Visiting Professor Program  
Academic Year 2024/2025

TEACHING COMMITMENT: 12 hours

COURSE TITLE  
Mineralogy and Chemistry of Inorganic Wastes

TEACHING PERIOD  
2nd term

SCIENTIFIC AREA  
Mineralogy

LANGUAGE USED TO TEACH  
English

COURSE SUMMARY
1) What is waste?;
2) The Aim Conflict in Waste Management: Zero Waste vs Zero Pollution;
3) Minerals as Waste: From Excavation Materials to Asbestos Fibres;
5) Synthetic Minerals: A Contradiction in itself?;
7) Mineral Wastes II: Residues from Industrial Processes and WtE: Slags & Ashes;
LEARNING OBJECTIVES
To become acquainted with the chemical foundations of waste management, in a view of integrated sustainable and circular economy.

VISITING PROFESSOR PROFILE
Based on a strong background in general and applied mineralogy and water-mineral-interaction, the visiting professor should be involved in the new field of "waste mineralogy" by applying mineralogical concepts and methods like electron microprobe and X-ray diffraction to inorganic wastes and by-products like slags, ashes, sludges and dusts to investigate their environmental impact and recycling potential as high-value secondary resources for a sustainable development of our society.

CONTACT REFERENT
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