at RIT Dubai in association with Dubai Future Labs and Khalifa University on 2 March 2023. The team consisted of Mohamed Firas Adil (2021A7PS0116U), Kayan Irani (2021A7PS0192U), Anurag Kumar Jha (2020A7PS0128U) and Dhruv Jain (2019A7PS0260U), under the guidance of Dr. Vilas Gaidhane. The team worked on the navigation challenge, where they built an Autonomous Mobile Robot (A Small Vehicle) which was able to navigate through the track while following traffic rules such as signals, speed humps, and zebra crossing as well as avoiding obstacles on the track. The team has been awarded 2500 AED and a 11000 AED scholarship for the postgraduate program.

4. Department of Mechanical Engineering

i. Student Achievements

Ph.D. Student Mr. Abhishek Khare, working with Dr. Shashank Khurana, received the Best Paper Award at the International Conference on Innovation and Challenges in Engineering Sciences (ICICES-2023) held during 17-18 March 2023 in India. The title of his presentation was "Micro-Vortex Generators with Circular Perforation for Turbulent Flow Separation Control".

ii. Technical Visit to Grundfos

Department of Mechanical Engineering, in association with ASHRAE Chapter, MAHE Dubai, organized a technical factory visit for the 3rd year students to Grundfos, Dubai, the largest pump manufacturer in the world, on 7 and 8 March 2023 and were presented with a wonderful learning experience in terms of theory, fabrication, assembly and testing of different commercial pumps, in line with their ongoing compulsory course on Prime Movers and Fluid Machinery. This gave them direct practical exposure in complementing theoretical knowledge. The students were accompanied by Dr. Shashank Khurana.

1. Department of Electrical and Electronics Sciences

i. Industry Advisory Panel (IAP) Inaugural Meeting

The Department of Electrical and Electronics Engineering had organized an Industry Advisory Panel (IAP) inaugural meeting with prominent leaders from the industry and faculty on February 11, 2023, at campus. The objective of this panel discussion is to seek opinions, counsel, and support from our external stakeholders to assist us in offering the best technology and educational outcomes. The panel discussion was graced by Mr. Deepak Bhatia, Vice President of Etisalat; Mr. Rafael Fiestas, Vice President of Weidmüller; Mr. Rahul Bharathan, Vice President of Bahwan Cyertek; and Dr. Dawood Al Ali, Senior Manager at DEWA. They have pioneered the stage for innovative new collaborations and ideas with their valuable contribution and insights.

ii.   World Police Summit 2023

- Team IFOR (Intelligent Flying Object for Reconnaissance) students Aadish Jain (2021A7PS0905U), Aditya Singhal (2021A7PS0906U), Adit Tewari (2021A3PS0915U), and J.Kanishkha (2019A7PS0072U) under the guidance of Dr. V. Kalaichelvi have been announced as winners of their research paper titled "Crime Detection using Drones and Artificial Intelligence" on 7 March, 2023 for the World Police Summit - Expert hub organized by Dubai Police from 7 to 9 March 2023.The theme of the event was to validate ideas and ideate a solution that is up to market standards. Twelve teams were shortlisted for the finals and out of which Team IFOR was declared winners. The team has proposed an innovative solution to detect crime with the help of drones and Artificial Intelligence. Their idea aims to identify suspicious behaviour, patterns, or anomalies that could be indicative of criminal activity. They have demonstrated their approach to reduce the risk to human officers and improve response times, ultimately making communities safer and helping law enforcement apprehend criminals more quickly.

- Prof M.B Srinivas presented a research paper titled "A low-cost device of child/Woman Safety" on 7 March 2023 for the world police summit 2023.

iii.   Hands on Training Session for First Year Students

Prof. TG Thomas and Dr. Sunil Thomas along with HoD Dr. V. Kalaichelvi and ably supported by LIs Mr. Hidayathulla, Mr. Chelladurai and Mr. Ashwani Saini, conducted a special session for first-year students on Friday, 3 March 2023, where they were given practical hands-on exposure to important concepts in Electrical Sciences course through software simulations using MATLAB (MATRIX Laboratory) and hardware circuit realizations. Twenty seven students attended the session, and they were appreciative of the opportunity thus provided.

iv. Publication Details of Students and Faculty:

- Neethu Elizabeth Michael, Shazia Hasan, Ahmed Al-Durra, Manohar Mishra, "Economic scheduling of virtual power plant in day-ahead and real-time markets considering uncertainties in electrical parameters", Energy Reports, Volume 9, 2023,Pages 3837-3850, ISSN 2352-4847, https://doi.org/10.1016/j.egyr.2023.02.092.
- Abhilasha Singh, V. Kalaichelvi & R. Karthikeyan (2023), "Performance analysis of object detection algorithms for robotic welding applications in planar environment", International Journal of Computer Integrated Manufacturing, DOI: 10.1080/0951192X.2022.2162601
- R Swarnalatha, has published a research article on "A Greedy Optimized Intelligent Framework for Early Detection of Alzheimer's Disease Using EEG Signal", Computational Intelligence and Neuroscience, Feb, 2023. SCIE. IF 3.12.
- Dr Vilas H Gaidhane delivered Keynote on "Modelling and Analysis of Graphene-FET based Gas Sensor" in three days International Conference on Advancement in Core and Frontier of Physics (ACFP- 2023), 17-19 February, 2023, Mathura, India.

