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Dr. Gunnar Yttri, Rector, Western Norway University of Applied Sciences (HVL), Norway

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Prof. N. Muthukumarasamy, CIT, India
Prof. P. Ravirajan, University of Jaffna, Sri Lanka

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Dr. R. Ramaseshan, IGCAR, India

TRAVEL AND ACCOMMODATION

For more details about travel and accommodation, visit the conference website: www.amceha2023.in

VISA Information:

In general, overseas citizen travelling to India require a visa. A general portal with information about consulates and visa services for India is available at <https://indianvisaonline.gov.in>

GUIDELINES FOR ABSTRACT SUBMISSION

Abstracts should be written in English language and they should not exceed one page as per the template given in the conference website. They should be submitted as either PSD or MS Word file, via Conference Management Tool (CMT) only. Authors are encouraged to submit high quality original work that has not been published previously. Submitted abstracts will be reviewed through a double blind review process and the reviewers' comments will be notified to the corresponding authors. Accepted abstracts will be disseminated as oral or poster presentations and will be published in the conference abstract proceedings.

Selected abstracts presented in the conference will be invited for full paper publication which will be published after peer-review in Elsevier journals "Materials Letters", "Materials Today: Proceedings", "Elsevier Book series", etc.

IMPORTANT DATES

Abstract submission dead line : 15th August, 2023
Acceptance Notification : 25th August, 2023

REGISTRATION

At least one of the authors of a paper and all participants should register on or before 30.08.2023

Type	Foreign Delegates (USD)	Indian Delegates (INR)	SAARC Countries (USD)
Industry Delegates	400	4000	200
Academic Delegates	300	3000	100
Student Delegates	200	2000	50

Registration fee covers Conference kit, Copy of Proceedings and Lunch.

MODE OF PAYMENT

1. Demand Draft in favour of "AMCEHA 2023" payable at Coimbatore
2. Bank Transfer A/c No: 6087531801
Name: AMCEHA 2023 IFSC: IDIB000S107
3. Credit Card payment: For detail please visit conference website: www.amceha2023.in

ADDRESS FOR COMMUNICATION

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Collaborating Partners



Western Norway
University of
Applied Sciences



International Conference on

ADVANCED MATERIALS FOR CLEAN ENERGY AND HEALTH APPLICATIONS (AMCEHA 2023)

September 19 & 20, 2023

ORGANIZED BY

COIMBATORE INSTITUTE OF TECHNOLOGY
INDIA,

WESTERN NORWAY UNIVERSITY OF
APPLIED SCIENCES, NORWAY

and

UNIVERSITY OF JAFFNA, SRI LANKA

Venue

COIMBATORE INSTITUTE OF TECHNOLOGY
Coimbatore, India

Sponsors



Norwegian Directorate
for Higher Education
and Skills

In today's world innovation in materials is required to tackle and solve many of the challenges associated with future clean energy supply and health care applications. The environmental challenges arising due to rapid growth of industries and urbanization has forced the research community to move towards and focus much on clean energy technologies and health technologies. Advancements made in the area of nanotechnology in recent years has provided significant developments in the area of clean energy segment and health applications. An active collaboration between scientists working in the area of theoretical and experimental materials science and computer scientists should be there to deploy proven computational methodologies to predict, screen, optimize and identify materials which have the potential to be used in clean energy sector and health care applications. The International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA 2023) will act as a platform for the exchange of technical and scientific information between international researchers in the field of materials for clean energy and health applications. Generation of electricity using solar energy is considered as a viable method to produce energy by using clean energy principle.

This conference will have sessions in which research scientists will discuss about the issues associated with the different solar energy conversion technologies and the great challenges associated in materials design to achieve high solar power conversion efficiency.

Technological developments achieved in the area of fuel cells and hydrogen production has paved the way for use of hydrogen as clean energy source in the transport sector. Advanced functional materials is an interdisciplinary field of research and development of these functional materials is crucial to move towards the region of providing solutions in the areas of energy, healthcare, electronics, and catalysis.

The development of biodegradable and biocompatible materials is an attractive and interesting area of research and the developed materials will find applications in the areas of dentistry, orthopedics and can also act as a diagnostic tool in the field of medicine. This conference will be a promising, and an exciting event which will bring together researchers, clinicians, scientists, engineers and industry personnel and provide them a platform to discuss the latest developments in the area of advanced materials for clean energy and health applications leading to knowledge transfer and will also help them to establish new collaborations.

