I am pleased to present the eighth newsletter of the Centre for Continuing Education (CCE) to the IIT Kanpur community. I am glad to report again that several Short Term Courses, Workshops, and Conferences were successfully conducted in online and offline mode during the period between July to December 2022. All these events and activities have been made possible by the active support and cooperation of the IITK Faculty, staff, and community. We profusely thank them for their services and place the same on record.

A total of fifty two (52) events were conducted under the aegis of the CCE.

We will make continued efforts to offer courses from IITK Faculty during the first half of 2023. I am looking forward to reporting our activities again in the next newsletter. Take care and stay safe.
47 Short Term Courses
03 Conferences
02 Symposium
Short Term Courses

01 01.07.2022 - 30.04.2023
Foreign Language Program 2022-2023 (Online)
Prof. B. V. Rathish Kumar
Department of Mathematics and Statistics, IIT Kanpur

02 02.07.2022 - 23.07.2022
IIT Kanpur Advanced Training School on OFTS System Design and Analysis for 6G Wireless Technology using PYTHON and MATLAB
Prof. Aditya K. Jagannatham
Department of Electrical Engineering, IIT Kanpur

03 02.07.2022
The evolution of our planet Earth
Prof. Debajyoti Paul
Department of Earth Sciences, IIT Kanpur

04 10.07.2022 - 10.08.2022
Introduction to Infrastructure Asset Management
Prof. Sudhir Mishra
Department of Civil Engineering, IIT Kanpur

05 10.07.2022 - 12.07.2022
Understanding of Science & Technology for Academic Development (USTAD) - 2022
Prof. Amey Karkare
Department of Computer Science Engineering, IIT Kanpur

06 11.07.2022 - 15.07.2022
Geodetic Surveying
Prof. Onkar Dikshit
Department of Civil Engineering, IIT Kanpur

07 21.07.2022 - 23.07.2022
Electromagnetic Interference and Compatibility (EMI/EMC) Techniques for Industrial and Medical Applications
Prof. M. Jaleel Akhtar
Department of Electrical Engineering, IIT Kanpur

08 29.07.2022
Indian Philosophy's Day
Prof. Sushruth Ravish
Department of Humanities and Social Sciences, IIT Kanpur

09 01.08.2022 - 30.11.2022
Internship Program for National Centre for Geodesy
Prof. Onkar Dikshit
Department of Civil Engineering, IIT Kanpur

10 10.08.2022
Microscopy of Soft Matters
Prof. Rahul Mangal
Department of Chemical Engineering, IIT Kanpur
<table>
<thead>
<tr>
<th>No.</th>
<th>Date Range</th>
<th>Event Description</th>
<th>Instructor(s)</th>
</tr>
</thead>
</table>
| 11  | 13.08.2022 - 26.08.2022 | IITK Intensive Training School (ITS) on PYTHON for Data Science and Data Analytics | Prof. Aditya K. Jagannatham  
Department of Electrical Engineering, IIT Kanpur |
| 12  | 15.08.2022 - 31.12.2022 | Classical Electromagnetism-2 (Magnetostatics)                                      | Prof. B. V. Rathish Kumar  
Department of Mathematics and Statistics, IIT Kanpur |
| 13  | 20.08.2022 - 10.10.2022 | Supporting the ICCC Studies and Actions                                             | Prof. Prof. Pradip Swarnakar  
Department of Humanities and Social Sciences, IIT Kanpur |
Department of Electrical Engineering, IIT Kanpur |
| 15  | 17.09.2022          | IEEE MTT-S Women in Microwaves Workshop                                            | Prof. M. Jaleel Akhtar  
Department of Electrical Engineering, IIT Kanpur |
| 16  | 19.09.2022 - 30.09.2022 | Strengthening of Positioning Infrastructure                                         | Prof. Onkar Dikshit  
Department of Civil Engineering, IIT Kanpur |
| 17  | 26.09.2022 - 30.09.2022 | GRACE Hackweek 2 - Online                                                          | Prof. Balaji Devaraju  
Department of Civil Engineering, IIT Kanpur |
| 18  | 27.09.2022 - 01.10.2022 | Strengthening Capacity at the District level on Air Pollution and Health           | Prof. Mukesh Sharma  
Department of Civil Engineering, IIT Kanpur |
| 19  | 07.10.2022 - 23.10.2022 | Regulatory Certification Program on Renewable Energy: Economics, Policy and Regulation | Prof. Anoop Singh  
Department of Industrial & Management Engineering, IIT Kanpur |
| 20  | 17.09.2022          | Towards Sustainable and Resilient Power System                                     | Prof. Alok Ranjan  
Department of Electrical Engineering, IIT Kanpur |
| 21  | 17.10.2022 - 26.04.2023 | JSW Smart Manufacturing                                                            | Prof. Raghu Nandan Sengupta  
Department of Industrial & Management Engineering, IIT Kanpur |
| 22  | 01.11.2022 - 20.01.2023 | Data Analysis in Criminal Justice                                                  | Prof. Prof. Arvind Verma  
Department of Criminal Justice Engineering, IIT Kanpur |
23 04.11.2022- 05.11.2022  
Technocruise -Kanpur  
Prof. Amitabha Bandyopadhyay  
Department of Biological Sciences & Bioengineering (BSBE), IIT Kanpur

