

Mario Marchetti obtained his Ph D at INSA de Lyon (France) in 2002 conducting his research with the French space Agency. He then spent two years at NASA Glenn Research Center working the lifetime of fluid lubricants for space applications. He joined Cerema in 2003, with a research dedicated to winter maintenance of transportation infrastructures and associated environmental impacts till 2015. In 2016, he worked as a research associate in MOPS laboratory for three years at Université de Lorraine, cooperating with its researchers for over a decade on topics interesting Université Gustave Eiffel. As now a senior researcher at Université Gustave Eiffel, his research is dedicated to materials durability and physico-chemical mechanisms at stake in their alteration, implementing Raman spectroscopy, and chemometrics, and with extended competences on instrumentation, infrared thermography, and sensors developments. His talk will deal with the benefits of coupled Raman spectroscopy and microscopy in the characterization of the durability of civil engineering materials, and in particular in the mapping of the specific phases.

