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11th ANNUAL WOMEN'S MEET – AWM 2026

7th March, 2026, Chennai, India

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AWM 2026

11th Annual Women's Meet

7 March 2026, Chennai, India

CONFERENCE PROCEEDINGS

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Chennai – 88

This publication presents the proceedings of the 11th Annual Women's Meet – AWM 2026 held at Chennai, India on 7 March 2026. The Conference was organized by Centre for Women Development (CWD) of Venus International Foundation (VIF).

More information on AWM 2026 is given at: www.venusinfo.org/women/2026.html

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Editors:

R. Sathishkumar, PhD.,

T.R. Ganeshbabu, PhD.,

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Mobile No.: +91 9840556456

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Email Id: contact@venusinfo.org

Acknowledgment

With great pleasure, we welcome you all to the 11th Annual Women's Meet – AWM 2026 hosted by the Centre for Women Development (CWD), Venus International Foundation (VIF), Chennai, India on 7 March 2026. This scientific conference is organized with the theme – “To Cultivate Research Spirit and Create a Vibrant Community of Women in Science and Technology” and how to plan a journey forward to have a voice for women professionals and female intellectualism. The conference focuses on recent research, developments, and challenges in the field of Agricultural Sciences, Engineering, Health and Medical Sciences, Humanities and Social Sciences, Law, Management and Science.

The AWM 2026 conference provides a great opportunity for women to focus on meeting the changing requirements of science and technology and to foster collaborative relationships. The conference allows all participants to celebrate accomplishments, extend peer networks, and jointly explore future research directions. Further, the conference offers enlightening keynote lectures by renowned experts, followed by scientific parallel sessions. The conference received an overwhelming response from women researchers, which is leading to high-quality presentations and discussions. Finally, the conference team wishes every participant to have a productive and enjoyable time at this special conference.

Team, AWM 2026

Message from General Chair – AWM 2026



The Annual Women's Meet is now a well-established platform for women researchers and the key aim remains the opportunity to share ideas and meet the people to exchange new knowledge and innovation to stimulate fresh insights on different levels.

The Eleventh Women's Meet – AWM 2026, in particular, was a challenging exercise as the Scientific Conference format allowed us to structure sessions differently, facilitating participation in innovative ways. The scope of papers will ensure an interesting day and the subjects covered illustrate the wide range of topics that fall into this important and ever-growing area of research.

I thank the Organizing Committee, Speakers, and Reviewers for their enthusiastic support. We would like to thank all the authors for submitting their work to AWM 2026 and for giving us the opportunity to assemble a high-quality program. We are happy to publish the proceedings of AWM 2026. I hope that AWM 2026 will be successful and enjoyable to all participants.

R. Sathish Kumar

R.SATHISHKUMAR

General Chair – AWM 2026

Organizing Committee – AWM 2026

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AWM 2026 Conference Schedule

Programme Venue: Green Park Hotel, Chennai

8:45 am onwards	Registration
INAUGURAL SESSION	
9.30 am	Welcome Address
9.35 am	Lighting of the Lamp
9.45 am	Thamiz Thai Vaazthu
10.00 am	Presidential Address by General Chair
Networking and Refreshment Break (10:00 –10:20 am)	

KEYNOTE SESSION	
Venue: Vauhini Hall (10:20 –11:30 am)	
Speaker	Title of Talk
Dr. Garima Shukla, Queen's University, Canada	Impact of Sleep on Overall Treatment Outcomes in People Living with Epilepsy: our Experience from India and the West
Dr. Eiman Aleem, London South Bank University, England	From IGF-1R Signaling and CDK Mouse Models to AI-Based Precision Medicine: A Translational Journey in Cancer Research
Dr. Mukta Bansal, Nanyang Technological University, Singapore	Unlocking Supply Chain Efficiency through Mathematical Modeling

