



UNIVERSITY OF TRENTO - Italy
Department of Industrial Engineering



FONDAZIONE
BRUNO KESSLER

Provisional program

2nd Workshop "Materials Characterisation by the Combined Analysis"

November 26-30, 2018, Trento (Italy)

ThermoFisher
SCIENTIFIC



Monday	Tuesday	Wednesday	Thursday	Friday
<i>Rietveld analysis</i>	<i>Microstructure and nanostructured materials</i>	<i>Diffraction, Reflectivity and Fluorescence combined</i>	<i>Electron diffraction and analyses</i>	<i>The combined analysis in the raw materials field</i>
	9h Microstructure analysis I: from line broadening to Rietveld-PDF (Luca Lutterotti)	9h Fluorescence: XRF and GIXRF analyses (Christina Strelti)	9h Analytical Electron Microscopy: A multiple-tool technique for combined analyses (Stefano Gialanella)	9h Microstructure analysis III: examples and application to geology (Juan Gomez Barreiro)
~10h30 / 11h : coffe break				
10:00h Welcome Introduction: Beam-Matter interaction (Giancarlo Pepponi) Classical Rietveld Analysis (Luca Lutterotti)	Microstructure and Texture analysis: theory and case studies (Daniel Chateigner)	Combining Diffraction, Reflectivity and Fluorescence analysis in thin films (Giancarlo Pepponi)	Analysis of Electron Diffraction Ring Patterns (Philippe Boullay)	Mineralogical and chemical analyses in the mine environment (Xavier Bourrait) Photonic for in situ monitoring in the mine exploration (Salvatore Siano)
~12h30 / 14h : Lunch				
Instrumentation and measurements (Christophe Fontugne)	Practical session: microstructure (size-strain and defects) Hands on Maud	Practical session: XRD and XRF combined analysis on bulk materials Hands on Maud	Practical session: working with diffraction images and texture Hands on Maud	Practical session: combined mineralogical and chemical analyses Hands on Maud
~15h30 / 16h : coffe break				
Practical session: Rietveld analysis and Phase Quantification Hands on Maud	Practical session: nanomaterials and Rietveld-PDF analysis Hands on Maud XRD-XRR-XRF laboratory (17:00 – DII/FBK labs)	Practical session: XRR and GIXRF combined analysis on thin films Hands on Maud	Practical session: Ring pattern analysis from electron diffraction images Hands on Maud	Practical session: student's selected case studies Hands on Maud
~18h End of the day				
Welcome Dinner			Social Dinner	