24 04.11.2022 - 03.11.2023  
Advanced Certification Programme in Cyber Security and Cyber Defense  
Prof. Sandeep Shukla  
Department of Computer Science Engineering, IIT Kanpur

25 05.11.2022  
Flexible Electronics: Product Case Studies on Sensors, OLED and PV-2022  
Prof. S Sundar K Iyer  
Department of Electrical Engineering, IIT Kanpur

26 07.11.2022- 11.11.2022  
Technocruise -Nanded  
Prof. Amitabha Bandyopadhyay  
Department of BSBE, IIT Kanpur

27 10.11.2022 - 12.11.2022  
Steelmaking & Refractories  
Prof. Dipak Mazumdar  
Department of Materials Science and Engineering, IIT Kanpur

28 14.11.2022 - 18.11.2022  
UAV Data Acquisition & Processing  
Prof. Rajeev Sinha  
Department of Earth Sciences Engineering, IIT Kanpur

29 15.11.2022 - 26.11.2022  
AICTE ATAL Program on Stress Management  
Prof. Prishati Raychowdhury  
Department of Civil Engineering, IIT Kanpur

30 16.11.2022 - 25.11.2022  
Mitigating Climate Change while Harnessing Renewable Energy  
Prof. J Ramkumar  
Department of Mechanical Engineering, IIT Kanpur

31 16.11.2022 - 17.11.2022  
Workshop on Social Aspects of India Energy Transitions: Enablers, Barriers and Opportunities  
Prof. Prof. Pradip Swarnakar  
Department of Humanities and Social Sciences, IIT Kanpur

32 22.11.2022 - 31.05.2023  
Behavioral Training for Client Facing Employees of KESCO  
Prof. Amit Shukla  
Department of Industrial & Management Engineering, IIT Kanpur

33 25.11.2022- 26.11.2022  
Technocruise -Kota  
Prof. Amitabha Bandyopadhyay  
Department of BSBE, IIT Kanpur

34 03.12.2022 - 16.12.2022  
IIT Kanpur PYTHON and MATLAB/OCTAVE-Based Winter Training School in 5G Wireless Technologies: Massive MIMO, mmWave MIMO, Spatial Modulation  
Prof. Aditya K. Jagannatham  
Department of Electrical Engineering, IIT Kanpur
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
<th>Faculty Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.12.2022 - 04.12.2022</td>
<td>Technocruise - Sonepath</td>
<td>Prof. Amitabha Bandyopadhyay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Biological Sciences &amp; Bioengineering (BSBE), IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Aerospace Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Mechanical Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prof. Sarvesh Mishra</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Mechanical Engineering, IIT Kanpur</td>
</tr>
<tr>
<td>07.12.2022</td>
<td>Vigyan Jyoti Program Lab Visit</td>
<td>Prof. B. V. Rathish Kumar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Mathematics and Statistics, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Mathematics and Statistics, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Electrical Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prof. Adrish Banerjee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Electrical Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td>And Penetration Testing</td>
<td>Department of Computer Science Engineering, IIT Kanpur</td>
</tr>
<tr>
<td>17.12.2022</td>
<td>Introduction to Supercomputing</td>
<td>Prof. Preeti Malakar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Computer Science Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Biological Sciences &amp; Bioengineering (BSBE), IIT Kanpur</td>
</tr>
<tr>
<td>18.12.2022</td>
<td>TOSC-Phase-1</td>
<td>Prof. Amitabha Bandyopadhyay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Biological Sciences &amp; Bioengineering (BSBE), IIT Kanpur</td>
</tr>
<tr>
<td>19.12.2022</td>
<td>Technocruise - Sagar</td>
<td>Prof. Amitabha Bandyopadhyay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Biological Sciences &amp; Bioengineering (BSBE), IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Mechanical Engineering, IIT Kanpur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Materials Science and Engineering, IIT Kanpur</td>
</tr>
</tbody>
</table>
Conferences