v. Invited Talk

Dr. Shazia Hasan, Associate Professor, Department of Electrical and Electronics Engineering, BITS Pilani, Dubai Campus was an invited speaker in the Five Day Online Short-Term Training Program (STTP) on "Recent Advancements in Electrical Grid, Renewable Energy and its Application in EVs" held from 13 to 17 March 2023, jointly organized by The Institution of Engineers (India) [IEI], BBIT.

vi. Multisim Workshop

On February 23, 2023, the AOEE of the EEE department organized a MULTISIM Workshop under the supervision of Dr. Vilas H Gaidhane. In the workshop, the students became familiar with the SPICE simulation software and its different tools for designing, simulating, and analyzing different electronic circuit designs. Following the success of the 1st week's Multisim session, the department scheduled another workshop on Multisim on March 2, 2023. The event was held during the 7th and 8th hour of the regular class schedule. The workshop, as a whole, was successfully conducted by the combined efforts of all the faculty members of the EEE department and student members of the AOEE.

vii. Career Guidance Session

On 28 March 2023, IEEE organized a Career Guidance session with Dr. Nilesh Goel, Prof M.B.Srinivas and Dr.R.Gomathi Bhavani for students of all years of EEE and ECE. The session was facilitated by AOEE team. More than 40 students got benefited with the wide range of career options presented by Dr. Nilesh Goel. Importance of IEEE for an Electrical Engineer and various career opportunities/services offered by IEEE were also presented. Dr. Gomathi Bhavani from the Career services division and Dr. M.B. Srinivas, University wide dean for Research talked about how BPDC can help students in getting their dream job and getting into higher studies respectively.
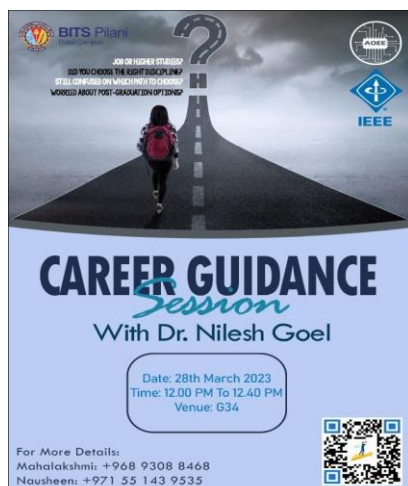
viii. Events by SWE and WIE

- Under the guidance of Dr R Swarnalatha, SWE (Society of Women Engineers) committee members hosted an exhilarating rapid-fire quiz competition called "HighQ" that challenged IQ and general knowledge on February 22, 2023. The team that got the maximum number of correct answers out of 25 questions won

the winner's certificate and movie tickets of their choice. The winners are Slot 1: Sanchit Choudhary (III year ECE) & Anurag kumar Jha (III year CS); Slot 2: Prasannah Raman (I year CS) and Dhanush Krishna (I year CS).

- Under the guidance of Dr R Swarnalatha, WIE (Women In Engineering) committee members hosted a mind-boggling event named "Blind Coding Challenge" with the coding languages as Python/Java/C on February 23, 2023. Anurag Kumar Jha (III-year CS) & Rahul Vimal Sumbly (II year CS) received the winner's certificate and laptop bags as a token of appreciation.

ix. Workshop by AOEE

- AOEE of the EEE department organized a workshop on "MULTISIM" on 23 February 2023. Dr.Vilas H Gaidhane Conducted the workshop from 1:00 PM to 2:45 PM. Twenty students the workshop and had insights of Multisim.

x. Visit

- Dr. Nilesh Goel and Dr. V. Kalaichelvi visited the University of Birmingham, Dubai Campus at DIAC for an event organized by RTA from 21st to 23rd February,2023. RTA initiated the Industry to academia interaction and promoting the startups with a positive impact on sustainability.

6. Department of Humanities and Social Sciences

- Dr. Devika: Sharma, Devika. (forthcoming). *Language and Borders*. In the Oxford Research Encyclopedia of International Studies. Oxford University Press. doi: 10.1093/acrefore/9780190846626.013.722

- Students of Bachelor of Business Administration of Ganpat University, Gujarat, India, visited BITS Pilani, Dubai Campus on an educational trip from 21-23 March, 2023. They had a campus tour and noted the different facilities available on campus.

  The management faculty of the Department of HSS at BPDC engaged with the students. Dr Faisal Nazir Zargar spoke about Corporate Finance with specific focus on Investment and Financing decisions of a corporation. He also encouraged the students to look into the Chartered Financial Analyst (CFA) program. Taking the discussion further, Dr Asgar Ali touched upon the basics of investment management, asset allocation, interest rate hikes by the Federal Reserve Bank and the failure of US Banks and Credit Suisse Case. Dr Sourjo Mukherjee gave a presentation on "Fundamentals of Digital Marketing Strategy". He discussed the similarities and dissimilarities between traditional marketing and digital marketing as well as the basic steps in the digital marketing strategy development process, and the importance of the POEM framework in digital marketing practice.

  The next big attraction for the students was the various start-up ideas and innovations. Dr Gulshan Kumar was delighted to interact with the students at the Centre for Innovation, Incubation & Entrepreneurship, Dubai (CIIED) and enlightened them about the various start-up opportunities available in Dubai.

