



# 2022 4<sup>th</sup> International Conference on Sustainable Technologies for Industry 4.0

2022 December 17 - 18

All the schedules, Zoom links and IDs of International Conference on Sustainable Technologies for Industry 4.0 (STI 2022) have been given below. Follow the given links to join the conference.

17 Dec Saturday

08:30 AM - 09 :00 AM

Kit Collection and Breakfast

17 Dec Saturday

09:00 AM - 09 :30 AM

Conference Highlights and Greeting Exchanges

17 Dec Saturday

09:30 AM – 10:30 AM

Inaugural Session

17 Dec Saturday

10:30 AM – 11:15 AM

**Keynote 01: On Bengali (Bangla) Language and Script based Technology Development**

**Speaker** | Prof. Dr. Bidyut B. Chaudhuri, IEEE Life Fellow, Techno India University, Kolkata, India

**Session Chairs** | Prof. Dr. Md. Haider Ali, Prof. Dr. Md. Monirul Islam

**Room No.** | PCR-302

**Zoom Link** |

<https://zoom.us/j/6511121930>

**Zoom ID** |

6511121930

17 Dec Saturday

11:15 AM – 11:30 AM

Health Break

17 Dec Saturday

**Technical Session 01**

11:30 AM – 13:00 PM

**Parallel Sessions 01: Computer Vision and Pattern Recognition**

**Session Chairs** | Prof. Dr. Md. Zahidul Islam, Dr. Md. Mostafijur Rahman

**Paper IDs** | 1351, 742, 9032, 5830

**Room No.** | PCR-306

**Parallel Sessions 02 (Blended): Computational Linguistics and Natural Language Processing**

**Session Chairs** | Prof. Dr. Mohammad Shamsul Arefin, Dr. Mazharul Haque

**Paper IDs** | 3315, 1505, 1570, 3754

**Room No.** | PCR-307

**Zoom Link** |

<https://bdren.zoom.us/j/62983960323>

**Zoom ID** |

62983960323

**Parallel Sessions 03: Advances in Power Electronics towards Industry 4.0**

**Session Chairs** | Prof. Dr. Abdur Razzaq, Dr. Molla Shahadat Hossain Lipu

**Paper IDs** | 4472, 4744, 6297, 7362, 7447

**Room No.** | PCR-309

**Parallel Sessions 04: Energy management and optimization**

**Session Chairs** | Dr. Ashik Ahmed, Dr. Ahsanul Alam

**Paper IDs** | 8898, 2253, 2319, 7674

**Room No.** | PCR-404

**Parallel Sessions 05: Sensor and Optics**

**Session Chairs** | Prof. Dr. Samia Subrina, Dr. A. A. Monzur Ul Akhbir

**Paper IDs** | 2530, 4459, 2506, 6036

**Room No.** | PCR-506

**Parallel Sessions 06 (Virtual): IOT and Machine Learning**

**Session Chairs** | Prof. Dr. Md. Shariful Islam, Prof. Dr. Md. Obaidur Rahman

**Paper IDs** | 9964, 641, 3093, 6429, 6732

**Room No.** | PCR-602

**Zoom Link** |

<https://zoom.us/j/6511121930>

**Zoom ID** |

6511121930

**Parallel Sessions 07: Textile Engineering Applications**

**Session Chairs** | Dr. Ahmed Jalal Uddin, Dr. Md. Shariful Alam

**Paper IDs** | 1366, 2016, 2653, 2710, 4137

**Room No.** | PCR-601

EVENT SCHEDULE





# 2022 4<sup>th</sup> International Conference on Sustainable Technologies for Industry 4.0

2022 December 17 - 18

# EVENT SCHEDULE

17 Dec Saturday

13:00 PM – 14:00 PM

Prayer and Lunch Break

17 Dec Saturday

14:00 PM – 14:45 PM

