



# Report of

National Conference on

# ENVIRONMENT, WATER, AGRICULTURE, SUSTAINABILITY AND HEALTH (EWASH-2024): INTEGRATED INDIGENOUS TECHNOLOGICAL ADVANCEMENT FOR ATMANIRBHAR BHARAT

13-14 DECEMBER 2024

Department of Applied Sciences
Visvesvaraya Technological University
Muddenahalli, Chikkaballapur – 562101, Karnataka, India

Organized by



Department of Applied Sciences, Visvesvaraya Technological University
Muddenahalli, Chikkaballapur - 562101



Damodar Academy of Scientific & Educational Research, New Delhi



Save The Environment Kolkata / Gurugram

Sponsored by



DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION MINISTRY OF DEFENCE, GOVERNMENT OF INDIA

## Report on the Program: National Conference on EWASH-2024

The National Conference on Environment, Water, Agriculture, Sustainability, and Health (EWASH-2024) was successfully conducted on 13th - 14th December, 2024, under the theme "Integrated Indigenous Technological Advancement for Atmanirbhar Bharat".

The conference was organized by Department of Applied Sciences, Visvesvaraya Technological University, Muddenahalli, Chikkaballapur in association with Save the Environment (STE), a Society for Research Awareness and Social Development, Gurugram/Kolkata and Damodar Academy of Scientific & Educational Research, New Delhi.

#### **Inauguration Highlights:**

The event was inaugurated by **Dr. Raghupathi A. R.,** Dean and Director (Medical Education), Sri Madhusudan Sai Institute of Medical Sciences and Research, Sathya Sai Grama, Muddenahalli, Chikkaballapur, Karnataka.

The ceremony was presided over by **Prof. G. S. Venkatesh**, Coordinator, Visvesvaraya Technological University, Muddenahalli.

#### **Distinguished Guests:**

- Dr. Kshipra Misra, President of Save The Environment and former Additional Director, DIPAS (DRDO), Delhi.
- \* **Dr. Sushil Kumar Singh**, Scientist "F", Acoustic Sensor Division, Solid State Physics Laboratory, Timarpur, Delhi.

#### Venue and Schedule:

• Date: 13th December 2024

• **Time:** 10:00 AM

• **Venue:** Seminar Hall, 5th Floor, D1 Block, Visvesvaraya Technological University, Muddenahalli, Chikkaballapur, Karnataka.

#### **Program Features:**

The event featured the **STE Award Ceremony**, honoring contributors to environmental sustainability and technological advancements.

The organizing team, led by **Dr. Dinesh Rangappa** (Organizing Chair) and **Dr. Prasanna D. Shivaramu** (Organizing Secretary), ensured a well-coordinated and impactful conference.

The program emphasized innovative solutions to pressing global challenges through indigenous technology, aligning with the vision of **Atmanirbhar Bharat**.

The event was warmly attended by delegates, academicians, researchers, and industry professionals, fostering collaborative discussions and actionable insights.

# **DAY 1: 13<sup>th</sup> DECEMBER, 2024**

The inaugural program started at 10:00 AM with a lamp-lighting ceremony, followed by STE award Ceremony.

# Inauguration and Opening Ceremony with Lighting Lamp

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The ceremony was presided over by **Prof. G. S. Venkatesh**, Coordinator, Visvesvaraya Technological University, Muddenahalli.

**Dr. Kshipra Misra**, President of Save The Environment and former Additional Director, DIPAS (DRDO), Delhi and **Dr. Sushil Kumar Singh**, Scientist "F", Acoustic Sensor Division, Solid State Physics Laboratory, Timarpur, Delhi addressed the gathering as guests.

**Dr. Prasanna D. Shivaramu**, Organizing Secretary, EWASH-2024 delivered welcome address and **Dr. Dinesh Rangappa**, Organizing Chair, EWASH-2024 presented the **Conference Overview and VTU**.



The following prestigious awards were conferred during the **EWASH-2024** National Conference:

#### STE Award Ceremony 2024

STE Fellowship Award, STE Water Award, STE Women Excellence Award, STE Meritorious Award, STE Innovative Award, STE Young Researcher Award, and STE Student Award 2024.











First keynote address delivered by Dr. Paromita Chakraborty, Professor & Head, Centre for Research in Environment, Sustainability Advocacy and Climate Change Directorate of Research, SRM Institute of Science Technology, Kattankulathur-603203, Tamil Nadu,

She delivered the keynote address on, "Interlinkages between plastics and endocrined is rupting chemicals: Risk Assessment and Sustainable Technologies."



**Invited Talks:** Topics included indigenous acoustic emission technology for disaster early warning systems, sustainable production of kojic acid, artificial intelligence for environmental applications, and supercritical carbon dioxide-assisted eco-friendly textile dyeing.



Invited Talk – 1: "Indigenous acoustic emission technology for real time early warning system for natural disasters" Dr. Sushil Kumar Singh,

Scie ntist
''F",
D.O.
- A c oust i c Sen s o r

T INVECTMENT, WATER, CONTROL OF SUSTAINABLE IVERS

Division, Solid State Physics Laboratory, Lucknow Road, Timarpur, Delhi- 110054



Invited Talk – 2: "Sustainable production of kojic acid using renewable resources"

Dr. Saurabh Jyoti Sarma Associate Professor &

Interim
Head,
Depart
men
t of



Biotechnology, Bennett University (Times of India Group) Cabin No. 160, M-Block, First Floor Plot No. 8-11, TechZone-II, Greater Noida.



