

Faculty Development Programme (FDP)
Research Methodology
July 24-30, 2023

The one-week Faculty Development Programme on ‘Research Methodology’ was organised by the Association of Indian Universities, New Delhi—Academic and Administrative Development Centre (AADC), IEEE Committee, Shoolini University, Solan, Himachal Pradesh during July 24-30, 2023. About fifty participants registered for the programme. The programme aimed to enhance participants’ understanding of research methodology, ethics, academic writing, interdisciplinary research, and technical writing using LaTeX. The event saw the active participation of fifty attendees, including students and faculty members from various departments of the university. The event was inaugurated by Prof. Virender Rihani, Dean, Engineering who highlighted the importance of research methodology in conducting high-quality research. Mr. Daman Dev Sood, IEEE Chairman, New Delhi Section delivered the Keynote Address, emphasizing the significance of choosing the right research methodology based on research questions, design, data collection, and analysis methods.

The plenary talks by Prof. Valentina E Balas and Dr. Shubhajit Roy Chowdhury covered the challenges in engineering research and the importance of interdisciplinary research. Prof. Balas stressed the ethical considerations in research and the responsible use of artificial intelligence. Dr. Roy Chowdhury explained the phases of interdisciplinary research and its benefits in addressing complex problems.

The next session was focused on research ethics and academic writing. Dr. Manu Sood presented ethical principles, including autonomy, beneficence, non-maleficence, justice, scientific validity, and honesty. He also discussed academic integrity and ways to prevent plagiarism. The participants gained insights into writing styles, citations, and appropriate source referencing.

Dr. Barsha Mitra delivered the plenary talk on ‘Quality Publications’. She covered publication types, choosing venues, research paper sections, manuscript submissions, and ethical considerations. Further, Dr. Nageshwar Rao led the hands-on practical workshop on LaTeX for technical writing, where participants learned to create documents, format text, and incorporate mathematical expressions, tables, and figures. Dr. Samiya Khan discussed ethical considerations in computer science and engineering research in his session. Topics included

informed consent, data ownership, privacy, data sharing, and the code of ethics for researchers in this field.

Dr. Gousia Habib spoke on ‘Research Proposal Writing Strategies to Secure Research Grants’ during the session. Participants learned about the structure of a proposal and the importance of a well-defined research problem, objectives, scope, significance, methodology, and anticipated results. The event provided an enriching experience for the participants. They gained insights into research methodologies, ethical considerations, academic writing, interdisciplinary research, and technical writing using LaTeX. The event equipped them with valuable knowledge and skills for conducting high-quality research in their respective fields.