The PS division made necessary arrangements for a company visit to Master Builder Solutions in Dubai. At the company site, the students came to know the contribution of the company in building monuments and well-known places all over the world. They became familiar with the business operation of the company and the entire production process, starting from raw material procurement to quality control and supply.

The tour expanded the students' academic knowledge and broadened their perspectives on global issues.

II. Student Welfare Division
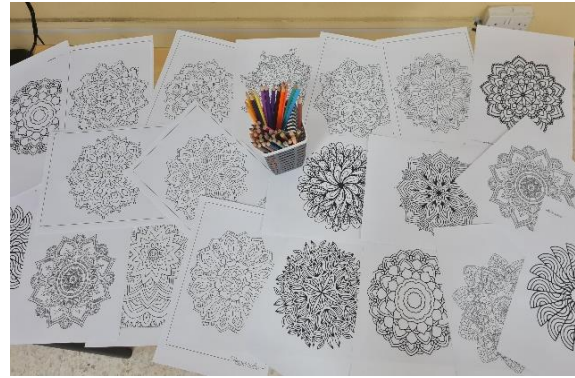
1. Women's Day

A workshop on mindfulness with mandalas was organized specially for the support staff, on 8 March 2023. Staff and students who attended also benefitted from the activity. The counselor explained the benefits of mindfulness and how mandalas can be used to reduce stress and achieve a sense of peace and happiness.

Ms.Eunice Fernandes, the counselor was invited on the show Mama Mia with Muriel on 100.3 Talk FM. The talk was aired on 15 March at 12.30pm. The counselor shared signs and symptoms to identify mental health concerns. She also shared tips on how to overcome challenging situations. She threw light on the need for mental health awareness among today's youth and parents and also shared all the initiatives taken at BITS Pilani, Dubai Campus for students, faculties and staff wellbeing.

2. Postman

Another round of certification course by Postman - "Postman API Fundamentals Student Expert Certification", is offered to all BITSians across all four campuses from 21 March 2023. The course is offered online on Postman Academy and is free of cost! It has no prerequisites and will give an opportunity to all students to learn API-based programming, which is currently being offered to leading institutions globally! All students who complete the course will get a certificate of completion and free access to Postman Enterprise License worth $828/year/user. Students would also get a "Postman API Fundamentals Student Expert Badge" over Badgr.

3. Google Developers Student Club (GDSC)

1. **Event Name: GDSC Flutterflow Part 2**
Date: 10 March 2023
Main Coordinators: Anurag Kumar Jha

An online Flutterflow workshop was conducted on 10 March 2023. The workshop focused on the Backend where Firebase was taught from scratch. Topics also covered were custom functions and web hosting. A total of 35 attends were present during the. Attendees were able to build full stack functioning mobile applications. Recordings were done by Aryan Satwani and Anurag Kumar Jha. Attendance was done by Riddhi Goswami and Dhakshina Ilango.An Instagram Story was posted to encourage people to share their work with the concepts they learnt from the Workshop.

2. **Event Name: GDSC Student Challenge Ideathon 2023**
Date: 19 March 2023
Venue: University of Sharjah
Main Coordinator: Anurag Kumar Jha
Participants:
Team 1: Mohammed Husamuddin, Laya Shree Elango, Riddhi Goswami
Team 2: Rahul Sumbly, Vansh Gupta, Amaya Navare, Alan Mohan
Team 3: Rushit Palesha, Krish Motiani, Mohammed Aman, Siddharth Choudhury
Team 4: Priyanka Saginala, Chandini
Four teams represented GDSC BPDC in its very first inter-university hackathon. By moving towards the UN's Sustainable Development Goals, our university students came up with very creative ideas and solutions that impressed the judges. Participants also had the opportunity to attend the Firebase, Flutterflow and Pitching Workshops held during the event organized by experts in the field. Our students also had a great opportunity to interact and network with the brightest minds from other universities. Although our students could not reach the podium, they learnt a lot and took home valuable memories and some fun goodies! A reel showcasing the highlights of the very succssful and memorable hackathon was posted later.

4. Groove

i. Raviver Alumni Meet

Groove performed at the yearly gathering of BITS alumni, on 4 March 2023; the audience thoroughly enjoyed it. A few seniors even joined Groove on stage, Sumeet a BITS Alumni was part of Groove and he joined the team on stage to perform with them.

ii. JASHN'23 Trailer Reveal

On 6 March 2023, the trailer for JASHN'23 was completed, and Groove was requested to provide the audience with a preview of what to expect on the day of the event. Both the Eastern and Western teams of BITS performed their unique styles and choreography in the auditorium and amazed the crowd.

5. Social and Environment Club

i. Al Noor Family Fun Run

4 March 2023, students from Bits Pilani Dubai Campus volunteered for the Al Noor's most popular community event- The Al Noor-Zurich Family Fun Fair 2023. We got an opportunity to be a part of Al Noor Superhero Walk/Fun Run 2023, a **walk for inclusion**.

This walk/fun run was in alignment with an initiative that aims at promoting the participation and inclusion of persons with disabilities in the community, eliminating all obstacles that may stand in the way of them positively engaging in their environments, as capable individuals of society.

ii. International Women's Day

This year on International Women's Day, The Social and Environment Club along with students and staff of BITS Pilani Dubai Campus participated in this year's global camping to embrace equity.