01 19.09.2022 - 23.09.2022
Annual Conference on Quantum Condensed Matter (QMAT 2022)
Late Prof. Amit Dutta
Department of Physics, IIT Kanpur
Prof. Amit Agarwal
Department of Physics, IIT Kanpur
Prof. Arijit Kundu
Department of Physics, IIT Kanpur

02 08.12.2022 - 10.12.2022
COPEN-12
Prof. J Ramkumar
Department of Mechanical Engineering, IIT Kanpur
Prof. Mohit Law
Department of Mechanical Engineering, IIT Kanpur

International Conference on Physical and Mathematical Modelling in Iron and Steelmaking in honour of Prof. Dipak Mazumdar
Prof. Amrendra Singh
Department of Materials Science and Engineering, IIT Kanpur
Prof. Rahul Sarkar
Department of Materials Science and Engineering, IIT Kanpur

Symposium

01 05.11.2022 - 07.11.2022
In Memory of Profs. P Dutt, A Lal, S Dutta
Prof. Mohua Banerjee
Department of Mathematics & Statistics, IIT Kanpur

Recent Trends in Cancer Research and Precision Medicine
Prof. Bushra Ateeq
Department of BSBE, IIT Kanpur
Faculty in Focus

Prof. J. Ramkumar
Professor, Department of ME & Design
Indian Institute of Technology Kanpur

Prof. Ramkumar has taught at the Department of Mechanical Engineering and Design at Indian Institute of Technology Kanpur for last 20 years. He is an INAE fellow. He studies micro and nano manufacturing, sustainable and cheap product and process development. Prof. Ramkumar reviews 20+ journals, has 80+ patents and 250+ publications or his innovative and useful research. He has been a consultant for several projects under the DRDO, DST, BIRAC, HAL, and others; and has used over Rs. 25 crores to create technologies at IIT Kanpur. Imagineering Lab, Tinkering Lab, Maker’s space, MedTech Lab, and RuTAG (Rural Technology Action Group) at IIT Kanpur are all his brain child that provides an ecosystem to cater to the requirements of needful users be it students, scholar, faculties or for project work across the country. He has done 150+ seminars on NPTEL, MOOCs, and FDPs to inspire Indian students to pursue research.
IIT Kanpur is organizing a Vigyan Jyoti programme, funded by Department of Science and Technology (DST), India during last few years. This is a holistic program to encourage and inspire female students to pursue higher education and thus, become self-reliant and independent in life. The primary aim of the program is to create gender enabling environment and strengthen the eco-system. As early grooming reaps huge rewards, promoting interest in science and technology amongst girl students in the early education years will be very beneficial. Fifty students of Class XI, science stream, from region Lucknow district Kanpur Nagar will be selected.

**Objective**

- To encourage and inspire girl students to pursue higher education and thus, become self-reliant and independent.
- To facilitate conducive/enabling environment from School level to College Level and from research level to job level.
- To ensure easy access to science and technology information and knowledge sharing.
Students-Undergraduate Research Graduate Excellence (SURGE) program, is an approved internship Program of IIT Kanpur, which runs under the aegis of Centre for Continuing Education (CCE), IIT Kanpur. This program provides an opportunity to undergraduate and M.Sc first year students of IITK, Non-IITK and also to the students of SAARC countries, with an objective of giving in-hand experience of technical learning in their field of research.

This year SURGE-2022 program was conducted in online mode from second week of May to July 2022. A total of 232 students (167 IITK, 64 Non-IITK and 01 student under SAARC category) successfully completed the internship. SURGE-2022 program also provides a stipend to the participants selected under the Institute Funded category and Project Funded category. This program has also a provision of awarding the participants who produce exceptional quality research work. They are given a cash award under different award categories along with a commendation certificate. However, all the successful participants of this program are given a participation certificate.
CCE Staff

Mr. Gyanendra Singh
Mrs. Sanno Devi Kushwaha
Mr. Ram Naresh Chaurasiya
Mr. Sudesh Kumar Gupta
Mr. Vinay Kumar
Mr. Yogendra Singh
Mr. Abhishek Singh
Mr. Rajesh Kumar

Centre for Continuing Education
Indian Institute of Technology
Room No. 207, Outreach Building
Indian Institute of Technology Kanpur

Phone: 0512–259–7795
Email: cce@iitk.ac.in