AWM 2026 Conference Schedule

SCIENTIFIC SESSION – I	
Venue: Vauhini Hall (11:30 – 12:40 pm)	
Parallel Track – 1A	
Discipline: Medical Sciences – I, Agriculture – I	
Speaker	Title of Talk
Dr. Manju Rahi, ICMR – Vector Control Research Centre, Puducherry, India	Translating Research into Policy: Evidence Informed Pathways for Disease Elimination in Resource Constrained Settings
Dr. A. Suganya, ICAR – Sugarcane Breeding Institute, Coimbatore, India	Achievements of Pre- breeding and Tissue Culture Research in Sugarcane
Dr. Rajeshwari N, University of Agricultural Sciences, Dharwad, India	Biocultural Linkages of Plant Diversity and Food Traditions among the Halakki Vokkaligas of the Western Ghats
Dr. Sahana Sen Mazumder, Biswa Bangla Biswabidyalay, Bolpur, India	Occupational Health Risks in West Bengal's Leather Industry: A Cross-Sectional Study
Dr. Santhi Sri K.V, Acharya Nagarjuna University, Guntur, India	Socio-Economic Constraints faced by the Farmers of Prakasam District in Adoption of Integrated Pest Management Practices
Dr. Ruchira A. Shukla, Navsari Agricultural University, Navsari, India	Profitability Drivers of Women-Led SHGs in Agribusiness: Evidence from South Gujarat
Dr. Manju R, NITTE Deemed to be University, Mangaluru, India	Nature-Driven Nanotechnology: Development of a Poly herbal Silver Nanoparticles based Hydrogel
Dr. Surya Prabha Matangi, Vignan's Foundation for Science, Technology and Research, Guntur, India	Development of Anti-Diabetic Chocolate using Low Glycemic- Index Ingredients

AWM 2026 Conference Schedule

SCIENTIFIC SESSION – I	
Venue: Bharani Hall (11:30 – 12:40 pm)	
Parallel Track – 1B	
Discipline: Engineering – I, Science and Humanities – I, Management and Law	
Speaker	Title of Talk
Dr. Khushbu Singh Raghav, CSIR – CEERI, Pilani, India	RF MEMS Switches For 6G And Next Generation Communication Applications
Dr. Ramya Araga, National Institute of Technology Warangal, India	Photocatalytic Degradation of Emerging Contaminants using TiO ₂ -based Nanocomposites
Dr. Rashmi Ashtt, Indira Gandhi Delhi Technical University for Women, India	Good Governance for Safe and Inclusive Heritage Areas: A Case Study of Shahjahanabad, Delhi
Dr. Tinku Sinha Sarkar, Saha Institute of Nuclear Physics, Kolkata, India	Probing Physics from MeV to TeV Energies
Dr. Bindulika Sharma, Jamia Millia Islamia, New Delhi, India	Play, Image and Imagination: Visual Culture in Early Childhood Education
Dr. Deepa Sachin Deshpande, MGM University, Chhatrapati Sambhajanagar, India	Early Cancer Detection using Infrared Thermographic Images and Deep Learning
Dr. Rashmi Achmare, JSPM University, Pune, India	Restructuring the Humanities in the Digital Age: Knowledge Paradigms and Emerging Research Methodologies
Dr. R. Sindhu, Santhigiri Scientific and Industrial Research Institute, Thiruvananthapuram, India	Technological Advancements, Challenges and Innovations in Lignocellulosic based Biorefinery for Fuels and Chemicals

AWM 2026 Conference Schedule

SCIENTIFIC SESSION – I Venue: Bharani Hall (11:30 – 12:40 pm)	
Parallel Track – 1B Cont... Discipline: Engineering – I, Science and Humanities – I, Management and Law	
Speaker	Title of Talk
Dr. Mononita Kundu Das, St. Xavier's University, Kolkata, India	A Study of Social Security Measures for Women Working in Unorganized Sectors in India
Dr. Babita Singh Parasain, IILM University, Greater Noida, India	Question Hour in Parliament: A Critical Appraisal under the Indian Constitution (A Study from 2010-2015)
Dr. Anupama Prashar, Management Development Institute Gurgaon, India	Human-Artificial Intelligence (AI) Collaboration in Procurement and Supply Chain Decisions
Dr. S. Muthulakshmi, VHNSNC, Virudhunagar, India	Glass Ceiling Among Women Managers in Service Sectors with Special Reference to Tamilnadu