This special day also featured a mindfulness workshop in the form of mandala art conducted by our counselor Mrs. Eunice for all the ladies.

iii. Blood Donation

On 9 March 2023, The Social and Environment Club, in association with Latifa Hospital, hosted a blood donation drive. More than 130 people registered, and 100+ people were able to donate.

iv. SNF Development Centre

On 20 March, some of the students from our college visited the SNF Development Centre to celebrate World Down Syndrome Day with the children.
The event started with amazing performances put up by the students followed by an energizing activity of Zumba. The event ended with the colorful drawings and collage made by the children during the event.

v. Earth Hour

On 25 March 2023, The Social and Environment Club celebrated Earth Hour in our campus.
All the lights were switched off, and candles were lit up across the campus. This musical night had a jam session with instruments, and people sang along, enjoying the darkness.



vi. Spectrum Goodie Bags Collection

These items are being gathered to craft the perfect giftpack for these young stars, and we need your help to do so! Each student is requested to purchase the snacks that have been mentioned according to their batch as displayed in the post and hand them over to the respective coordinators who will be responsible for collecting and handling these items.

6. Shades

i. Artex 2023
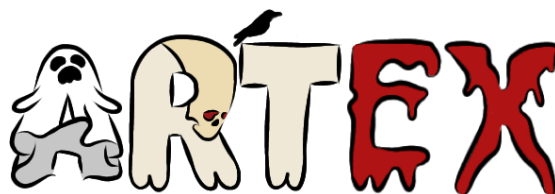
The most awaited Art event, ARTEX 2023 conducted by the SHADES club BPDC was inaugurated on March 1st, 2023, by our Director, Professor Srinivasan Madapusi accompanied by Dr. Priti Bajpai, Dean of Student Welfare, Mrs. Anuradha Srinivasan and Dr. Vijaya Ilango SHADES club Faculty-in-charge lighting the lamp gracing the occasion. Dr. Vijaya Ilango, Faculty in charge of Shades welcomed and briefed about the event. Following the welcome speech, the Director spoke words of enlightenment and praised the event for showcasing every BITSian's talent.

After the inauguration ceremony, the *"kalakriti"* exhibition was open for students to visit. One of the main events was the Kalakriti Art exhibition which attracted a huge audience with its artpieces by the talented students, Faculty, staff, and alumni with variety of categories like pencil art, pen art, acrylic, watercolor, wool crochet, digital art, fabric art, etc. We also exhibited artworks of Alumni and staff. For the first time, we invited students from other universities to showcase their artwork. We received submissions from universities around our campus in Academic City, Dubai.

Along with the Art exhibition, during ARTEX different competitions like the Henna competition, Diya painting, Clay modeling, etc. were held. Participant's outputs from the event were displayed throughout the exhibition. A henna stall also was there for visitors.
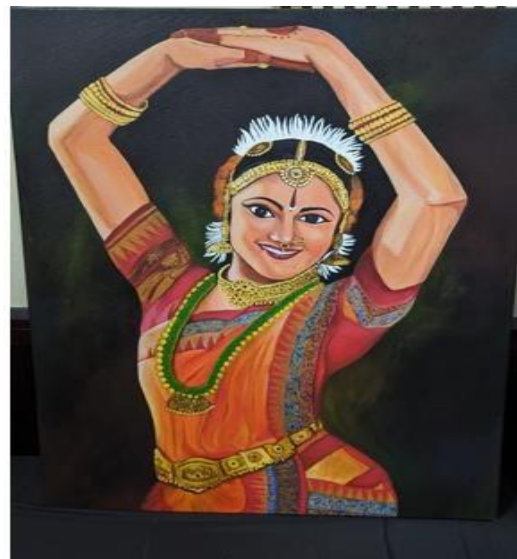
Blind art was also conducted, and the students had a lot of fun trying to replicate the given itemblindly with just instructions from their teammate.

Along with competitions, we also had different games prepared for the visitors.
BALLIN' – The player is given three chances and they should get the ball into any of the mounted cups.
BALLOON POP – Pop at least one balloon out of the two given chances using the pin.
TRAIL – Follow the footsteps and handprints and complete throughout without tumbling onthe floor.

We also set up two photobooths for students and staff to take pictures to take back memories of Artex. Photobooths were set up according to theme and students really enjoyed taking pictures in the setups. Visitors enjoyed delicious chaat and mojitos from the stall of our sponsor, CCD Chaat, and Snacks Stall.

Preparations for the event started in January 2023 when the office bearers recruited a team of volunteers and segregated them into different teams carrying on different tasks regarding the event.