## Keynote 02: Neurosymbolic AI for Explainable Sentiment Analysis

**Speaker** | Prof. Dr. Erik Cambria, IEEE Fellow, Founder of SenticNet, Singapore

**Session Chairs** | Prof. Dr. Mohammad Kaykobad, Prof. Dr. M. Sohel Rahman

**Room No.** | PCR-302 **Zoom Link** | <https://zoom.us/j/6511121930> **Zoom ID** | 6511121930

## Keynote 03: Hope on Solar PV Energy to Achieve Carbon Neutrality by 2050

**Speaker** | Prof. Dr. Nowshad Amin, Universiti Tenaga Nasional, Malaysia

**Session Chairs** | Prof. Dr. Celia Shahnaz, Dr. Molla Shahadat Hossain Lipu

**Room No.** | PCR-309 **Zoom Link** | <https://bdren.zoom.us/j/67460957697> **Zoom ID** | 67460957697

17 Dec Saturday

14:45 PM – 15:00 PM

Short Break

17 Dec Saturday

Technical Session 02

15:00 PM – 16:30 PM

## Parallel Sessions 01: Artificial Intelligence and Machine Learning

**Session Chairs** | Prof. Dr. Md. Atiqur Rahman Ahad, Prof. Dr. Sejuti Rahman

**Paper IDs** | 9732, 1198, 6131, 3457, 3524

**Room No.** | PCR-309

## Parallel Sessions 02 (Virtual): Artificial intelligence and machine learning for engineering applications

**Session Chairs** | Prof. Dr. Mohammed Imamul Hassan Bhuiyan, Dr. Kafiul Islam

**Paper IDs** | 5029, 9168, 7274, 6326, 6782

**Room No.** | PCR-602 **Zoom Link** | <https://zoom.us/j/6511121930> **Zoom ID** | 6511121930

## Parallel Sessions 03: Internet of Things (IoT), Cloud and Big Data Analysis

**Session Chairs** | Prof. Dr. M Shamim Kaiser, Prof. Dr. Muhammad Golam Kibria

**Paper IDs** | 2070, 2740, 4915, 9805, 6822

**Room No.** | PCR-307

## Parallel Sessions 04: Augmented Reality, Virtual Reality, and Bioinformatics

**Session Chairs** | Dr. Muhammad Nazrul Islam, Dr. Habibur Rahman

**Paper IDs** | 1342, 4655, 7546, 7786, 6229

**Room No.** | PCR-306

## Parallel Sessions 05: Control and power system

**Session Chairs** | Dr. Nahid Al Masood, Dr. Ahsanul Alam

**Paper IDs** | 3513, 7150, 9184, 8185

**Room No.** | PCR-404

## Parallel Sessions 06: Energy storage and e-transportation

**Session Chairs** | Prof. Dr. Ziaur Rahman Khan, Dr. Ratil H Ashique

**Paper IDs** | 2061, 2970, 3930, 4486, 8217

**Room No.** | PCR-506

## Parallel Sessions 07 (Virtual): Deep Learning, Image Processing, and Medical Imaging

**Session Chairs** | Prof. Dr. Md. Mijanur Rahman, Dr. Muhammad Abul Hasan

**Paper IDs** | 7434, 7188, 6781, 9054, 4729

**Room No.** | PCR-601 **Zoom Link** | <https://bdren.zoom.us/j/61668451145> **Zoom ID** | 61668451145

17 Dec Saturday

16:30 PM – 16:45 PM

Health Break





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17 Dec Saturday

16:45 PM – 17:30 PM

## Keynote 04: Design for reliability in power electronic systems

**Speaker** | Prof. Dr. Frede Blaabjerg, IEEE Fellow, Aalborg University, Denmark

**Session Chairs** | Prof. Dr. Md. Ashraful Hoque, Prof. Dr. ASM Shihavuddin

**Room No.** | PCR-302 **Zoom Link** | <https://zoom.us/j/6511121930> **Zoom ID** | 6511121930

17 Dec Saturday

16:45 PM – 17:30 PM

## STI Expo 2022: Industrial Panel Discussion

**Session Chairs** | Prof. Dr. ASM Shihavuddin

**Room No.** | PC-Lobby

17 Dec Saturday

17:30 PM – 18:00 PM

## Prayer Break

17 Dec Saturday

18:00 PM – 19:00 PM

