



Seeing beyond

Practical Session: Image Analysis using Machine learning

September 17th, 2020

15.00-16.00 e 16.00-17.00

Faculty of Civil and Industrial Engineering - Sapienza University of Rome

The event will be held ONLY in attendance



PROGRAMME

- Brief introduction to Image Analysis and Segmentation: how to gain valuable and meaningful information from microscopic images
- Introduction to Machine Learning: training the program, learning from examples and experiences, finding relationships
- The ZEN Platform: the microscope software permitting to unleash all features of an imaging station
- From Acquisition to Processing of an Image: how to set up a correct workflow
- Case studies:

- o one standard image analysis vs. Machine learning-based analysis: different approaches and tools
- o one complex case (impossible with standard image analysis): how machine learning permits to overcome hard tasks without tedious manual measurements

SPEAKERS:

Dr. Veronica Sparacino - veronica.sparacino@zeiss.com

After completing a master degree in Geosciences in University of Milan, I have been working for 5 years as a researcher in the field of composites materials at Petroceramics a spin-off of the University of Milan. Since 2012 I have been working as an application specialist before, and as a product and regional sales manager later, for Material Sciences Microscopy.

Dr. Silvia Contessi – silvia.contessi@zeiss.com

In the last four years I made research in the field of soil contamination and environmental restoration, in the framework of a doctoral course in Earth Sciences at Padua University, which will be completed this year. My scientific interests also deal with the development of low CO₂ alternative binders and the re-utilization and valorization of industrial wastes. Since mid-2019 I joined Zeiss as an Application specialist for Material Science Microscopy.