

Autonomous Institute, Affiliated to VTU

Department of Chemical Engineering

- 1. Name of the Department: Chemical Engineering
- 2. Name of the Activity: Two-Day Workshop on "AI Tool Integration to Automate Research in Academics"

3. Objectives:

- a) To introduce students to AI tools that enhance and automate various stages of academic research.
- b) To provide hands-on experience with AI applications in literature review, academic writing, data visualization, and manuscript preparation.
- c) To encourage the adoption of modern, technology-driven research methodologies.
- d) To build interdisciplinary collaboration between Chemical Engineering and Computer Science domains.

4. Date: 07th & 08th April 2025

Time: 2 PM to 4:30 PM (both days)

Venue: Seminar Hall, Department of Chemical Engineering, BMS College of

Engineering, Bengaluru

5. Brief summary of the Programme:

The IIChE-BMSCE Student Chapter, successfully conducted a two-day workshop titled "AI Tool Integration to Automate Research in Academics" on the 7th and 8th of April 2025. The workshop's primary objective was to equip students with practical knowledge of modern AI tools that can significantly streamline and enhance various stages of academic research. Spanning across two days, the workshop was designed to offer both theoretical understanding and practical demonstrations.

On Day 1, participants were introduced to foundational concepts of Artificial Intelligence and its applications in academia. Sessions covered topics such as AI-based academic writing assistance, generating graphical abstracts using SVG tools, and automated data visualization techniques using Python. These sessions emphasized real-



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time applications and included live demonstrations of interactive chart creation and AIdriven research tools.

Day 2 shifted focus towards optimizing academic writing and research publication workflows. Participants explored AI-powered tools for literature review automation, citation and reference management, manuscript formatting, plagiarism detection, and journal selection processes. The day also featured extended hands-on sessions involving Python-based automation for data analysis, showcasing how coding and AI can simplify repetitive and time-consuming research tasks.

The resource persons—Dr. Siva Kiran RR (Ramaiah Institute of Technology), Dr. Selva Kumar S, and Dr. Manjunath D R (both from the Department of Computer Science and Engineering, BMSCE)—brought in interdisciplinary expertise that bridged Chemical Engineering and Computer Science. Their sessions were interactive, engaging, and deeply informative.

Participants were actively involved in hands-on demonstrations, Q&A sessions, and collaborative discussions throughout the event. The feedback was overwhelmingly positive, with attendees appreciating the workshop's practical orientation, relevance to modern academic challenges, and the high-quality expertise of the speakers.

In conclusion, the workshop marked a significant step toward digital empowerment in academia. It highlighted the urgent need to integrate AI tools into traditional research frameworks and positioned BMSCE as a pioneer in driving such forward-thinking initiatives. The success of the event reflects the commitment of the Department of Chemical Engineering and the IIChE-BMSCE Student Chapter to fostering innovation, interdisciplinary collaboration, and research excellence.

6. Number of participants: 47

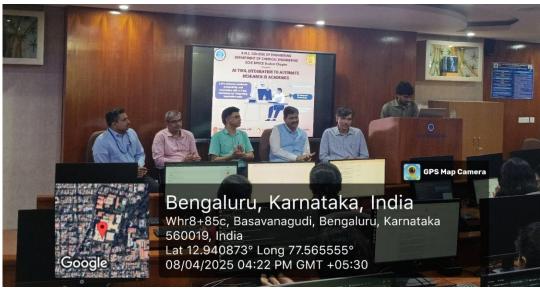


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7. Photographs:



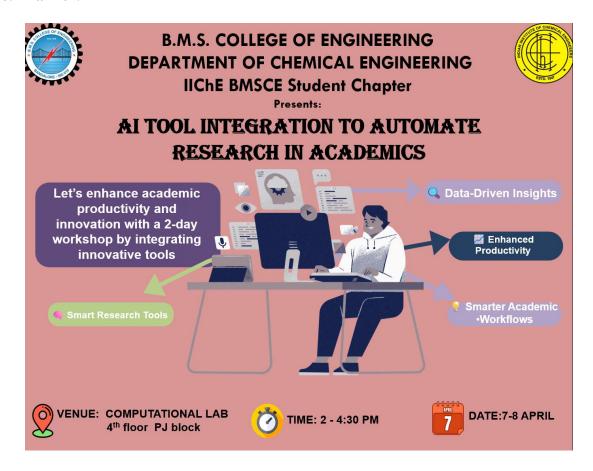




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8. Banner:





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9. Attendance Copy

