



5th IEEE International Conference on Sustainable Technologies for Industry 5.0 (STI 2023)

Green University of Bangladesh, Purbachal American City, Rupgonj, Dhaka, Bangladesh

Date: 09-10 December 2023  sti@green.edu.bd  sti.green.edu.bd

WHY STI?

- First initiative in southeast Asia for organizing an international conference on Sustainable Technologies for Industry 5.0
- Only conference in Bangladesh, technically co-sponsored by the central IEEE Computer Society, USA
- All the papers of the previous editions were included in the IEEE Xplore digital library within short period of times
- From the very first edition, all the accepted papers are included in the Scopus and other renowned indexed databases
- With each subsequent edition, involvement of international participants is increasing, e.g., 2019: 20 countries, 2020: 22 countries, 2021: 35 countries, and 2022: 39 countries
- In the last edition (STI 2022), FOUR (4) IEEE fellows joined as keynote speakers, and it is a regular practice for STI episodes.

CALL FOR PAPER

From its inception, innovation shows no signs of slowing down. However, to overcome the post-covid economic challenges and to establish competitive, sustainable, and greener industries, a new wave of innovation needs to be introduced, which inspires to transit from Industry 4.0 to Industry 5.0. The latter complements the earlier by highlighting synergic co-existence of human intelligence and machine intelligence as drivers for a transition to a sustainable, human-centric and resilient industry. Attaining green and digital transitions requires new technologies to be introduced focusing on the values of stakeholder unlike Industry 4.0 — on machine intelligence and automation only. Hence, Industry 5.0 attempts to capture the value of new technologies, providing prosperity beyond jobs and growth, while respecting planetary boundaries, and placing the well-being of the industry worker at the center of the production process.

STI 2023 welcomes researchers, industry professionals, and practitioners to display their scientific achievements and sustainable solutions for industrial developments in the fields of computer science & engineering, electrical & electronic engineering, textile engineering, robotics and cyber-physical systems related to Industry 5.0. It will be hosted at the permanent campus of Green University of Bangladesh, Purbachal American City, Dhaka, Bangladesh during 09-10 December 2023.

We are seeking original high-quality innovative research for submissions. All submissions to STI 2023 will go through a double-blind peer reviewing process.

Accepted and presented papers of Track 1 and Track 2 will be submitted to the IEEE Xplore digital library. Note that, papers of our last four editions are already accepted and archived in IEEE Xplore digital library and they are also archived in Scopus database. Papers presenting original research are being sought within following tracks, but not limited to:

01	Intelligent Computing, Networking and Security Systems	02	Energy, Robotics, Electronics, Sensors and Communications	03	Textiles and Other Industry 5.0 Applications
<ul style="list-style-type: none"> • Augmented Reality, Virtual Reality, Bioinformatics • Computational Linguistic and Natural Language Processing • Computer Vision, Image Processing and Pattern Recognition • AI in Autonomous Vehicles • AI and Machine Learning in Smart Grid Power System • Concurrence of 5G/6G, Cloud, Fog and Edge Computing • AI in Robotics, Industrial and Maritime IoT • Application of Digital Twins in Diverse Industries • Data Mining Techniques for Business Intelligence • Transfer, Federated, and Split Learning Methods in Industry Applications • Software Defined Networking • Information Security and Privacy • Big Data Analytics and Blockchain Technologies • Human Computer Interaction and Human Robot Interaction 		<ul style="list-style-type: none"> • Smart grids and microgrids • Electric Vehicles and e-transportation systems • Energy storage systems and technologies • Power electronics and renewable energy systems • Wireless power transfer and wireless charging technologies • Emerging RF Technologies and Systems for 5G and beyond • Signal processing for biomedical applications and healthcare • Internet of things and sensor networks for electrical systems • Cybersecurity and privacy in electrical networks • Robotics and automation • Advanced materials and devices • Nuclear Physics and Biochemical Engineering • Nanotechnology 		<ul style="list-style-type: none"> • Smart Textiles and Clothes • Sustainable Machine Design • Automated Inspection and Maintenance • Green Manufacturing of Yarn & Fabric and Fashion Design • Advanced Spinning, Dyeing, Printing and Finishing • Smart Home/City/Industries/Health/Agriculture • Autonomous and Unmanned Aerial Vehicles • Smart Education and Virtual Professor • Industrial Policies Aligning SDG • Advanced Industrial Production 	

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IMPORTANT DATES

Full Paper Submission.....	31 JUL 2023
Submission of Special Session, Tutorial and/or Workshop Proposal.....	18 SEP 2023
Proposal for Student Conference.....	18 SEP 2023
Acceptance Notification.....	16 OCT 2023
Final Camera-Ready Paper Submission.....	31 OCT 2023
Conference Date.....	09-10 DEC 2023

SUBMISSION GUIDELINE

Prospective authors are invited to submit their manuscripts reporting original unpublished research developments in the topics related to the conference. It is required that the manuscript follows the standard IEEE format (IEEE standard double column, 10-point font) including the followings:

- Submitted paper should be in PDF format and should be of 4-6 pages
- Submissions must include title, abstract, keywords, body and references.
- Due to double-blind peer review requirement, paper must not contain author names and affiliation information.
- Download the IEEE templates in Microsoft Word or LaTeX format.
- Authors are advised to upload full papers through Easy Chair conference management system using this link:

<https://easychair.org/conferences/?conf=sti2023>

SPECIAL FEATURES

- Keynote and Invited Speeches
- Technical Paper Submission
- Interactive Paper Session
- Industrial Talks
- Workshop and Tutorials
- High-level Panel Discussion on Industry 5.0



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