Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (Formerly Known as Dr. Sudhir Chandra Sur Degree Engineering College)

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Phone: +91 22 25603889, 25603898, 65330375

Website: www.surtech.edu.in; Email-info@dsec.ac.in

Report on 3rd International Conference on Sustainable Environmental Engineering and Science (SEES 2025)

Organised by

Dept. of Civil Engineering of

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

in association with

Jadavpur University, Maulana Abul Kalam Azad University of Technology and C. V. Raman Global University, Odissa

Title: 3rd International Conference on Sustainable Environmental Engineering and Science (SEES 2025): A Gathering of Minds for a Sustainable Tomorrow

Details of Guests with Designation:

SEES 2025 was honoured by the presence of several eminent personalities from academia and industry. Their expertise and participation gave the conference a rich, multi-dimensional character. Among the distinguished guests were:

- **Dr. Arunabha Mazumder** Emeritus Professor, School of Water Resources Engineering, Jadavpur University
- **Dr. Asis Mazumder** Former Dean, Interdisciplinary Studies, JU; Director & Professor, School of Water Resources Engineering, JU
- **Dr. Subhasish Das** Joint Director and Associate Professor, School of Water Resources Engineering, JU
- **Dr. Asok Adak** Associate Professor, Civil Engineering, IIEST Shibpur
- Dr. Shiv Narayan Yadav Associate Professor, Tribhuvan University, Nepal
- **Dr. Shashit Kumar Yadav** Assistant Professor of Physics, Tribhuvan University, Nepal
- Dr. Ananta Kumar Das Professor of Renewable Energy Engineering, MAKAUT
- **Dr. Biswabandhu Chatterjee** Assistant Professor, Civil and Environmental Engineering, C.V. Raman Global University, Odisha
- **Dr. Sumit Chabri** Professor of Mechanical Engineering, Narula Institute of Technology
- **Dr. Rajashree Lodh** Assistant Professor, Civil Engineering, Heritage Institute of Technology, Kolkata





(Formerly Known as Dr. Sudhir Chandra Sur Degree Engineering College)

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Phone: +91 22 25603889, 25603898, 65330375 Website: www.surtech.edu.in; Email-info@dsec.ac.in

• **Dr. Jyotikusum Acharya** – Professor, Civil Engineering, Budge Budge Institute of Technology, Kolkata

Alongside them, the conference was supported by the leadership of the JIS Group, with Sardar Taranjit Singh (MD, JIS Group) as Chief Patron, and other patrons including Sardar Haranjit Singh, Sardar Amrik Singh, Ms. Manpreet Kaur, Sardar Simarpreet Singh, Ms. Jaspreet Kaur, and other directors of the group. Their encouragement added great value to the event.

Number of Participants

SEES 2025 saw enthusiastic participation both in-person and virtually.

- Over 80 participants attended across the two days.
- More than 35 research papers were presented in six technical sessions.
- The audience included faculty members, research scholars, industry experts, and students.
- The hybrid format allowed participation from outside India, with several presenters joining virtually, particularly from Nepal and other regions.

This mix of participants created a lively, global environment, bringing fresh perspectives to the discussions.

Date

The conference was held on 4th and 5th September 2025 at the Dr. APJ Abdul Kalam Auditorium, SurTech campus, Kolkata, with technical sessions running in parallel rooms

Objective

The conference was not just an academic gathering—it was driven by a bigger purpose. SEES 2025 aimed to:

- 1. Create a platform for meaningful conversations on sustainability challenges in engineering and science.
- 2. Encourage collaboration between researchers, industry leaders, and policymakers to address pressing environmental issues.
- 3. Provide young scholars with a stage to showcase their ideas and interact with experts.
- 4. Highlight innovative and interdisciplinary research, from renewable energy and water resources to sustainable construction and pollution control.
- 5. Ensure that the outcomes were not only limited to discussions but also documented through Springer publications, giving researchers international visibility.

Overview



(Formerly Known as Dr. Sudhir Chandra Sur Degree Engineering College)

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Phone: +91 22 25603889, 25603898, 65330375

Website: www.surtech.edu.in; Email-info@dsec.ac.in

A Warm Start: The first day began with registration, followed by the inaugural ceremony in the Dr. APJ Abdul Kalam Auditorium. The traditional Lamp Lighting and Ganesh Vandana created an atmosphere of hope and positivity.