## Advisory and Organizing Committee Meeting

End of Day 1

18 Dec Sunday

08:30 AM - 09 :00 AM

## Breakfast

18 Dec Sunday

09:00 AM – 09:30 AM

## Conference Highlights and Greeting Exchanges

18 Dec Sunday

09:30 AM – 10:30 AM

## Keynote 05: Machine Learning for Space-Air-Terrestrial Networking

**Speaker** | Prof. Dr. Choong Seon Hong, Senior Member, IEEE Kyung Hee University, South Korea

**Session Chairs** | Prof. Dr. Hafiz Md. Hasan Babu, Prof. Dr. Mohammad Shorif Uddin

**Room No.** | PCR-302 **Zoom Link** | <https://zoom.us/j/6511121930> **Zoom ID** | 6511121930

18 Dec Sunday

10:30 AM – 11:15 AM

## Keynote 06: Smart electric vehicle management and planning

**Speaker** | Prof. Dr. Z. Y. Dong, IEEE Fellow, Nanyang Technological University, Singapore

**Session Chairs** | Prof. Dr. Md. Adnan Kiber, Prof. Dr. Md. Fayzur Rahman

**Room No.** | PCR-302 **Zoom Link** | <https://zoom.us/j/6511121930> **Zoom ID** | 6511121930

18 Dec Sunday

11:15 AM – 11:30 AM

## Health Break

18 Dec Sunday

Technical Session 03

11:30 AM – 13:00 PM

## Parallel Sessions 01: Renewable energy technologies

**Session Chairs** | Prof. Dr. Abdul Hasib Chowdhury, Dr. Ahmed Al Mansur

**Paper IDs** | 1109, 1577, 5528, 8346, 9607

**Room No.** | PCR-306

## Parallel Sessions 02: IoT and cloud computing

**Session Chairs** | Dr. Monirujjaman Khan, Dr. Nazmus Shakib

**Paper IDs** | 1721, 5091, 7678, 6904

**Room No.** | PCR-307





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## Parallel Sessions 03: Artificial Intelligence and Machine Learning

**Session Chairs** | Prof. Dr. Syed Akhter Hossain, Prof. Dr. Ahsan Habib Tareque

**Paper IDs** | 2309, 2681, 5490, 4943, 9315

**Room No.** | PCR-309

## Parallel Sessions 04: Materials and nanofabrication

**Session Chairs** | Dr. Sajid Mohaimin Chowdhury, Dr. A. A. Monzur Ul Akhir

**Paper IDs** | 2393, 5156, 8996, 9176

**Room No.** | PCR-404

## Parallel Sessions 05 (Virtual): Microwave and Antennas

**Session Chairs** | Prof. Dr. Rezwan Khan, Dr. Nazmus Shakib

**Paper IDs** | 4640, 4936, 5755, 3253, 7119

**Room No.** | PCR-602

**Zoom Link** | <https://zoom.us/j/6511121930>

**Zoom ID** | 6511121930

## Parallel Sessions 06 (Blended): Textile Engineering Applications

**Session Chairs** | Prof. Dr. Lal Mohan Baral, Dr. Jagannath Biswas

**Paper IDs** | 5124, 6580, 7454, 7975

**Room No.** | PCR-506

**Zoom Link** | <https://bdren.zoom.us/j/67599502680>

**Zoom ID** | 67599502680

## Parallel Sessions 07 (Virtual): Deep Learning, Image Processing, and Medical Imaging

**Session Chairs** | Prof. Dr. Hasanul Kabir, Prof. Dr. Mohammad Abu Yousuf

**Paper IDs** | 365, 4937, 7989, 7182, 9269

**Room No.** | PCR-601

**Zoom Link** | <https://bdren.zoom.us/j/62044253710>

**Zoom ID** | 62044253710

18 Dec Sunday

13:00 PM – 14:00 PM

Prayer and Lunch Break

18 Dec Sunday

14:00 PM – 14:45 PM

## Keynote 07: Cross-cultural Thinking in the Development of a Sustainable Fashion Education System: A Collaborative Approach with Industry, Policy, and the Educational Sector