The teams – Decor, Content Creation, and Logistics, all worked together in proceeding with the event. The decor team started early with creating the hangings, cutouts, etc. to create itemsfor decoration. The content creation team worked on writing emails, invites, and also posts, posters, and reels for social media (which can be all seen in our Instagram, *shades. club)* Logistics team helped the decor team in the final stages of setting up the items in places and also helped in the art collection.
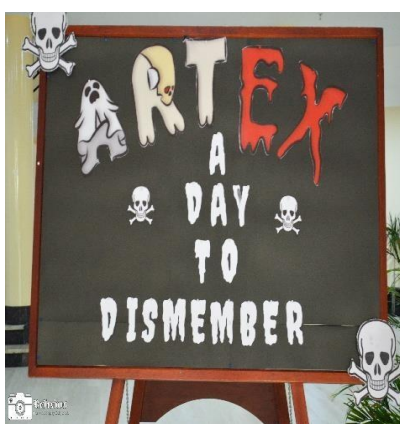
7. Reflections

    i. Photography coverage for Jashn trailer launch on 6 March 2023.

    ii. Media coverage for women's day celebration by WIE and SWE on 8 March 2023.

    iii. Complete media coverage for Jashn was held from 14-17 March, 2023.

    iv. Pixels: Annual Inter-University photography competition was organized by Reflexions as a part of Jashn'23. This year we received 118 entries from 12 different universities across UAE, which was the highest in last 6 years.

    v. The results were announced on 17 March. The competition had two categories, mobile photography and landscape photography.

    vi. BITS Pilani secured first place in both categories.

    vii. Media coverage for an interaction with Padma Bhushan Shri Nambi Narayanan with faculty and students held on 19-20 March 2023.

    viii. Media coverage for Artex held on 1 & 2 March 2023

    ix. Photography coverage for alumni division, Raviver, 2023 held on 4 March.

III. Jashn

i. Day 1: Solo Battle

The initial day of Jashn commenced with a Solo battle, where Surya Radhakrishnan and Abbas Nazir, representing BITS Pilani, Dubai from Groove, participated along with eight other contestants. The solo battle was divided into two rounds: The Choreography round and The Showcase round.

1.Choreography Round

Participants were partnered with their opponents for a 1v1 battle. This is a preliminary round; participants were expected to prepare a choreo to the music of their choice. Dancers were judged based on their choreography, stage presence, ability to engage with the audience and musicality. The Choreography round is for 1 min therefore each participant got 30 seconds.

2.Showcase round

1v1 battle lasting for 1 min wherein both dancers are expected to dance impromptu to any style and beat of music selected by the judges. The judges assessed the quality of the performance, musicality, dance technique, personality of the performers and ability to entertain the judges.

The "Solo Battle" event was exciting, with Wollongong University emerging as the winners and Manipal securing the 2nd position. The participants displayed exceptional dancing skills and mesmerized the audience with their outstanding moves. The judges were Monish Kumaran, Vijay also known as Roxtyle and Alina Zion Cherry.

ii. Day 2: Dancing Duet

The second day commenced with a performance by eight dancing duos, which included Ria and Sneha from BITS Pilani, Dubai. All the teams were highly competitive and gave exceptional performances that made it difficult for the judges, Mohammed Shaheed and Devesh Rajesh, to decide the winner. Each team had a unique theme that they portrayed with excellence. Despite the tough competition, BITS Pilani, Dubai emerged as the winners with their haunted theme that captivated the judges and left the audience spellbound. Ria and Sneha had the support of their choreographers Dev

and Shilpa, who constantly guided them throughout. Manipal secured 2nd place.

iii. Day 3: Group Dance

a) **Eastern category**

Group dance is a form of dance that involves two or more dancers performing together in a synchronized manner, Group dance requires a lot of coordination, timing, and teamwork, as all the dancers need to move together in perfect harmony to create a visually appealing performance. All universities showcased their creativity, expressed emotions, and fascinated the crowd. There were 7 teams all of which performed exceptionally well, however BITS Pilani, Eastern team - YBC emerged as winners and bagged the gold medal with their performance. Their theme MS Dhoni was unique which left the audience mesmerized. The second place was secured by Middlesex University.

b) **Western category**

All the universities surprised the judges by their upbeat tempo, energetic movements, and synchronized choreography. The audience saw wide range of dance styles and themes, the judges for this category included Mohammed Shaheed, Alina Zion Cherry and Naveen Singh. Middlesex University emerged as winners for this category and took home the gold medal. Their Samurai theme amazed the judges which led them to victory, BITS Pilani, Dubai WSB team secured 2nd place. Their energetic performance and fun choreography excited the crowd.

iii. Day 4: Shweta Subram and Project 91 Performance

Day 4 started off with Perplexed an event by the quiz club of BITS Pilani, Dubai Campus. Flummoxed. The Second event of the day was Twist in the Tale, followed by Instrumental, where participants showcased their instrumental skills. The third event of the day was Pixels, where participants showcased their photography skills.

The final event of the day was the much-awaited Fashion Show, where participants showcased their creativity and fashion sense. After the fashion show, the audience was treated to a breathtaking performance by the famous singer, Shweta Subram. Her soulful voice and impeccable singing skills left the audience spellbound. She performed some of her popular hits and also interacted with the audience, making the entire experience even more memorable.

As the sun began to set, the stage was set for the grand finale of Jashn 2023. The renowned Sunburn DJ, Project 91, took the stage and set the tone for the party. The crowd went wild as the DJ played his chart-topping tracks, and everyone danced the night away. Overall, Jashn 2023 was a Grand Success, and the participants and audience had an amazing time. The festival brought together a diverse range of talents, creativity, and culture, making it a memorable experience for everyone involved.

