

BITS PILANI DUBAI CAMPUS STUDENT CHAPTER



BITS Pilani
Dubai Campus

AICHE ANNUAL REPORT 2023-2024



**BITS Pilani, Dubai Campus
Student Chapter**

Prep. by: Dr Souvik k Paul

EVENTS HELD (In Chronological Order)

Workshop on CFD -October 7 & 8, 2023

On the 7th of October 2023, AIChE hosted the Computational Fluid Dynamics (CFD) workshop using the Open Foam Software. The session was conducted by Mr. Adwaith Gupta, CEO of Paanduv Applications. It was open to all undergraduates, post graduate and PhD students. The workshop succeeded in sparking intrigue in the field of fluid dynamics while enhancing the problem-solving skills of the attendees and fostering the vigor for innovation.



BITS Pilani
Dubai Campus

AIChE
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

Workshop on "CFD with Open FOAM"
for All Undergraduate, Post Graduate and PhD Students

Organized by
AIChE Student Chapter,
Department of Chemical Engineering
BITS Pilani, Dubai Campus

Mode: Online
OCTOBER 7 & 8, 2023
*Free for all

Speaker: Adwaith Gupta, CEO,
Paanduv Applications,
Alumnus of Stanford University

Registration Link:
<https://lnkd.in/d/nKpGJab>

What is the workshop about?
✓ Understand fluid dynamics
✓ Improve problem solving skills
✓ Foster culture of innovation

*Certificates will be provided by PAANDUV Applications to all the participants

BTF AKSI EXPO- October 15, 2023

We are delighted to announce that the Chemical Engineering department of Birla Institute of Technology and Science, Pilani Dubai, has secured the Overall Achievement prize at the BTF AKSI EXPO 2023.

3rd Year Chemical Engineering student Krishna Sunil bagged this achievement for his demonstration of the Chem-E-car concept based on hydrogen fuel.



Workshop on water quality monitoring, surveillance and simulation of waste water treatment systems – October 9, 2023

The Department of Chemical Engineering at Birla Institute of Technology and Science, Pilani Dubai along with AIChE present a unique opportunity to dive into the world of Waste Water Management. The Workshop on water quality monitoring, surveillance and simulation of waste water treatment systems, was held on October 28, 2023.

Students of Grades 10-12 were participated and gained hands-on learning experience of analytical instruments, simulation basics and much more.

WORKSHOP ON WATER QUALITY MONITORING, SURVEILLANCE AND SIMULATION OF WASTEWATER TREATMENT SYSTEM
for Grade 10-12 students
organized by
Department of Chemical Engineering
BITS Pilani, Dubai campus

Details
October 28, 2023 (Saturday)
9:00 am-3:00 pm
Mode: In-person
Venue: BITS Pilani, Dubai Campus
Facility Fee: 40 AED

WHAT IS THE WORKSHOP ABOUT?
- Hands-on use of analytical instruments
- Learn basics of simulation for waste water treatment
- 1:1 interaction with the faculty

ADDITIONAL DETAILS
- Certificates will be provided to all participants
- Food is inclusive (Snacks and lunch provided)
- Transportation will be self availed

REGISTRATION DETAILS
https://docs.google.com/forms/d/ej1FAtpQL5fw0G1EsvWx8dzCmTJ00z7JUT0LQFzAR0U1SvH1Qg07JA/view?orm?usp=sf_link

CONTACT
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- Dr. Prakash Kumar SG, 050-1570504
- Dr. Nishant Pandya, 055-6279879
- Dr. Souvik Paul, 055-2438254

EXCEL WORKSHOP- November 23, 2023

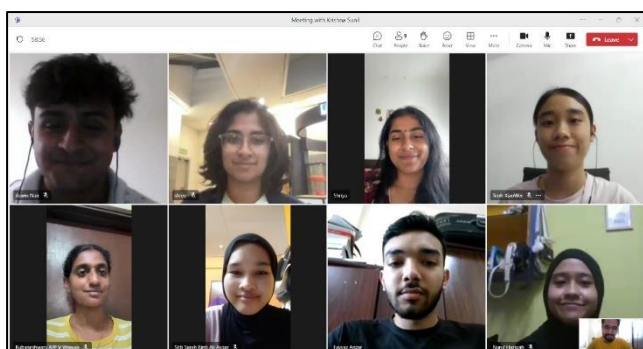
Working on excel can be tiresome. We have all been there at some point. And so, the Chemical Engineering Department at Birla Institute Of Technology and Science, Pilani Dubai decided to conduct an Advanced Excel Workshop for all those who wished to 'excel' at 'Excel'.

