

Workshop Programme

“Recent Developments and Applications in earth sciences of electron probe micro-analysis”

Presentations are scheduled for the afternoon European time to allow potential participation from both the East-coast USA and parts of Asia (all times in Eastern European Time-EET; CET+1, GMT+2, EST+7, PST+10).

Day 1 (5th April 2021)

14:00-14:15 Welcome

14:15-15:00 Background, strengths, and limitations of EPMA - EPMA methods with some application (AH)

15:00-15:15 Break

15:15-16:15 Sample preparation (flat surfaces, mounting media, carbon coating etc.)(AH)

16:15-16:30 Break

16:30-18:00 Poster presentations from participants*

Day 2 (6th April 2021)

14:00-14:45 Use of standards - quantitative analysis - Statistics (AH)

14:45-15:00 Break

15:00-15:45 X-ray maps (JDO)

15:45-16:00 Break

16:00-16:45 Applications of EPMA on geological materials (JA)

Day 3 (7th April 2021)

14:00-14:45 Rare earth element analysis using EPMA (JA)

14:45-15:00 Break

15:00-15:45 Analysing silicate glass: beam damage, volatiles-by-difference, and oxidation state (EH)

15:45-16:00 Break

16:00-16:45 EPMA in (volcanic) diffusion studies (JH)

Day 4 (8th April 2021)

14:00-14:45 *The power of electronprobe microanalysis in the study of extraterrestrial materials* (JD)

14:45-15:00 Break

15:00-15:45 *EPMA in quantitative metamorphic petrology - XMapTools-I* (PL)

15:45-16:00 Break

16:00-16:45 *EPMA in quantitative metamorphic petrology - XMapTools-II* (PL)

Day 5 (9th April 2021)

14:00-14:45 *EPMA in concert with other techniques* (JH)

14:45-15:00 Break

15:00-15:45 *Modelling EPMA (CASINO, CalcZAF/Standard)*(EH)

15:45-16:00 Break

16:00-17:00 WDS X-ray mapping- how to perform quantitative matrix, background and interference corrections on pixels (JDO)

17:00-17:15 Closing remarks (IB)

*: will be held only in case a minimum number of abstracts received (n=10)

Instructors (in alphabetical order of the last name)

Julian Allaz (JA) ETH Zürich

James Day (JD) University of San Diego, SCRIPPS

John Donovan (JDO) University of Oregon

Anette Von der Handt (AH) University of Minnesota

Jason Herrin (JH) Earth Observatory of Singapore

Ery Hughes (EH) California Institute of Technology

Pierre Lanari (PL) University of Bern

Coordinator-Organizer Ioannis Baziotis (IB) Agricultural University of Athens