WOMEN'S AWARDS CEREMONY SESSION – I Venue: Vauhini Hall (12:40 – 1:00 pm)

Lunch and Networking Break (12:40 to 2:00 pm)

AWM 2026 Conference Schedule

SCIENTIFIC SESSION – II	
Venue: Vauhini Hall (1:15 – 2:45 pm)	
Parallel Track – 2A	
Discipline: Medical Sciences – II, and Agriculture – II	
Speaker	Title of Talk
Dr. Poonam Kumari, CSIR – Institute of Himalayan Bioresource Technology, Palampur, India	Harnessing Edible Flowers for Functional Food Development and Rural Livelihood Enhancement
Dr. Ankita Arvindkumar Doshi, Navrachana University, Vadodara, India	Structural and Functional Insights into HMGA2: Implications in Cancer Progression
Dr. Kolanpaka Blessi Priyanka, Kakatiya University, Warangal, India	Review on Ionic Liquids as Green Solvents
Dr. M. S. Chaitanya Kumari, Acharya N. G. Ranga Agricultural University, Guntur, India	PARICHAY – An Innovative Gender-Sensitive Extension Method for Women in Agriculture
Dr. Shubhangi Sambhaji Dere, MGM Medical College and Hospital, Navi Mumbai, India	The Pregnancy Tele-yoga Module to Combat Stress, Anxiety, and Depression Associated with Pregnancy: An Exploratory Open-label Multicentric Study
Dr. Merin K Joseph, St. Gregorios Dental College, Ernakulam, India	Comparative Analysis of the Accuracy of the Bite Registration in Dentate Condition Obtained by the Triple Tray Bite and Vinyl Poly Siloxane Bite Registration Material

AWM 2026 Conference Schedule

SCIENTIFIC SESSION – II	
Venue: Bharani Hall (1:15 – 2:45 pm)	
Parallel Track – 2B	
Discipline: Engineering – II, Science and Humanities – II, and Veterinary Science	
Speaker	Title of Talk
Dr. Snehal Uttam Bobade, COEP Technological University, Pune, India	Risk-Based Decision Support Model for Strategic Prioritization of Accident Blackspots Using Severity Index and Severity Level Assessment in National Highway Networks
Dr. S. Shailajha, Manonmaniam Sundaranar University, Tirunelveli, India	Influence of Reduced Graphene Oxide Coating on Structural Characteristics and Cytocompatibility of Al ₂ TiO ₅ Scaffolds
Dr. Janagam Indumathi, Sri Venkateswara Veterinary University, Tirupati, India	Development of Reformulated Chicken Sausages with Vegetable Oil Seeds Incorporation - A Novel Technology
Dr. Aarti Nagpal Mehta, Chanakya University, Bengaluru, India	Addressing Reproductive Health Vulnerabilities in Adolescent Girls: Outcomes of a Multidimensional Psychosocial Intervention
Dr. Josna James, Chinmaya Vishwa Vidyapeeth Deemed to be University, Ernakulam, India	Recent Developments in Virtual Fuzzy Parameterized Soft Topological Structures: A Review
Dr. Anitha Guttavelli, GITAM University, Visakhapatnam, India	Design and Development of an Underwater Drone following a Tandem Fish-tailed Thrust Mechanism
Dr. Roshaniben Chaudhary , Ganpat University, Ganpat Vidyanagar, India	Biodiesel Production and Process Optimization using Agrowaste through Oleaginous Microorganisms
Dr. Nilashree Mahesh Madakath, Fr. C. Rodrigues Institute of Technology, Mumbai, India	Integration of Error Control Coding for Robust Speaker Recognition

