

[MS-13. Materials in geology, mineralogy and archeology](#)

10 September, 16:45 - 18:45 / 11 September, 16:30 - 18:30

MS-13-P-1420

Identification of twin types in twinned natural quartz crystal by FEGSEM and EBSD analysis

Presenting author: **Samardžija Z.**

Authors: Samardžija Z., Lenart A.

MS-13-P-1819

Earliest life on Earth: new insights from electron and ion beam microscopy

Presenting author: **Wacey D.**

Authors: Wacey D., Saunders M., Kong C.

MS-13-P-1926

TEM Studies of Clay Mineral Nanotubes: Imogolite and Pseudo-Boehmite

Presenting author: **Iijima S.**

Authors: Iijima S., Zheng L.

MS-13-P-1972

The interrelation of elemental and phase composition of Norilsk ore type

Presenting author: **Mashukov A. V.**

Authors: Mashukov A. V., Mashukova A. E., Ponomareva S. V.

MS-13-P-2275

Combining EBSD and TEM to infer the crystallographic and shape orientation relation of acicular TiO₂-inclusions with the garnet host lattice

Presenting author: **Habler G.**

Authors: Habler G., Proyer A., Wirth R., Abart R.

MS-13-P-2452

Study of the oolites Bakchar ore area by scanning electron microscopy.

Presenting author: **Kryazhov A.**

Authors: Kryazhov A., Rudmin M., Logvinenko O., Ilenok S.

MS-13-P-2457

The mineralogy of Au-bearing skarn zones of the Topolninskoe area (Gorny Altai)

Presenting author: **Kryazhov A.**

Authors: Logvinenko O., Kryazhov A., Rudmin M.

MS-13-P-2464

Characterization of sub-micron UO₂ inclusions in natural baddeleyite (ZrO₂)

Presenting author: **O'Connell J. H.**

Authors: O'Connell J. H., Lee M. E., Janse van Vuuren A.

MS-13-P-2502

Characterization of twin domains in Phalaborwa baddeleyite xenocrysts by EBSD and TEM

Presenting author: **Lee M. E.**

Authors: Lee M. E., Goosen W. E., O'Connell J. H., Janse van Vuuren A.

MS-13-P-2522

3D imaging of chemical distribution from melting in the laser-heated diamond anvil cell

Presenting author: **Nabiei F.**

Authors: Nabiei F., Cantoni M., Badro J., Dorfman S., Gaal R., Gillet P.

MS-13-P-2624

HRTEM investigation of complex modular structures in geo-materials: an important investigation tool to reveal fine nanotextures of titanium-disilicates

Presenting author: **Genovese A.**

Authors: Genovese A., Camara F., Falqui A., Sokolova E., Hawthorne F. C.

MS-13-P-2681

Electron microscopy and DFT study of (130) twins in chrysoberyl crystals from Pratinhas, Brazil

Presenting author: **Daneu N.**

Authors: Drev S., Komelj M., Mazaj M., Rečnik A., Daneu N.

MS-13-P-2813

Topotaxial transformation of ilmenite (FeTiO₃) single-crystals to rutile (TiO₂) and hematite (Fe₂O₃) during thermal treatment

Presenting author: **Stanković N.**

Authors: Stanković N., Rečnik A., Šturm S., Daneu N.

MS-13-P-2876

Microscopic methods for the study of biomineralization in ancient sedimentary rocks and modern marine sediments.

Presenting author: **Reykhart L.**

Authors: Reykhart L.

MS-13-P-3049

Use of large area phase distribution maps for determination of modal analysis and chemical composition of geological samples

Presenting author: **Halodova P.**

Authors: Halodova P., Haloda J.,

MS-13-P-3062

THE CONTRIBUTION TO MORPHOLOGICAL AND CHEMICAL CHARACTERISTICS OF THALLIUM MINERALS FROM ALLCHAR

Presenting author: **Šoufek M.**

Authors: Šoufek M., Bermanec V., Mikulčić-Pavlaković S., Spasevski L.

MS-13-P-3238

Three dimensional morphometric characterization of rock pore-throats in sedimentary oil and gas reservoirs by scanning electron microscopy

Presenting author: **Leyte F.**

Authors: Leyte F., Pacheco S. U., Garibay V., Tovar J. E., Palacios E., Angulo B. E., Esquinca C., Martinez E., Prado P.

MS-13-P-3259

Electron Microscopy of Smectite Clay and the Assembly

Presenting author: **Chiou W.**

Authors: Chiou W., Kaufhold S., Dohrmann R., Ishikawa A., Kuwamura Y., Minoda H., Fukushima K.

MS-13-P-3326

Determination of the 3D texture of hematite aggregates from different structural domains of Quadrilátero Ferrífero (Iron Quadrangle)

Presenting author: **Ferreira F. O.**

Authors: Ferreira F. O., Lagoeiro L. E., Barbosa P. F., Rodrigues C. A.

MS-13-P-3328

The role of deformation mechanisms related to phase transition in distinct structural domains of the Quadrilátero Ferrífero's Banded Iron Formations

Presenting author: **Ferreira F. O.**

Authors: Ferreira F. O., Lagoeiro L. E., Barbosa P. F., Rodrigues C. A., Gonçalves F. L.

MS-13-P-3471

A multi-technique approach by SEM/EDS, Optical Microscopy, XRD, FT-IR to characterize limestone from Constantine, North-East of Algeria.

Presenting author: **Benguedouar M.**

Authors: Benguedouar M., Boucheur M., Benabbas C.,

MS-13-P-5721

Refinement of lattice parameter of hematite by Nano-beam electron diffraction

Presenting author: **Freitas E. F.**

Authors: Freitas E. F.

MS-13-P-5929

Nanoscale characterisation of meteoritic and geological samples using combined TKD and EDS in the SEM

Presenting author: **Trimby P. W.**

Authors: Trimby P. W., Daly L., Bland P., Jacob D. E., Moody S., Piazzolo S., Ringer S. P.,

MS-13-P-6005

Understanding mineral weathering on Mars using DualEELS / EDX mapping in STEM

Presenting author: **Maclaren I.**

Authors: MacLaren I., Lee M. R., Kovacs A., Tomkinson T., Smith C. L.