



DST - PURSE - II



International Conference on

**WASTE TO WEALTH AND ENERGY -
Towards Global Circular Economy**

DECEMBER 14 – 16 , 2021



Organised by

**DEPARTMENT OF CIVIL ENGINEERING
(NBA - ACCREDITED)
FACULTY OF ENGINEERING AND TECHNOLOGY
ANNAMALAI UNIVERSITY
ANNAMALAI NAGAR - 608 002
CHIDAMBARAM,
TAMIL NADU, INDIA.**

About Annamalai University

Annamalai University was established by Rajah Sir S.R.M. Annamalai Chettiar as per Annamalai University Act 1928 (TamilNadu Act 1 of 1929). In 2013, Annamalai University Act, 2013 (Tamil Nadu Act 20 of 2013), has come into force from September 25, 2013, after obtaining the assent of His Excellency, the President of India. Annamalai University, accredited with 'A' Grade by NAAC in 2014, is one of India's largest public residential universities with 10 Faculties and 49 departments of study. The NIRF-2021" by the Ministry of Human Resource Development (MHRD) has ranked the University in the band 101 - 150 in the University Category, 16th in Pharmacy Category and 40th in the Medical Category ranking of India. The Times Higher Education World University Ranking - 2022 has ranked Annamalai University in 1200+ for Overall category and in Subject Category the University is ranked 601+ for Clinical & Health Subjects, 801+ for Life Sciences and 1000+ in the Physical Sciences. "The QS World University Ranking - 2021" has ranked Annamalai University in the band of 301 - 350 in Asia Ranking. Annamalai University has a commendable track record in projects and publications and has been awarded the PURSE Programme by the Department of Science and Technology. Ten departments are supported by UGC-SAP, Ten by DST-FIST and two departments have attained the status of Centre of Advanced Study. Annamalai University has joint research and innovation partnerships with 24 institutions across USA, Europe, Australia, Japan, and the UK. The list of partners includes prestigious institutes like Karolinska Institute, John Hopkins University, and University of Michigan amongst others.

Two of the most notable international collaborations in which Annamalai University is the Co-ordinating Institute include the Indo- EU FUNCFOOD Project and the 21st Century Indo-US Knowledge Initiative. There are several ongoing research projects with international foundations and industries like Bayer, Cavin-Kare, Dow Agro-sciences, Bill & Melinda Gates Foundation, HCL, L&T, Accenture, and Huawei. To its credit, the University has obtained 15 Patents and has 40 MoUs with research partners like FAO, IRRI and USDA. The ISR activities of the University include, Hospital on Wheels, Free Medical and Dental Camps in Villages, Lifestyle & Hygiene Awareness, Rural & Urban Health Centres through the Faculty of Medicine and Dentistry which is attached with a 1400 bedded hospital. The Faculty of Agriculture carries out extension activities like Agripreneurship Development Programme, Sustainable Livelihood Projects for Tsunami affected people and Training Farmers in Integrated Farming.

ABOUT THE DEPARTMENT

The Department of Civil Engineering presently offers undergraduate programme in B.E. Civil Engineering, Postgraduate programmes in Environmental Engineering, Water Resources Engineering & Management, Environmental Engineering & Management and Ph.D. in Civil Engineering. The Department has received financial assistance of Rs. 100 lakhs through UGC-SAP DRS phase-II. The Department has strong infrastructure with well equipped laboratories under UGC-SAP, AICTE and other funding agencies. The Department has received grants through major and minor research projects for a tune of Rs.225 lakhs and till date produced 67 Ph.Ds in the last 15 years. The Department had MOU/Collaboration for student exchange programme with Fukii University, Japan. The centre for Environment, Health and Safety (CEHS) an integral part of the Department, is accredited as EIA consultant by QCI under NABET scheme for MoEF & CC for several industrial sectors. The centre has completed industrial consultancy projects for a tune of Rs.100 lakhs and also pursuing work for about Rs.300 lakhs.