The welcome address by Prof. (Dr.) Saradindu Panda, Principal & Conference Chair, set the tone, followed by speeches from JIS officials. Mr. Baibaswata Das, Organizing Secretary, introduced the vision of SEES 2025, explaining the goals, tracks, and importance of the event. Guests were felicitated, acknowledging their valuable presence.

Knowledge Sharing through Keynotes

The conference featured nine keynote lectures across two days. Each talk brought something unique:

- Dr. Arunabha Mazumder spoke on water sustainability, linking academic research with real-world challenges.
- Dr. Asis Mazumder highlighted interdisciplinary approaches to environmental engineering.
- Dr. Subhasish Das and Dr. Asok Adak discussed pressing issues in water and pollution control.
- Speakers from Tribhuvan University, Nepal, offered cross-border perspectives on renewable energy and climate issues.
- Dr. Biswabandhu Chatterjee, Dr. Sumit Chabri, and others explored challenges in renewable energy, materials, and engineering practices.

These sessions ensured that participants were exposed to both theoretical insights and practical strategies.

Technical Sessions: A Burst of Ideas

The six technical sessions were the heart of SEES 2025.

- Day 1 afternoon: Papers on biofuels, emission reduction, blockchain-based energy trading, and innovative construction designs were presented. Another session explored urban noise mitigation, fog harvesting, sustainable concrete, and SDG progress.
- Day 2: Sessions focused on groundwater studies, precipitation modeling, glacier recession, dam monitoring, soil stabilization, and AI in civil engineering.

The sessions were well-coordinated, with participants actively engaging in Q&A discussions. The hybrid mode worked seamlessly, with international presenters joining via Google Meet.

Beyond Academics

The conference was not all serious work. Shared breakfasts, lunches, and tea breaks became informal networking opportunities. On the final evening, a Gala Dinner brought together



(Formerly Known as Dr. Sudhir Chandra Sur Degree Engineering College)

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Phone: +91 22 25603889, 25603898, 65330375

Website: www.surtech.edu.in; Email-info@dsec.ac.in

guests, speakers, and participants in a more relaxed setting—celebrating not just the success of SEES 2025, but also the friendships and collaborations formed.

Outcome

The outcomes of SEES 2025 were both immediate and long-term:

- 1. Knowledge Exchange: Over 35 papers were presented, covering themes like sustainable materials, biofuels, climate modelling, and renewable energy. These contributions will reach a wider audience through Springer publications.
- 2. Global Collaboration: The hybrid format meant experts from India and Nepal could connect effortlessly. For many participants, it was their first experience of presenting research in such a diverse international forum.
- 3. Recognition and Motivation: Best Paper Awards celebrated outstanding contributions, motivating researchers to aim for impactful work.
- 4. Networking for the Future: New collaborations were formed—between students and professors, between institutions, and even across borders. These ties promise to evolve into joint research and projects.
- 5. Institutional Pride: For SurTech, SEES 2025 was not just an event but a demonstration of its capacity to host high-quality international conferences. It enhanced the institute's reputation as a center for sustainability-focused engineering education.
- 6. Student Inspiration: For young participants, this was more than a conference—it was an experience. Listening to experts, presenting their own ideas, and engaging in discussions left them inspired to carry forward the mission of sustainability.

Conclusion:

The 3rd International Conference on Sustainable Environmental Engineering and Science (SEES 2025) was more than a two-day academic event—it was a celebration of ideas, innovation, and collaboration. With its strong participation, insightful keynotes, and engaging technical sessions, the conference lived up to its promise of being a global platform for sustainability.

The concluding session, with Best Paper Awards and Vote of Thanks by Mr. Baibaswata Das, tied together two days of learning and sharing. The final Gala Dinner was the perfect ending—symbolizing togetherness and looking ahead to future editions of SEES.

In every sense, SEES 2025 reminded us of one thing: sustainability is not a choice but a responsibility, and conferences like this help turn responsibility into action.

Please find the attached glimpses of the program –



(Formerly Known as Dr. Sudhir Chandra Sur Degree Engineering College)

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Phone: +91 22 25603889, 25603898, 65330375

Website: www.surtech.edu.in; Email-info@dsec.ac.in





3rd International Conference on Sustainable Environmental Engineering and Science (SEES 2025) organized on 4th and 5th September, 2025