



17th International Conference of Surfaces, Coatings
and Nanostructured Material | **NANOSMAT2026**
RHODES-GREECE | 6-10 JULY 2026
www.nanosmat.org

SHORT BIO:

Francesco Dalena is Group Leader of the Spectroscopy & Catalysis team within the CLEAR-RN research network at the Laboratoire Catalyse et Spectrochimie (LCS, CNRS, ENSICAEN, Université de Caen Normandie).

He has developed extensive experience in materials chemistry, heterogeneous catalysis, and nanoporous materials through academic and research positions in Italy and France. His work has focused on the synthesis, characterization, and evaluation of zeolites and related catalytic materials, with particular attention to the relationship between structure, active sites, and catalytic performance. His main expertise lies in advanced infrared spectroscopy, including ex situ, in situ, and operando FTIR methodologies. By combining spectroscopy, chemometrics, and catalytic testing, he investigates adsorption phenomena, active sites, and reaction mechanisms under working conditions.

Prior to joining the LCS, he served as Assistant Professor in Chemical Engineering in Italy, where he taught courses in catalysis and sustainable energy-related processes. He has also contributed to international training activities through invited lectures and specialized courses.

Dr. Dalena is the author of more than 70 peer-reviewed publications, with over 1,400 citations and an h-index of 19 (Scopus). He is actively involved in scientific coordination, international collaborations, editorial activities, and peer review for leading journals in catalysis and materials science.