UNIVERSITÀ DEGLI STUDI FIRENZE | Dipartimento di Scienze della Terra | Dipartimento di Architettura

SEMINAR CYCLE

SUSTAINABLE HERITAGE: ORGANIC LIME AND ANCIENT ENGINEERING IN INDIAN ARCHITECTURE

Prof. Thirumalini SELVARAJ

Heritage and Sustainable Materials Research lab - VIT Vellore, INDIA

Visiting professor at the Department of Earth Science of the University of Florence

24/11/2025

14:30-17:30

Indian Heritage and Organic Lime Recipes

Aula A, Geologia
Via La Pira, 4
50121 Firenze (FI)

28/11/2025

15:30-17:30

Ancient techniques in Indian Heritage Structures

Aula 208, Plesso Santa Teresa
Via della Mattonaia, 14
50121 Firenze (FI)

These seminars focus on different types of organic lime mortar recipes used in India under different climate conditions, exploring their use as climate response materials. Additionally, the strength, durability and longevity of ancient sustainable techniques employed in Indian monuments are characterised in relation to their relevance to modern constructions.

BIO: Prof. Thirumalini Selvaraj has 20 years of experience in research, with more than 80 publications in the field of heritage structures and sustainable materials characterisation.
Her primary research areas include developing scientific methodologies for the restoration of heritage structures, studying the chemistry of organic mortars and exploring carbon capture technology in buildings.
She restored over 30 heritage structures in India and documented around 20 plant and organic additives.
She serves as a member in several scientific expert committees and has two patented products to her.
She is currently working on new old materials in civil engineering, the carbonation potential of organic lime mortars and their carbon storage, in order to provide robust scientific evidence that validates the use of ancient, eco-friendly admixtures in modern construction practices.