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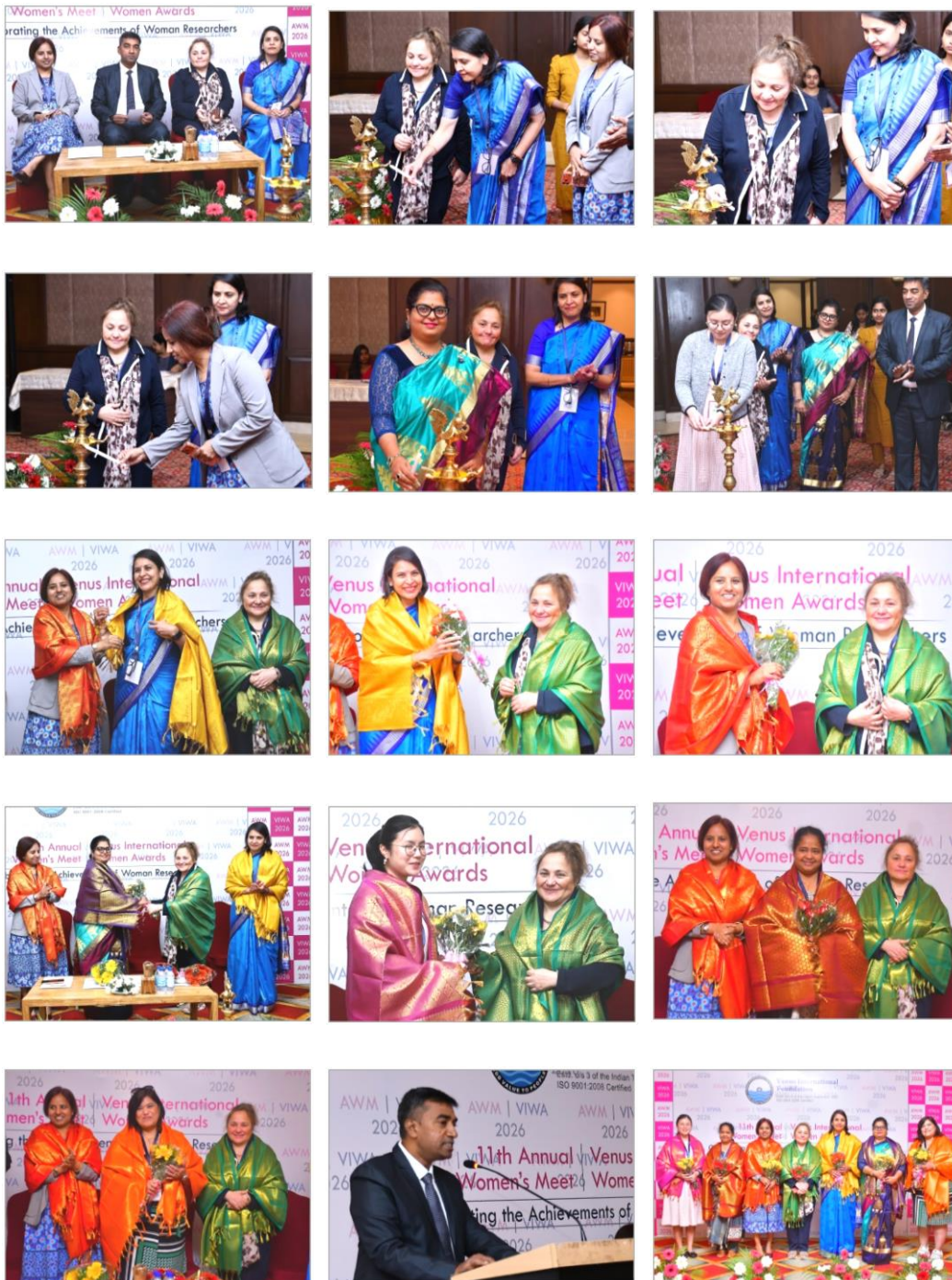
SCIENTIFIC SESSION – II Venue: Bharani Hall (1:15 – 2:45 pm)	
Parallel Track – 2B Cont... Discipline: Engineering – II, Science and Humanities – II, and Veterinary Science	
Speaker	Title of Talk
Dr. Electa Alice Jayarani A, K.S. Institute of Technology, Bengaluru, India	Automated Theme Mining and Sentiment Characterizing of Student – Faculty Interaction Feedback using Natural Language Processing
Dr. Swathi Nambari, Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam, India	SPSG and PO based RCS Estimation of Complex Shaped and Plasma Covered objects for Stealth Signature Management
Dr. Shyna A, TKM College of Engineering, Kollam, India	AI Models for Improving CBF Quantification in Arterial Spin Labeling MRI: Tackling Challenges with Deep Learning