Jalebi baby, Bollywood singer - Shweta Subram Performing at JASHN'23

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Jalebi baby, Bollywood singer - Shweta Subram Performing at JASHN'23
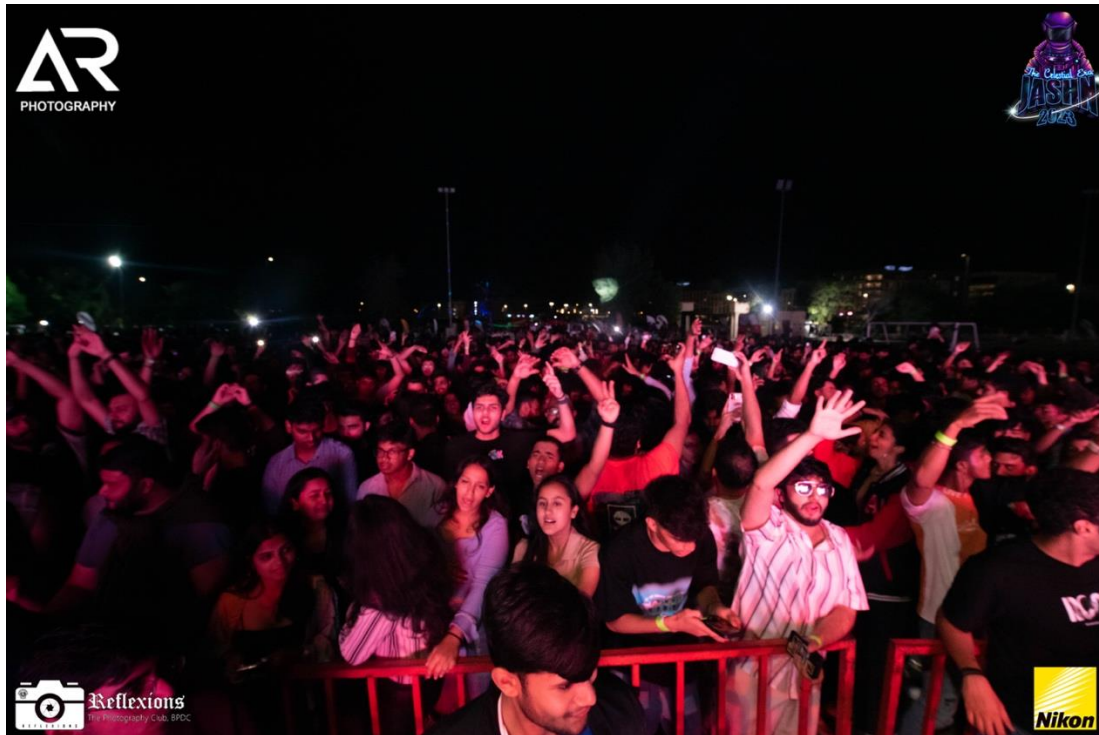
Audience during Jalebi baby, Bollywood singer - Shweta Subram Performance at JASHN'23

Audience during Jalebi baby, Bollywood singer - Shweta Subram Performance at JASHN'23

Audience during Sunburn DJ - Project 91 performance at JASHN'23

Sunburn DJ - Project 91 performing at JASHN'23

Sunburn DJ - Project 91 performing at JASHN'23
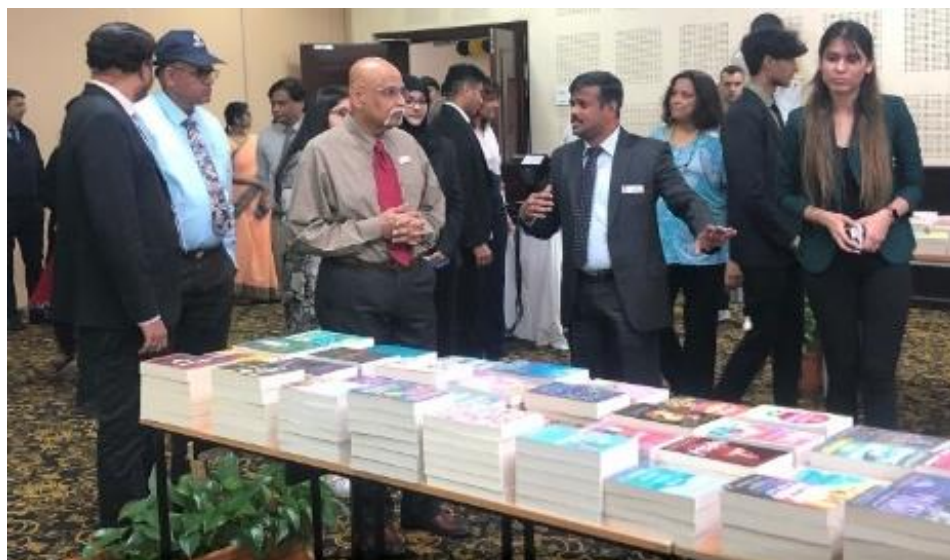
IV.BPDC Library

1. BPDC Book Fair

Every year March is observed as the month of Reading in the UAE. In honor of National Reading Month, we have conducted a BITS Book Fair from March 6-10 March 2023.
The most awaited BITS Book Fair was inaugurated by our Director, Prof. Srinivasan Madapusi, along with teachers, staff, and students.
Students, Faculty and Staff were actively purchased and read books during the BITS Book Fair. The support of BPDC users has certainly made this year's BITS Book Fair a big success, it would not have happened without your support and active purchase.

In addition to the Books, we have organized an Author's Talk, Author signings, an IELTS information session and entertaining with fun games such as Ludo, Snake & Ladder, and Jenga.