SYMPOSIA THEMES OF THE CONFERENCE

SYMPOSIUM ON SOLAR ENERGY APPLICATIONS

- Novel materials for solar cells
- Thin film solar cells, Dye /quantum dot sensitized solar cells, Organic solar cells, Perovskite solar cells
- Photovoltaic technologies and Energy management
- Solar thermal application
- Hybrid power systems and micro grid operations

Symposium Chairs

Prof. N. Muthukumarasamy, Coimbatore Institute of Technology, India

Prof. G. R. A. Kumara, NIFS, Sri Lanka

Symposium Editors

Dr. R. Balasundaraprabhu, PSG College of Technology, Coimbatore

Dr. Q. Y. Soundararajah, Eastern University, Sri Lanka

Dr. P. Amalraj, University of Jaffna, Sri Lanka

SYMPOSIUM ON HYDROGEN ENERGY

- Fuel Cell
- Production
- Storage & Transport

Symposium Chairs

Dr. R. Yuvakumar, Alagappa University, India

Dr. Velaug Myrseth Ultedal, HVL, Norway

Symposium Editors

Dr. Shivatharsiny Yohi, University of Jaffna, Sri Lanka

Dr. Jonathan Økland Torstensen, HVL, Norway

SYMPOSIUM ON ADVANCED FUNCTIONAL MATERIALS & DEVICES

- Batteries
- Super capacitors
- LEDs, Detectors, FETs
- Photocatalysts
- Energy from waste

Symposium Chairs

Prof. S. Agilan, Coimbatore Institute of Technology, India

Prof. Meena Senthilnathan, University of Jaffna, Sri Lanka

Symposium Editors

Dr. S. Prasanna, PSG College of Technology, Coimbatore

Dr. M. Jeyanthinath, Madurai Kamaraj University, India

Dr. S. Ubenthiran, University of Jaffna, Sri Lanka

SYMPOSIUM ON MODELLING, SIMULATION & ARTIFICIAL INTELLIGENCE

- Smart materials for clean energy applications
- Smart materials for health applications
- AI for clean energy management

Symposium Chairs

Dr. P. Vajeeston, University of Oslo, Norway

Dr. Valliappan Raman, Coimbatore Institute of Technology, India

Symposium Editors

Dr. Said Bentouba, NORCE, Norway

Dr. A. Thevakaran, University of Jaffna, Sri Lanka

SYMPOSIUM ON HEALTH APPLICATIONS

- Biomaterials
- Tissue Engineering
- Regenerative medicine
- Materials for drug delivery
- Environmental and health impacts of clean energy technologies
- Bio sensors
- Nano materials for health care

Symposium Chairs

Prof. Kamal Mustafa, University of Bergen, Norway

Prof. M. Thirumarimurugan, Coimbatore Institute of Technology, India

Symposium Editors

Dr. R. Azarudeen, Coimbatore Institute of Technology, India

Dr. T. Pathmathas, University of Jaffna, Sri Lanka

CONFERENCE PROCEEDINGS EDITORS

Dr. P. Balraju, Coimbatore Institute of Technology, Coimbatore

Dr. M. Thanishaichelvan, University of Jaffna, Sri Lanka

INVITED SPEAKERS

Prof. Kamal Musatafa, University of Bergen, Norway

Dr. Smagul Karazhanov, IFE, Norway

Prof. Reza Arghandeh, HVL, Norway

Dr. David N McIlroy, Oklahoma State University, USA

Prof. Øyvind Frette, University of Bergen, Norway

Dr. Arne S Kristoffersen, University of Bergen, Norway

Dr. Martin Greve, University of Bergen, Norway

Dr. Velaug Myrseth Ultedal, HVL, Norway

Dr. Jonathan Økland Torstensen, HVL, Norway

Prof. A.A.Christy, University of Agder, Norway

Dr. P. Vajeeston, University of Oslo, Norway

Prof. Satoshi Uchida, The University of Tokyo, Japan

Prof. Patrick Then, Swinburne University of Technology, Malaysia

Prof. Gamini Rajapakse, University of Peradeniya, Sri Lanka

Prof. Nalin de Silva, University of Colombo, Sri Lanka

Prof. P. Ravirajan, University of Jaffna, Sri Lanka

Prof.A.Atputharaja, University of Jaffna, Sri Lanka

Prof. G.R.A Kumara, NIFS, Sri Lanka

Dr. Shuthanandan Vaithiyalingam, Pacific Northwest National Laboratory, USA

Prof. Ganesh Datt Sharma, The LNM Institute of Information Technology, Jaipur, India

Prof. Sudakar Chandran, Indian Institute of Technology Madras, India

Prof. S. Balakumar, University of Madras, India

Dr. M. Jeyanthinath, Madurai Kamaraj University, India

Dr. Venkatakrishnan, Indian Institute of Technology Mandi, India

ORGANIZERS

Western Norway University of Applied Sciences, Norway

Western Norway University of Applied Sciences (HVL) is a leading Norwegian public institution of higher education in Norway. With five campuses in the Western region of Norway, and with about 17,000 students, 2,000 staff, HVL is one of the largest higher education institutions in Norway. HVL offers a broad range of academic programs within engineering, social sciences, economic and administrative science, music and teaching. HVL has wide range of international higher education and research collaborations.