AWM 2026 Conference Schedule

INVITED SESSION	
Venue: Vauhini Hall (2:45 – 4:00 pm)	
Speaker	Title of Talk
Dr. Jayati Sarkar, Indian Institute of Technology Delhi, India	Engineering the Hydrogen Economy: From Cryogenic Storage to Bio-Electrochemical Systems
Dr. Tee Ying Qin, Universiti Teknologi Malaysia, Malaysia	Impact of Covid-19 Pandemic on Young Children from Malaysian Private Preschools
Dr. Mas Ayu Binti Haji Hassan, Universiti Malaysia Pahang Al- Sultan Abdullah, Malaysia	Generative Design for life: The Machine Learning Revolution for Future Biomaterials
Dr. Saxena Anika, The Education University of Hong Kong, Hong Kong	Computational Thinking Integration in Early Childhood Education: Tools, Pedagogy, and Research Insights
Dr. Jansirani Natarajan, University of Buraimi, Oman	The Impact of AI Familiarity on the Utilization of AI Tools by University Faculty

WOMEN'S AWARDS CEREMONY SESSION – II
Venue: Vauhini Hall (4:00 – 4:30 pm)
Valedictory, Networking & Refreshment (4:30 – 5:30 pm)

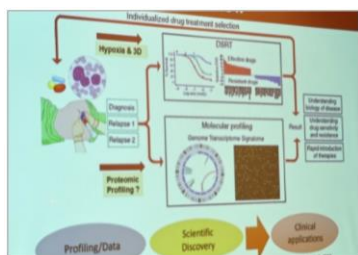
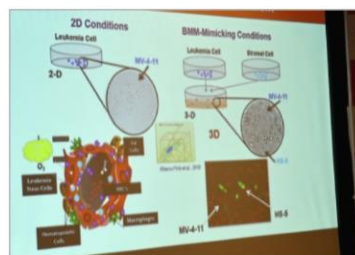
Inauguration Glimpses 1



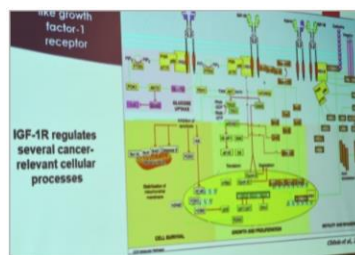
Inauguration Glimpses 2



Scientific Session Glimpses 1



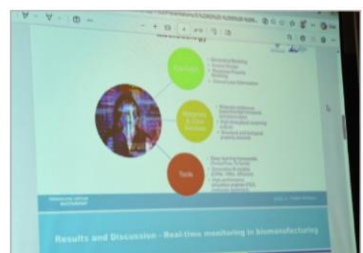
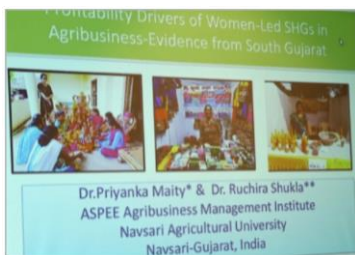
The model compared Random Forest regression, XGBoost, Decision Tree and Support Vector Machine (SVM) algorithms to highlight accuracy in survival predictions as well as to identify clinically relevant risk factors associated with disease progression in lung cancer patients.