We have announced three Lucky draw winners for the BPDC book lovers who bought more over AED 100/- namely Ms. Rincy Thomas (2019PHXF001U), Ms.Afrah Arshya (2019A9PS0163U) and Mr. Vignesh Nair (2019A7PS0205U). More than 40+ BPDC book lovers participated in the lucky draw.

2. Author Talk - Ms. Harshitha Nandha

On 7 March 2023, BPDC Library organized an author Talk by Ms. Harshitha Nandha, she is an avid reader and an admirer of literature. A 1997 batch BITSian with a dual degree in EEE and Physics, she became a stay-at-home mother after relocating to Dubai.

The passion for writing, however, continued to burn. Her first novella "Xanadu: Three Souls Searching for Paradise" was published in 2021. Her book is titled "BITS and Pieces: A Collage of My BITSian Memories." is her first non-fiction book and is a collaboration with another BITSian Girija Hariharan who has done the illustrations for the book.

She has also been nominated for Orange Flower Awards by Women's Web in the year 2022. Her articles and short stories are regularly published on leading websites like SheThePeople.tv, Momspresso.com and WomensWeb.in.
Her talk was attended by more than Thirty-Five members of the faculty, staff, and students, and everybody liked it.

3. Informative Session on IELTS

On 8 March 2023, BPDC Library organized an Invited talk on "Get to know about IELTS" by Ms. Malavika Jayakumar on the occasion of International Women's Day.
She is teaching English and IELTS ,8 years of experience. She is an educator who believes that each student has the potential to change the world, and she can support this by providing the best foundation. She graduated from University of Wollongong, Dubai Campus MA with Distinction, Class of 2013.

Her interactive session was quite useful for the students and attended by 30+ faculty,

staff, and students.

4. Dare to Dream: Mr. Rajiv Shah

On 9 March 2023, BPDC Library organized an invited talk on "Dare to Dream" by Mr. Rajiv Shah.
He is an Indian-origin author, entrepreneur, finance consultant, and angel investor from the UAE. His first book 'Forever: A Love Saga' was published in 2017 which gave him a great debut as a writer. Rajiv released his second book 'Forbidden' in 2022 and has been receiving great reviews from readers.

He was born and brought up in Mumbai and holds a Chartered Account rank. He has over 2 decades of working experience in India and UAE since 2004.
He is a multi-talented person, currently writing three more books and scripts for OTT series as well. His session was extremely useful for the students and faculty and staff

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V. Society of Women Engineers & Women in Engineering

i. HighQ

Under the guidance of Dr R Swarnalatha, SWE (Society of Women Engineers) committee members hosted an exhilarating rapid-fire quiz competition called "HighQ" that challenged IQ and general knowledge on February 22, 2023. The team that got the maximum number of correct answers out of 25 questions won the winner's certificate and movie tickets of their choice. The winners are Slot 1: Sanchit choudhary (III year ECE) & Anurag kumar Jha (III year CS); Slot 2:Prasannah Raman (I year CS) and Dhanush Krishna(I year CS).

ii. Blind Coding Challenge

Under the guidance of Dr R Swarnalatha, WIE(Women In Engineering) committee members hosted a mind-boggling event named " Blind Coding Challenge " with the coding languages as Python/Java/C on February 23, 2023. Anurag Kumar Jha (III-year CS) & Rahul Vimal Sumbly (II year CS) received the winner's certificate and laptop bags as a token of appreciation.

iii. Women's Day

With the advent of Women's History Month, SWE and WIE celebrated the growing legacy of women in all walks of life! There was a plethora of events planned, including games, giveaways, performances, and much more, along with a fundraiser open throughout the day.

Huge Appreciation to the SWE & WIE committee members consisting of Inas Riyaz (4th Year CS), Dhakshina Ilango (4th Year CS), Nausheen (4th Year EEE), Nileena Fatima (4th Year CS), Avani Verma (4th Year CS), Divija Sanapala (4th Year CS),Asmi Sriwastawa (4th Year CS), Neha.S (4th Year BIOT), Anoushka Chowdhury (4th Year Civil), Urvi Modi (3rd Year CS), Sarah Arshad (3rd Year CS), Shriyedita Ramesh(3rd Year BIOT), Anjali Singh (3rd Year EEE), Deeksha Sachan (3rd Year Civil), Ahlia Mariam (3rd Year Mech), Neha Jakhar (3rd Year CS), Jagati Jain (3rd Year BIOT), Shifa Parveen (3rd Year CS), Ummal Fahadha (3rd Year Chem),Husniya Meera(2nd Year BIOT) and Riddhi Goswami (2nd Year CS).

a. Fundraiser Drive to Al Jalila Foundation

A donation drive for Women's Day was organized by the WIE and SWE BPDC. All the collected funds are donated to the Al Jalila Foundation. This foundation is a global healthcare philanthropic organization dedicated to transforming lives, was founded in April 2013 by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates (UAE) and Ruler of Dubai, to position Dubai and the UAE at the forefront of medical innovation. It was heart-warming to see the outpouring of support from the faculty, staff, and students towards this important cause. We are thrilled to share that we were able to collect

an impressive amount of donations that will go towards empowering women and girls in our community. All the donations were handed over to Al Jalila Foundation in the name of BPDC.