Invited Talk – 3: "Artificial Intelligence for environment, water and agriculture". Dr. Mallikarjun Kodabagi, Nagarjuna College of Engineering and Technology, Devanahalli





Invited Talk – 4: "Supercritical carbon dioxide assisted ecofriendly dyeing of textiles: Future perspectives", Dr. M. Yogendra Kumar, Scientist, Defence Bio-Engineering and Electromedical Laboratory, Defence Research and Development Organisation, Ministry of Defence, CVRaman Nagar, Bengaluru.





Invited Talk – 5: "Semiconducting Nanostructures for Sensor and Catalytic Dye Degradation applications", Dr. H. C. Ananda Murthy, School of Applied Sciences, Papua New Guinea University of Technology, Lae, Morobe Province, Papua New Guinea





**Invited Talk – 6:** "Nanomaterials in health care", **Dr. Navya Rani M**, Nagarjuna College of Engineering and Technology, Devanahalli.



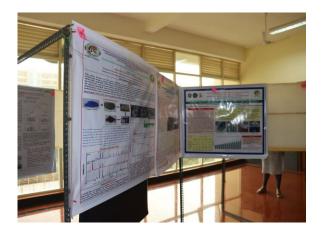
**Presentation by Industry Representatives: Canopus; Metrohm** 

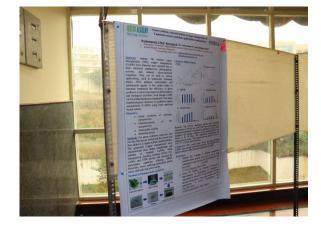


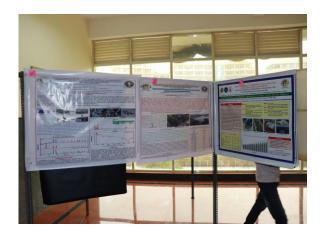


#### **POSTER SESSION - DAY 1**

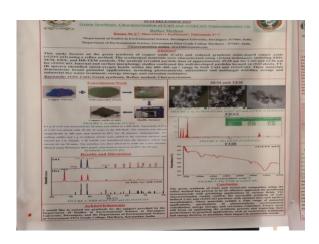
The conference featured interactive poster sessions and oral presentations, showcasing cutting-edge research and practical innovations by scholars and industry experts. Topics ranged from nanomaterials for healthcare to the valorisation of industrial waste for environmental applications.

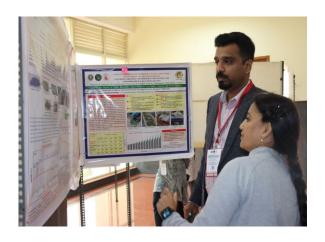












### **DAY 2: 14<sup>th</sup> DECEMBER, 2024**

#### **ORAL PRESENTATION – DAY 2**

**Invited Talks:** Speakers covered diverse topics such as recycling molybdenum from industrial wastewater, nano iron-pyrite seed stimulants for sustainable agriculture, climate change impacts, and advanced metal-based phosphates for water management.

Invited Talk – 8: "Nano Iron-pyrite Seed Stimulant for Sustainable Agriculture" Dr. Kalpana Bhargava, Scientist G, Technology Director, Advanced Technology High Energy Material Research Lab (HEMRL), Defence Research and Development Organization (DRDO), Ministry of Defence, Government of India, Sutar wadi, Pashan, Pune, Maharashtra.







Invited Talk – 9: "Valorisation of process waste for the removal of organic dyes from water", Dr. Suraj K. Tripathy, Associate Dean, School of Chemical Engineering, Associate Professor, School of Biotechnology Kalinga Institute of Industrial Technology, Bhubaneswar Odisha, India.

Invited Talk – 10: "Impact of Climate Change on Precipitation and Stream Flow" Dr. Nagraj S. Patil, Visvesvaraya Technological University, Belagavi.

**Invited Talk – 11:** "Valorization Metal-Based Phosphates for Sustainable Water Management: Advancing SDG 6 Goals", **Dr. Amita Somya**, Amity University, Bengaluru.











**TEA BREAK AND POSTER SESSION – DAY 2** 











#### VALEDICTORY AND AWARD CEREMONY

The conference concluded with a valedictory session and award distribution, acknowledging the best contributions across various categories. The EWASH 2024 National Conference served as a significant platform for sharing knowledge, fostering collaborations, and inspiring future innovations in sustainability, health, and environmental science.

The organizing committee expressed gratitude to all participants, sponsors, and volunteers for their efforts in making EWASH 2024 a resounding success.

STE Dr. Praloy O. Basu Lifetime Achievement Award – 2024 Dr. Vidyashankar S.

**BEST POSTER PRESENTATION AWARDS** 

BEST ORAL PRESENTATION AWARDS

**GROUP PHOTOS** 

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**BEST POSTER PRESENTATION AWARDS** 













# **BEST ORAL PRESENTATION AWARDS**



# **GROUP PHOTOS**



# **GLIMPSES OF EWASH - 2024**