Scientific Session Glimpses 2



Scientific Session Glimpses 3



Keynote Speaker 1



Dr. Garima Shukla, Queen's University, Canada

Title: Impact of Sleep on Overall Treatment Outcomes in People Living with Epilepsy: our Experience from India and the West

Abstract: Epilepsy is one of the commonest chronic neurological disorders, with tremendous public health impact. While most people with epilepsy (PWE) can be well controlled through regular intake of one or more anti-seizure medications, about a quarter remain refractory to medical treatment. Advanced surgical treatment and neuromodulation options have improved seizure outcomes in pharmaco-resistant epilepsy, yet in a subpopulation, several other aspects of their quality of life often remain unaltered or even continue to deteriorate despite seizure freedom. Epilepsy is a network disorder, with several comorbidities involving cognition, mood and sleep: in addition to complex psychosocial associations. Factors associated with unfavorable overall outcomes among PWE are not well determined. Over the last decade and a half, we have investigated the role of sleep disturbances and sleep disorders in overall epilepsy treatment outcomes. This work and that from other colleagues in the field, has demonstrated an important association of sleep with outcomes of epilepsy and its common comorbidities. Some interesting differences in this relationship among PWE populations in India versus those in Canada have been observed. The talk will bring to the audience, a bird eye's view of the intriguing relationship of sleep with overall seizure and non-seizure outcomes among PWE.

Keynote Speaker 2

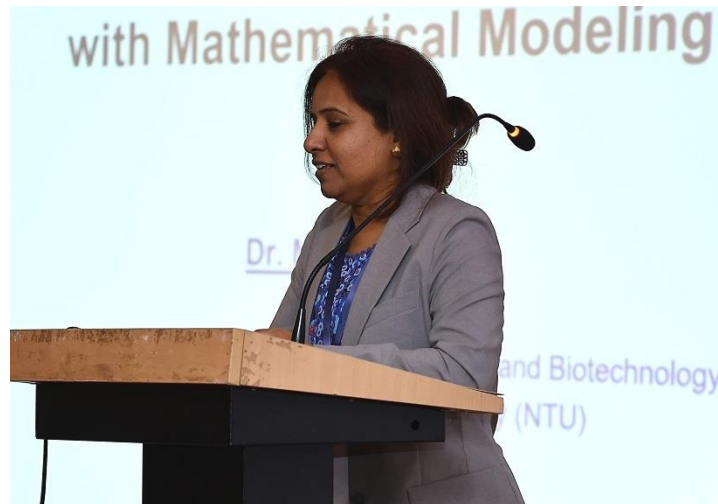


Dr. Eiman Aleem, London South Bank University, England

Title: From IGF-1R Signaling and CDK Mouse Models to AI-Based Precision Medicine: A Translational Journey in Cancer Research

Abstract: Cancer remains the second leading cause of death worldwide. Although descriptions of cancer date back to ancient Egyptian papyri, systematic investigation into its biological mechanisms and therapeutic vulnerabilities accelerated in the 18th century and expanded following the discovery of the DNA double helix. Cancer arises through cumulative genetic and epigenetic alterations that disrupt tightly regulated cellular processes. Hallmarks of malignant transformation include dysregulated signalling pathways such as the Insulin-like growth factor-1 receptor (IGF-1R), cell cycle perturbations, transcriptional reprogramming, and the acquisition of drug resistance. Understanding these interconnected processes requires the use of robust experimental and computational models. This presentation traces a translational research journey spanning *in vitro* 2D and 3D cellular systems, genetically engineered mouse models, including novel mechanistic studies of IGF-1R signalling, the role of hypoxia in drug resistance and the integration of multi-omics approaches for comprehensive molecular characterisation in acute myeloid leukaemia, refining patient stratification and precision therapy strategies. Building on these foundations, the talk explores the use of AI-based approaches for predicting cancer survival. By connecting molecular mechanisms, preclinical modelling, and computational analytics, this presentation illustrates a strategy for advancing precision oncology and improving translational impact.