Our very own professor, Dr. Nishant Pandya led the workshop, providing insight into the fundamentals of excel and data handling. The workshop was attended by students and professors alike, who will receive certificates for their participation.



International Exposure- Meeting with AIChE members worldwide, January 17, 2024, February 2 & 16, 2024

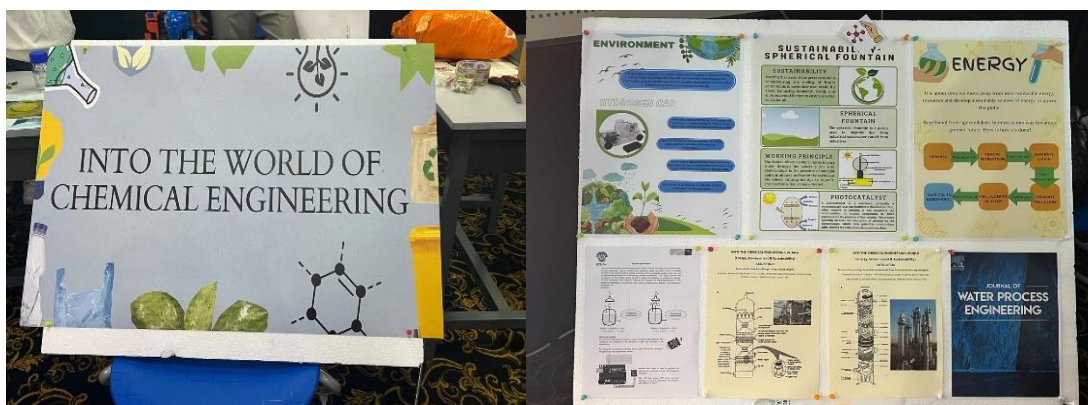
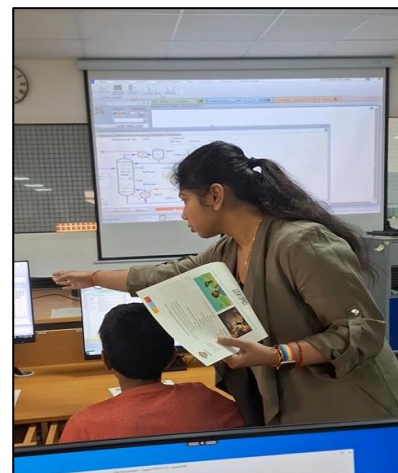
The months of January and February saw AIChE BPDC expand its network through meetups with universities around the globe. The club kick-started its endeavor through a gathering with AIChE-RGPIT from Uttar Pradesh. This was soon followed by participation in the podcast, Chemically Doped, hosted by AIChE-VIT and AIChE UTP from Malaysia for various collaborative works.



STEAM@BITS '2024' – March 23, 2024

STEAM@BITS '24 proved to be a big success as students from schools all over Dubai with an interest in pursuing a career in the field of engineering were able to come and interact with budding engineers. The Department of Chemical Engineering was proud to showcase to the students the various aspects involved in chemical engineering through a series of experiments that were designed to spark their curiosity and engage their imagination.

A workshop on ASPEN, a software that plays an important role in the designing of various chemical industries, was conducted by members of the AIChE club. Overall, STEAM@BITS '24 proved to be an exceptional platform for young students to interact with budding engineers to truly understand the beauty of chemical engineering.



Invited Talk: Digital Twins: a Game-changer for Process Optimization – April 26, 2024

On April 26, 2024, the student chapter of AIChE, of BPDC, organized a guest lecture by Mr. Sanjay Venugopal. Mr. Sanjay is a senior technologist at Yokogawa Technology Solution, Bengaluru and has years of experience as a guest lecturer under his belt. During this lecture he spoke about important aspects of Process Optimization such as understanding control systems, learning optimization techniques and improving dynamic simulation skills.

