



Wednesday, 8th February 2023 - Microsymposium UDM1
Venue: IBS Auditorium

08:40 - 08:45	Welcome from organizers	
Session I – Chair : Jean-louis Hazemann		
08:45 - 09:25	Keynote talk: High brightness and high coherence: what does it mean for imaging in environmental science?	Chris Jacobsen , <i>Northwestern University, USA</i>
09:25 - 09:45	Nannoconus: Analytical clue from past to future oceanic environments	Rajkumar Chowdhury , <i>Université Grenoble Alpes, France</i>
09:45 - 10:05	Porosity evolution during sustainable ironmaking with hydrogen probed by 4D synchrotron X-ray nano-tomography	Yan Ma , <i>Max-Planck-Institut für Eisenforschung, Germany</i>
10:05 - 10:30	Coffee break	
Session II – Chair : Alex Fernandez-Martinez		
10:30 - 11:10	Keynote talk: Investigating the structure and reactivity of mineral–water interfaces using in situ high-resolution X-ray reflectivity	Sang Soo Lee , <i>Argonne National Laboratory, USA</i>
11:10 - 11:30	In situ measurements of interface evolution during mineral dissolution	Bastien Wild , <i>Université Grenoble Alpes, France</i>
11:30 - 11:50	Importance synchrotron X-ray radiation in determining technology critical elements speciation : application in (bio)hydrometallurgy	Eric van Hullebusch , <i>Institut de Physique du Globe de Paris, France</i>
11:50 - 12:10	Yttrium speciation in world-class phosphorite deposit	Clément Bonnet , <i>Université de Montpellier, France</i>
12:10 - 13:30	Lunch at ESRF/ILL restaurant	
Session III – Chair : Hiram Castillo Michel		
13:30 - 14:10	Keynote talk: Elucidating the uptake and transformation of nanophases by plant leaves	Astrid Avellan , <i>CNRS, France</i>
14:10 - 14:30	Arsenic speciation controls the immobilization mechanism and stability of mixed valence iron minerals	Jeffrey Paulo H. Perez , <i>GFZ German Research Centre for Geosciences, Germany</i>
14:30 - 14:50	Spatially and temporally resolved mineral phase evolution and arsenic retention in microfluidic models of zerovalent iron-based water treatment	Andreas Voegelin , <i>Swiss Federal Institute of Aquatic Science and Technology, Switzerland</i>
14:50 - 15:10	Nanocrystalline manganese oxides: structure, reactivity, and their role in the geochemical cycle of trace elements	Sylvain Grangeon , <i>BRGM, France</i>
15:10 - 15:35	Coffee break	
Session IV – Chair : Luis Carlos Colocho Hurtarte		
15:35 - 15:55	Carbonate-oxalate mineralogy from the Great Barrier Reef Under Synchrotron light	Eduardo Villalobos-Portillo , <i>ESRF, France</i>
15:55 - 16:15	From soil to bean: Unravelling the pathways of cadmium in cacao	Hester Blommaert , <i>Université Grenoble Alpes, France</i>
16:15 - 16:35	How soil organic carbon fractions and the phosphorus distribution at the microscale respond to land use change in Amazonian Dark Earth and Acrisol	Luis Carlos Colocho Hurtarte , <i>ESRF, France</i>
16:35 - 16:55	Rhenium speciation and reduction pathway in sulfidic settings	Carolina Guida , <i>Université Grenoble Alpes, France</i>