Keynote Speaker 3



Dr. Mukta Bansal, Nanyang Technological University, Singapore

Title: Unlocking Supply Chain Efficiency through Mathematical Modeling

Abstract: Supply chains in the chemical industry form intricate global networks spanning raw material procurement, production, storage, and distribution across entities like oil fields, refineries, and petrochemical plants. Disruptions such as the 2011 Japan tsunami and COVID-19 pandemic highlight vulnerabilities in traditional planning, necessitating resilient, data-driven strategies. This talk addresses upstream procurement optimization for a multinational chemical firm with multiple sites producing multiple items. The goal is to minimize costs via optimal supplier contracts and spot market buys, balancing inventory and demand. A Mixed Integer Linear Programming (MILP) model is used for the contract selection. In an industrial case study, the mathematical models selected optimal contracts delivering a 15% savings over heuristics supporting flexible partial contracts and multi-site distribution.

Invited Speaker 1



Dr. Jayati Sarkar, Indian Institute of Technology Delhi, India

Title: Engineering the Hydrogen Economy: From Cryogenic Storage to Bio-Electrochemical Systems

Abstract: We will only be able to attain net-zero emissions, if we can follow coordinated, multi-mode approach towards clean energy generation, storage, and utilization. The present work in our lab focuses to advance hydrogen-based energy systems through computational modeling, novel materials development, and experimental validation. For this purpose, advanced numerical models are used to optimize the performance of alkaline water electrolyzer for hydrogen production. CFD studies help to understand the thermo-fluidic behavior of H₂ inside a cryogenic storage tank and molecular level modelling explores hydrogen adsorption in carbon-based materials such as graphene oxide and carbon nanotubes. These efforts try to uncover the mechanisms that ultimately control efficiency, safety, and scalability. Alongside these modeling efforts, bio-compatible polymer composite electrodes have been developed for microbial electrochemical systems, enabling simultaneous wastewater treatment and energy production. A pilot-scale alkaline electrolyzer is currently under testing, and microbial fuel cell technology has achieved proof-of-concept demonstration. We aim to turn our research into real-world technologies for a cleaner energy future.

Invited Speaker 2

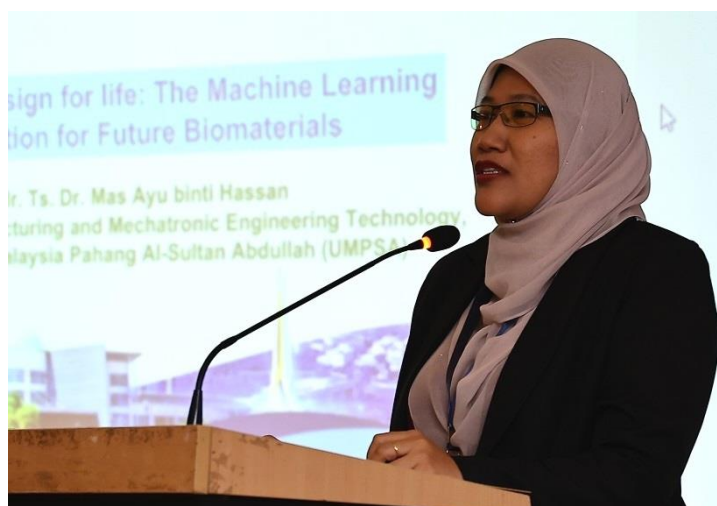


Dr. Tee Ying Qin, Universiti Teknologi Malaysia, Malaysia

Title: Impact of Covid-19 Pandemic on Young Children from Malaysian Private Preschools

Abstract: This paper discusses the pervasive impact of COVID-19 on children in the Malaysian private preschool sector that operates with minimal government funding compared to public preschools. A case study conducted at the beginning of the endemic period is presented to further illustrate and support the discussion. Based on retrospective interviews conducted with eight private preschool teachers and administrators, as well as three parents with preschoolers during the pandemic, findings revealed three core themes. First, children experienced lasting developmental shifts, with impact on their social and emotional development most apparent. Second, the study identifies a transformation in home-school partnerships as parents assume more responsibilities in children's learning and development. Finally, the pandemic has fundamentally transformed childhood experiences by limiting opportunities for social interactions and physical explorations. These results suggest that pandemic-induced effects among preschools have not simply disappeared; instead, they are brought further into the developmental landscape, requiring longterm, specialized support within the Malaysian education system.

