



Helmholtz Institute Freiberg for Resource Technology



RawMatCop short course *(Tentative Program updated on the 17th of April, 2018)*

University of Liège, Rue Courtois 1, 4000 Liège, Belgium

11th to 14th of June, 2018

DAY 1

- 8:30 - 9:00 Registration and welcome
- 9:00 - 10:00 Introduction to satellite based remote sensing and examples of general applications.
- 10:00 - 11:00 Introducing the Copernicus programme
- 11:00 - 12:00 Challenges facing raw materials value chain (exploration, extraction, processing, recycling, etc.)
- 12:00 - 13:00 Lunch
- 13:00 - 16:30 Hands-on session to introduce image downloads, visualization, enhancement, spectrum extraction, etc.

DAY 2

- 9:00 - 12:00 Introduction to image classification, machine learning, feature reduction + computer applications
- 12:00 - 13:00 Lunch
- 13:00 - 16:30 Basics of SAR, coherence, reflectivity and polarimetry, SAR classification methods + computer applications

DAY 3

- 9:00 - 12:00 Case studies and group-work activities
- 12:00 - 13:00 Lunch
- 13:00 - 15:30 Case studies and group-work activities
- 15:30 - 17:00 Practical session: InSAR, imaging an earthquake

DAY 4

- 9:00 - 10:00 Hyperspectral imaging as non-invasive techniques for different applications
- 10:00 - 12:00 Multiscale integration from outcrop to satellites - the use of unmanned aerial vehicles fill the gap
- 12:00 - 13:00 Lunch
- 13:00 - 15:00 Multiscale integration from outcrop to satellites - the use of unmanned aerial vehicles fill the gap
- 15:00 - 16:00 Participants presenting their groupwork results
- 16:00 - 17:00 General Discussion