About the Conference

India is one of the few nations endowed with an abundance of biodiversity. Unfortunately, overexploitation in the past several decades leads to depletion and contamination of natural resources, flora, and fauna. Inferior waste management and sanitation have always been a stigma that primarily intervenes with environmental quality. Waste and wealth escalate parallelly. Intrinsically, India has made rapid progress towards establishing an industry-based economy in the past decade. The same leads to the generation of a plethora of censoring waste. Tackling and management of such ultracritical urban waste is a gigantic task that seeks an advanced solution. Further, there is a potential of recycling and recoverability opportunity associated with this new age waste that may lead to the diminished consumption of raw virgin resources and promote the concept of the circular economy. Re-usage of materials shall also be uncourageous in terms of lessening the carbon footprint. With increased urbanization, the characteristic of municipal solid waste (MSW) is also undergoing a rigorous amendment and with the presence of domestic hazardous wastes such as paints, creams, tube lights, and CFL bulbs, batteries etc. The mended composition of MSW is hugely restricting the recoverability with the conventional windrow composting method. So, robust and advanced waste management technologies with the capability of handling shock loads are obligatory. Specifically, the focus needs to be shifted towards the recovery of energy and convert the waste processing and disposal facilities to self-reliance. With the challenges accelerating in every component of waste management, the conference aims to primarily focus on the cutting edge waste to product and energy recovery technologies, promoting and encouraging made in India equipment and technologies, adaptation and acclimatization of foreign developed technologies for Indian climatic condition and topography, maximize and inculcating the idea of 4R in Indian industries and households, discuss and design a pathway and future perspective of

attaining circular economy through expert panel discussion, minimize the consumption of energy with the help of promoting the concept of green and sustainable buildings, mandatory energy rating of buildings through energy audits, and technical interventions for the micromanagement of waste at community and household level.

KEY NOTE SPEAKERS

Eminent academicians, scientists and chartered engineers of relevance drawn from leading institutions and research organizations will deliver the Key note address

CALL FOR PAPER

The abstract not exceeding 300 words in Microsoft (MS) word (Times New Roman, font size 12, line spacing 1.5), highlighting the results of original research work should be in the following format: Title (Capital and bold with font size 14), Authors name (bold with font size 12) and Affiliation (Address of the institution with e-mail ID of corresponding author). Presenting author should be indicated with an asterisk (*) symbol. Title, author's name and affiliation should be centre aligned. Keywords (Times New Roman, font size 10) should be limited to 5 words. The abstract should be submitted by E-mail to wwece21@gmail.com on or before 15.10.2021

PUBLICATION:

Selected papers/articles will be published as a book chapters in CRC Press, USA and other articles in an official Journal of ISEB:CSIR-NBRI.

Conference Themes

1

Waste to Wealth- Value added Products
Waste to Energy- Recovery

2

Sustainable green energy
Sustainable water Resources

3

Smart technologies to protect natural resources
Circular economy towards sustainable development

4

Zero emission
Carbon foot prints

5

Treatment technologies for water and waste water

6

Green building technologies

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Important Dates :

Abstract Submission Deadline : 15.10.2021

Full Paper Submission Deadline : 15.11.2021

Notification to Authors : 30.11.2021

REGISTRATION FEES

Delegates from India

Academician ₹ 1500

Student PG/Ph.D ₹ 1000

Delegates from Industry ₹ 2500

Delegates from abroad US\$ 150

Registration

The participants are requested to send the filled in registration form to the “The Convener” along with the registration fee on or before 25-10-2021. The application form must accompany with the endorsement of the Head of the Institution/Head of the Department/Research Supervisor for research scholars/students. The conference registration fee should be paid online to the following account.

Name of the Account Holder : The Registrar,
Annamalai University

Savings Account Number : 621201156619

Name of the Bank : ICICI, Annamalainagar

IFSC Code : ICIC0006212

MICR Code : 605229010

Branch Code : 006212

SWIFT Code : ICICINBBXXX

The Authors are requested to register for the Conference through the below link

<https://forms.gle/ZnejkpzGU19rCi4d9>

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