Invited Speaker 3



Dr. Mas Ayu Binti Haji Hassan, Universiti Malaysia Pahang Al-Sultan Abdullah,
Malaysia

Title: Generative Design for life: The Machine Learning Revolution for Future Biomaterials

Abstract: The development of advanced biomaterials has traditionally relied on iterative experimental approaches that are costly, time-intensive, and limited in their ability to navigate highdimensional design spaces. Machine learning (ML) is increasingly being adopted to enable algorithm-driven biomaterials design by establishing quantitative structure–property–function relationships across compositional, processing, and biological variables. This review-focused talk examines state-of-the-art ML methodologies applied to biomaterials engineering, including supervised regression models, convolutional neural networks for microstructure analysis, and physics-informed and active learning frameworks integrated with high-throughput experimentation. Application areas include ML-guided optimisation of polymeric and hydrogel systems for tissue scaffolds, prediction of degradation kinetics and mechanical performance, and data-driven screening of surface chemistries for enhanced cell adhesion and biocompatibility. Particular attention is given to closed-loop design platforms that couple ML predictions with automated synthesis and characterization. Key challenges such as sparse and heterogeneous datasets, model generalizability, and experimental validation are discussed, alongside emerging strategies for explainable and transferable ML models. These approaches are enabling faster, more reliable translation of biomaterials from laboratory discovery to clinical and industrial applications.

Invited Speaker 4



Dr. Saxena Anika, The Education University of Hong Kong, Hong Kong

**Title: Computational Thinking Integration in Early Childhood Education:
Tools, Pedagogy, and Research Insights**

Abstract: Computational Thinking (CT) is increasingly recognised as a foundational skill for young learners, yet its integration into Early Childhood Education (ECE) requires careful alignment with developmental stages and pedagogical practices. This presentation draws on recent empirical studies and classroom innovations to examine four key teaching environments: unplugged activities, tangible block-based programming, robotics, and digital block-based platforms. Evidence highlights that unplugged activities foster embodied cognition and interactive learning, while tangible blocks provide concrete experiences for children in the preoperational stage. Robotics activities, such as programmable mice or Bee-bot, have been shown to enhance creativity and cross-disciplinary problem-solving, and digital block-based tools like Scratch Jr. introduce children to the essence of programming through accessible syntax and playful design. Synthesising these findings, the talk underscores the importance of teacher training, curriculum scaffolding, and policy support to ensure CT integration is developmentally appropriate and equitable. By situating CT within play-based and STEAM-oriented pedagogy, this research contributes actionable insights for educators, curriculum designers, and policymakers. Ultimately, CT in ECE is not about early coding alone, but about nurturing problem-solving, collaboration, and computational dispositions that prepare children for lifelong learning in a digital society. Keywords: Computational Thinking, Early Childhood Education, Unplugged Activities, Robotics, Digital Pedagogy.

Invited Speaker 5



Dr. Jansirani Natarajan, University of Buraimi, Oman

**Title: The Impact of AI Familiarity on the Utilization of AI Tools
by University Faculty**

Abstract: Introduction Artificial Intelligence (AI) is rapidly transforming education, reshaping how teaching, learning, and administrative activities are conducted. University faculty's knowledge of AI is increasing, with current use focused on administrative tasks such as drafting emails and reports, and on pedagogical support through curriculum design and personalized learning tools. For Omani universities, understanding these perspectives is crucial as the country aims to enhance its educational sector in alignment with the Oman Vision 2040 strategy. While many faculty members use AI, perceptions are mixed. Some express skepticism about its effectiveness in education, highlight ethical concerns, and note the need for more training to integrate AI confidently into teaching and research.

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