

International Conference on Next Generation Sustainable Materials for Water and Energy Solutions

(SuWatE'24)



In association with



19-21 December 2024



Hybrid Mode



www.suwate24.com

About the conference

Addressing the urgent challenges of water and energy requires the innovative use of chemistry. The proposed International Conference on Next Generation Sustainable Materials for Water and Energy Solutions - 2024 (SuWatE'24) aims to bring together diverse branches of chemistry, materials science, chemical and mechanical engineering and computational studies to further advance this dynamic field of research. Our conference aims to foster discussions and innovative solutions by exploring the current fundamental understanding of chemistry to address energy and water challenges. Additionally, we will focus on enhancing light-matter interactions, designing and synthesizing novel materials, and employing in-situ techniques to study chemical processes for water and energy solutions.

Thrust areas

Materials for water and energy

- Ø Multimetallic and single-atom catalysts
- Ø Defect engineering in chemical materials
- Ø Clusters, nanoparticles, plasmonic materials
- Ø Supramolecular materials & crystal engineering
- Ø Metal and covalent organic frameworks
- Ø 2D and 3D-based nanocomposites
- Ø Advanced carbon materials

Chemistry for Sustainable energy

- Ø Supercapacitors & Battery
- Ø Solar energy conversion
- Ø Fuel cells
- Ø OER, HER & ORR reactions
- Ø Water splitting
- Ø Carbon dioxide reduction
- Ø Nuclear energy applications
- Ø Green hydrogen production
- Ø Green ammonia and urea synthesis
- Ø Bio-renewable energy sector

Water for sustainable development

- Ø Methods for removal of contaminants
- Ø Photodegradation of organics & dyes
- Ø Separation & purifications of metals
- Ø Extraction of value-added metals & chemicals
- Ø Advanced oxidation process
- Ø Phyto- and phycoremediation
- Ø Antibacterials & antifungal activities
- Ø Water for climate, resilience, and environment

Theoretical methods for water and energy

- Ø Computational tools
- Ø Quantum computation
- Ø Machine learning and artificial intelligence tools



Important Dates

- Abstract submission opens: Sep. 15, 2024
- Abstract submission closes: Dec. 10, 2024
- Acceptance notification: Dec. 12, 2024
- Early bird registration closes: Nov. 30, 2024

For Registration



Registration Fee Details

Category	Early bird registration* (Until Nov 30, 2024)		Delayed Registration* (Dec 1- Dec 10, 2024)	
	Indian (INR)	Foreign (USD)	Indian (INR)	Foreign (USD)
Students (UG, PG, Ph.D.)	1500	25	1700	40
Postdoc/Faculty/Scientist	2000	50	2500	70
Industry person	2500	100	3000	150
Participation (without any presentation)	1000	10	1500	20
Book chapter publication with ISBN no	Applicable publication charges*			

Registration



Conveners

Dr S Muthu Prabhu - 9944498483
 Dr Sachil Sharma - 7807156581
 Dr Illa Ramakanth - 9573432526

Chemistry | SAS | VIT-AP

Email: suwate@vitap.ac.in

- Registration fee is non-refundable and exclusive of all taxes.
- Registration is mandatory for all the participants.
- Registration fee includes kit, lunch and one-day cultural tour for offline participants

Publications

All accepted and presented papers will be submitted for possible inclusion to Journals/Proceedings/Book chapters.

Journal details will be updated soon in the SuWatE conference website.

For more information visit www.suwate24.com

Keynote speakers



Prof Kazunari Domen
 University of Tokyo, and Sinshu University, Japan



Prof Ch Subrahmanyam
 IIT Hyderabad



Prof Byong-Hun Jeon
 Hanyang university, South Korea



Prof S Ramesh LGardas
 IIT Madras



Prof Giehyeon Lee
 Yonsei University, South Korea



Prof S Meenakshi
 The Gandhigram Rural Institute, Dindigul



Prof V Aravindan
 IISER Tripathy



Prof Ahin Roy
 IIT Kharakpur



Prof T Palaniselvam
 IIT Madras



Prof Yuichi Negishi
 Tohoku University, Japan



Prof N Selvaraju
 IIT Guwahati



Prof P Kalimuthu
 The Gandhigram Rural Institute Dindigul



Prof N Thillai Sivakumar
 CSIR-CLRI



Prof Ramendra Sundar Dey
 INST, Mohali