

# 3<sup>rd</sup> International Symposium on Sustainable Energy And Technological Advancements

(23<sup>rd</sup> – 24<sup>th</sup> February 2024)

# ISSETA 2024 Special Session on

# Sustainable and Green Building Construction Materials

## Aims and scope of the session:

It is well known that after water, concrete is the most widely used materials on the earth. Presently construction industries are using all the natural resources for concrete structure. The extraction and processing of these raw materials for concrete has several negative effects like landscape, degradation, dust, noise, visual pollution, loss of agricultural land and more water consumption which also included 4-5% worldwide CO<sub>2</sub> emission. Usage of sustainable materials in the construction industries has increased in recent years. It is necessary to select the suitable sustainable and energy efficient materials by the building engineer without any significant impact on the concrete properties to enhance its life.

### **Topics of interest:**

This special session invites research papers from the following topics (but not limited) to further recognize the performance of sustainable materials in construction industries in the engineering systems.

- 1. Sustainable and energy efficient materials for concrete structures
- 2. Smart materials and technologies for sustainable concrete
- 3. Ecofriendly Green concrete materials
- 4. Designing and properties of sustainable energy efficient concrete
- 5. Advanced characterization techniques for sustainable concrete
- 6. Deterioration of sustainable concrete (Physical, chemical, and microbial)
- 7. Corrosion behavior of sustainable concrete

### Special session organizer:

#### 1. Dr. Vinita Vishwakarma

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Prof. Vinita Vishwakarma is Additional Dean (Research) at Galgotias University, Greater Noida, India. She received her Ph.D from Ranchi University (Ranchi) in 2002. Her research expertise is in biofouling, bioremediation, bioimplants, surface modification of metallic substrates by thin film coatings, concrete modification by different types of pozzolans, admixture, nanoparticles, biodegradation and biodeterioration. She has guided 8 Ph.D Research Scholars. She has published 80 research articles in peered reviewed journals, 65 conference papers, 2 books, 7 book chapters. She completed 12 sponsored research projects from Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS), Department of Biotechnology (DBT), Defence Research and Development Organization (DRDO), Scheme for Promotion of Academic and Research Collaboration (SPARC, MHRD), Department of Science and Technology (DST) (STI HUB), etc. She is the members of many professional bodies such as Indian Science Congress Association, Indian Institute of Metals, Indian Women Scientist Association and Organization for Women in Science for the Developing World. She has also edited several proceedings books and reviewed many journal papers. Presently she is the Editor of a Book series "Sustainable Landscape Planning and Natural Resources Management (SLNR)". She has also recognized as top 2% researcher by Standford University from past three years.