BITS Pilani Dubai Campus | **AIChE** Student Chapter

Invited Talk on **"Digital Twins: A game changer for Process optimization"**

for All Undergraduate Students
Organized by **AIChE Student Chapter, Department of Chemical Engineering, BITS Pilani, Dubai Campus**
Mode: Online
April 26, 2024; 2:30 pm GST
*Free for all

Speaker: Sanjay Venugopal, Senior Technologist, Yokogawa Technology Solution, Bengaluru

Joining link: meet.google.com/cgu-noyh-stb

What is the workshop about?
 ✓ Understand control systems
 ✓ Learn optimization techniques
 ✓ Improve dynamic simulation skills

*Certificates will be provided by AIChE to all the participants

Sanjay Venugopal (Presenting)

PROCESS OPTIMIZATION

SMART MANUFACTURING | INDUSTRY 4.0

INDUSTRIAL AUTOMATION TO INDUSTRIAL AUTONOMY

Novel Materials | Smart Manufacturing | Simulation & data analysis | Optimization | Systems Engineering | Effective Health-care | design | Sustainable Energy

Manufacturing Business Intelligence (web, desktop, mobile apps), Dynamic production systems, Operations Collaboration & Business Processes | Predictive/Prescriptive Analytics | Integration | Data | Data Infrastructure (Data Abstraction, Storage, Processing) | Physical Systems

Process systems engineering – The generation next?
<https://www.sciencedirect.com/science/article/pii/S0098135421000302>

Participants: Sanjay Venugopal, Sameeha Adil, Aswin Sajeendran Nair, Mariya Jobi Kavungal, Karthik Sairam M, Mohammed Haroon, Nishant Pandya, 15 others, Souvik Paul

Invited Talk: “Environmental, Social, and Governance (ESG) and Sustainability as an Engineering Perspective” – May 4, 2024

On May 4, 2024, the student chapter of AIChE, of BPDC, organized a guest lecture by Mr. Kapil Malhotra on “Environmental, Social, and Governance (ESG) and Sustainability as an Engineering Perspective”. Mr. Malhotra is a Global Business leader and presently working in Fluoropolymer, Gujrat, India.

BITS Pilani Dubai Campus | **AIChE** Student Chapter

Invited Talk on **"Environmental, Social, and Governance (ESG) and Sustainability as an Engineering Perspective"**

for All Undergraduate Students
Organized by **AIChE Student Chapter, Department of Chemical Engineering, BITS Pilani, Dubai Campus**
Mode: Online
May 4, 2024; 1:00 pm GST
*Free for all

Speaker: Kapil Malhotra, Global Business Leader - Fluoropolymers | President - AMAI | Vice Chair (Chemical Chapter) - TPCI | Vice Chair (North) - ICC | Vice Chair (Chemical & Petrochemicals) - ASSOCHAM

Joining link: [Link]

*A quiz will follow the presentation, offering one lucky participant the opportunity to win a prize

Green Engineering Practices

- Innovative application of scientific knowledge and engineering principles
 - Design, develop, and implement solutions that meet the needs of the present without compromising the ability of future generations to meet their own needs.
- Renewable Energy
 - Solar, Wind, Hydro etc.
- Green Building or Sustainable infrastructure
- Green Mobility such as EV, H2 fuel

Participants: Jigar Deliwala, Kapil Malhotra, Prakash Kumar, Mohammed Wajah..., Sameeha Adil, Thakkar Jigneshku..., Karthik Sairam M, 16 others, Souvik Paul

BITS TECH FEST – May 6, 2024

AIChE members participated in BIT's tech fest on May 6, 2024. An initiative was taken to convert waste agricultural residue to green coal by thermochemical process.



Industrial visit to Dubatt Battery Recycling LLC. – May 9, 2024


The partnership between industries and academic institutions is crucial in advancing sustainable practices and environmental stewardship. AIChE members from the department of Chemical Engineering (second year along with a Ph.D. student) visited Dubatt Battery Recycling LLC to experience the practical applications of chemical engineering in an industrial setting.





Aswin Nair
(President of AIChE 23-24)

24-5-2024



Dr Souvik Kumar Paul
(Faculty in-Charge)

24-05-2024