Coimbatore Institute of Technology

Coimbatore Institute of Technology was established in the year 1956 and is one of the most reputed and prestigious educational institution in South India since 1956. The Institute has the services of competent and qualified faculty, and visionary management to enhance the

quality of education and research at all levels and maintain its position in emerging globalization. The Institute functions in collaboration with reputed Colleges and Universities abroad in cutting edge technologies.

University of Jaffna, Sri Lanka

The University of Jaffna was established in 1974 as the sixth campus of the University of Sri Lanka and attained autonomous status in 1978. At present, the University of Jaffna is one of the largest Universities in the country consisting of eleven faculties including Faculties of Science, Technology Engineering and Medicine and catering more than 13,000 undergraduates and around 600 postgraduate students. The University is committed to the search for truth in a diverse field of subjects, as has been emphasized in its motto *மெய்ப்பொருள் காண்பதறிவு* (Discernment is Wisdom). The University ensures quality in all spheres of its activities, such as teaching-learning, research, innovation, scholarship and community engagement

COLLABORATING PARTNERS

University of Bergen, Norway

The University of Bergen is a young, modern university. Most of its premises are concentrated in the heart of the city of Bergen. There are about 14,500 students enrolled, and 3,200 faculty and staff. The University's academic landscape is characterised by its great variety and breadth. Six faculties cover most of the traditional university disciplines. Within the faculties are included 60 different specialized departments, centres and institutes.

Institute of Energy Technology (IFE), Norway

Founded in 1948, IFE is an international research institute for energy and nuclear technology. IFE's mandate is to undertake research and development, on an ideal basis and for the benefit of society, within the energy and petroleum sector, and to carry out assignments in the field of nuclear technology for the nation.

PSG College of Technology, India

PSG College of Technology, an ISO 9001:2000 certified institution is one of the foremost institutions established in the year 1951 by the PSG & Sons' charities trust. The college today has a student strength of about 8518 with 15 engineering and technology departments besides the computer applications, basic sciences, management sciences and humanities departments. The college maintains close interaction with several R & D institutions and institutions of higher learning in India and abroad through institutional network programmes and collaborative programmes.

Alagappa University, India

Alagappa University is a public university located in Karaikudi, Tamil Nadu, India. Originated from Alagappa Arts College founded by Alagappa Chettiar in 1947, it was established in 1985 by an act of Tamil Nadu government. The university has 44 departments, 9 centres and 2 constituent colleges on its campus. 46 affiliated colleges in the districts of Sivaganga and Ramanathapuram are part of the university.

NORCE, Norway

NORCE is an independent research institute that conducts research for both public and private sectors, to facilitate informed and sustainable choices for the future. We deliver research and innovation in energy, health care, climate, the environment, society and technology. Our solutions address key challenges for society and contribute to value creation on the local, national and global levels.

University of Oslo, Norway

The University of Oslo is a public research university located in Oslo, Norway. It is the highest ranked and oldest university in Norway. It is consistently ranked among the top universities in the world and as one of the leading universities of Northern Europe; the 2022 Academic Ranking of World Universities ranked it the 67th best university in the world and the third best in the Nordic countries. The university has approximately 27,700 students and employs around 6,000 people. Five researchers affiliated with the university have been Nobel laureates and three have been Turing Award winners.

Eastern University, Sri Lanka

The Eastern University, Sri Lanka, was established on October 1986. The University was preceded by the Batticaloa University College established on August 1981. The Batticaloa University College began with two faculties: The Faculty of Science and the Faculty of Agriculture. Two new faculties viz. the Faculty of Commerce & Management and the Faculty of Cultural Studies were established in 1988.

PHD Chamber of Commerce and Industry

PHD Chamber of Commerce and Industry, established in 1905, is a proactive National Apex Chamber working at the grass-root level and with strong national and international linkages. PHD Chamber, through its research-based policy advocacy role, positively impacts the economic growth and development of the nation. PHD Chamber of Commerce and Industry (PHDCCI) is one of the Premier Chambers in India to have been accredited with "Diamond Grade" by NABET (QCI), at national and international level.