b. Interactive Session

To celebrate women and learn from great women at BPDC, an interactive session was organized. The panel consists of three amazing women, Prof. Priti Bajpai, Ms. Nahid Afshan, and Prof. Shazi Shah Jabeen, who shared their experiences, insights, and words of wisdom with the young adults.

c. Name The Dame – Fun Game

A fun-filled game "Name The Dame" was organized to celebrate the occasion. Women and men were invited to participate in the game and had a blast. Participants Throw ping pong balls into the numbered cups and based on the number they have to identify the woman in the picture. Tarunikka Unnikrishnan (I Year CS) was the winner and received the gift hamper as a token of appreciation.

d. Pictionary Event

An epic game named Pictionary was organized. This is a classic drawing game and put your artistic skills to the test! Participants pick up a price of paper with a word written on it and they have to draw the idea to the other person without directly drawing the word itself. Winners of Pictionary were Saanchi Swanand Kasar (II Year BIOT) and Jhuhi Niraj Shah(II Year BIOT). The winners received the gift hamper as a token of appreciation.

VI.   Staff Welfare Committee

i.   Music and Art of Living Sessions

The Staff Welfare Committee has started Piano and Flute lessons and Art of Living meditation sessions from 17 March, 2023. Director inaugurated the classes and felicitated. Piano and Flute Lessons are offered by Dr. Rusal Raj and Dr B. Vijaykumar whereas Dr. Siddhaling is engaging in the Art of living sessions.

ii.   Women's Day Celebrations

Women's day was celebrated on 17 March 2023 by the Staff Welfare Committee to support women empowerment and applaud the achievements made by women in different fields of life. All the BPDC women staff, faculties and students were invited. There were in total 65 attendees for the event scheduled exclusively for women. The venue was beautifully decorated in a pink-purple theme. Everybody supported us by dressing up accordingly. The event started with a welcome note

by Ms. Sapna Sadhwani. A motivational speech was given by the director, followed by a video clip depicting the diverse and powerful roles played by a woman. Then after, Mrs Anu explained how each woman sees, thinks and wonders differently, yet they all share common features. Attendees were asked to share their views on these 3 dimensions.

Dr. Shyamaa Adil (MBCHB, MFM, ABAM), an aesthetic GP doctor from Your Dental & Medical Center and her team came to the event to address all the ladies. All the attendees were welcomed with a rose, clinic discount voucher to each, followed by registration for raffle draw. There were in total 5 raffle draws. The winners received free vouchers for skin, hair, and dental services. Dr. Shyamaa also participated in Q & A from the audience regarding women's health and body. Your Dental & Mental Center also conducted a general quiz regarding women body, skin and hair and gifted vouchers to the winners.

There was a wonderful dance performance by staff and faculty which made the environment very lively. The fun continued with some games like passing the parcel, fillers, 1-minute games. The real fun began when Miss Bhavika made the audience play Housie. Winners of all the games were awarded gifts. The unity was projected when all the ladies in all recited the affirmation note all together and promised to be there for each other. And the celebration ended on a happy note with lunch meals.
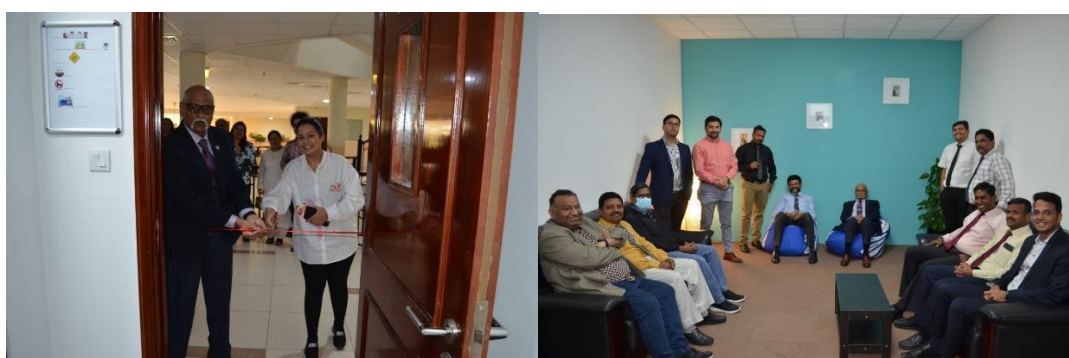
iii. Quiet Zone – Male and Female

For the Staff/faculty to escape and arrive in a "work – free" environment and relax and refresh themselves and to relieve their stress "QUIET ZONE" was created inside the campus premises and inaugurated on 22nd March 2023.

VII. The Nambi Effect

20 March 2023 has become one of the most memorable day for all BITSians. Padma Bhushan Awardee Shri. Nambi Narayanan visited our campus for an exclusive interaction with the students of BPDC.

He was accorded the warmest welcome and escorted to the field in front of the Campus Clinic, where he planted a tree sporting a BPDC cap.

BPDC's Editorial Board had a candid interview with the eminent scientist from India at the VIP Lounge.

The Nambi Effect, the interactive session was curated by Supernova - BPDC's Astronomy Club. The auditorium was filled to capacity! The audience was spell bound hearing Shri. Nambi's take on topics ranging from astronomy, stress-relief, space race, etc. to his life and times. Indeed, the Nambi Effect was electrifying and all present were super charged.