**Speaker** | Prof. Tao Hui, Dean, School of Fashion, Wuhan Textile University, China

**Session Chairs** | Prof. Dr. Nitai Chandra Sutradhar, Dr. Md. Shariful Alam

**Room No.** | PCR-302

**Zoom Link** | <https://bdren.zoom.us/j/68506260597>

**Zoom ID** | 68506260597

## Keynote 08: Opportunities and Challenges in Grid-Connected Distributed Energy Sources

**Speaker** | Prof. Dr. Atif Iqbal, Fellow IET (UK), Fellow IE (India), Qatar University, Qatar

**Session Chairs** | Prof. Dr. Khawza Iftekhar Uddin, Prof. Dr. Quamrul Ahsan

**Room No.** | PCR-309

**Zoom Link** | <https://zoom.us/j/6511121930>

**Zoom ID** | 6511121930

18 Dec Sunday

14:45 PM – 15:00 PM

Short Break

18 Dec Sunday

Technical Session 04

15:00 PM – 16:30 PM

## Parallel Sessions 01: HCI, Algorithms, and Blockchain

**Session Chairs** | Prof. Dr. Md. Mustafizur Rahman, Prof. Dr. Md. Motaharul Islam

**Paper IDs** | 708, 5809, 4298, 3650, 1681

**Room No.** | PCR-309

## Parallel Sessions 02: Computational Linguistics and Machine Learning

**Session Chairs** | Prof. Dr. Moshikul Haque, Prof. Dr. Md. Golam Rabiul Alam

**Paper IDs** | 3896, 6716, 7338, 7918

**Room No.** | PCR-307



EVENT SCHEDULE



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## Parallel Sessions 03: Computer Vision and Pattern Recognition

**Session Chairs** | Prof. Dr. Md. Zahidul Islam, Dr. AFM Shahab Uddin

**Paper IDs** | 7344, 9489, 8347, 8753

**Room No.** | PCR-306

## Parallel Sessions 04: Computer Network and Information Security

**Session Chairs** | Prof. Dr. Anupam Kumar Bairagi, Prof. Dr. Tushar Kanti Saha

**Paper IDs** | 2461, 6978, 3850, 5068, 5434

**Room No.** | PCR-602

## Parallel Sessions 05 (Virtual): Recent trends in Electrical Engineering

**Session Chairs** | Dr. Abdul Rauf Bhatti, Dr. Ratil H Ashique

**Paper IDs** | 6547, 2689, 9643, 9304, 5334

**Room No.** | PCR-601

**Zoom Link** | <https://bdren.zoom.us/j/62530840647>

**Zoom ID** | 62530840647

## Parallel Sessions 06 (Virtual): Hybrid Automotive Systems

**Session Chairs** | Dr. Mahidur Sarker, Dr. Molla Shahadat Hossain Lipu

**Paper IDs** | 3751, 9090, 7146, 842, 3824, 6934

**Room No.** | PCR-506

**Zoom Link** | <https://bdren.zoom.us/j/66520690788>

**Zoom ID** | 66520690788

## Parallel Sessions 07 (Virtual): Power Systems Design

**Session Chairs** | Prof. Dr. A H M Abdur Rahim, Dr. Ahmed Al Mansur

**Paper IDs** | 886, 6831, 8081, 6113

**Room No.** | PCR-404

**Zoom Link** | <https://bdren.zoom.us/j/66473518850>

**Zoom ID** | 66473518850

## Parallel Sessions 08 (Virtual): Deep Learning, Image Processing, and Medical Imaging

**Session Chairs** | Prof. Dr. Forhad Rabbi, Prof. Dr. Abdul L. Haque

**Paper IDs** | 8885, 1204, 1118, 146, 3415

**Room No.** | PCR-302

**Zoom Link** | <https://zoom.us/j/6511121930>

**Zoom ID** | 6511121930

18 Dec Sunday

16:30 PM – 16:45 PM

Health Break

18 Dec Sunday

16:45 PM – 17:30 PM

## Workshop on Basic Bioinformatics Tools & Techniques

**Speaker** | Dr. Mohammad Ali Moni, The University of Queensland, Australia

**Session Chairs** | Prof. Dr. Md. Mamun-Or-Rashid, Prof. Dr. Mohammad Shorif Uddin

**Room No.** | PCR-302

## Interactive Poster Session

**Paper IDs** | 4106, 4313, 5675, 5904, 7284, 8636, 9239

**Room No.** | PCR-309

18 Dec Sunday

17:30 PM – 18:00 PM

Prayer Break

18 Dec Sunday

18:00 PM – 20:00 PM

Award Giving Ceremony followed by the Gala Dinner

EVENT SCHEDULE

