

Research Field: ASTROBIOLOGY & GEOMICROBIOLOGY Focused Field: BIOMINERALS



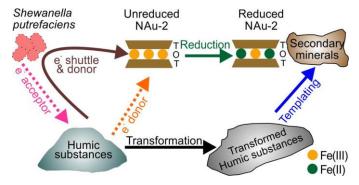
SHORT BIO

Following a B.Sc. degree in Geology at Central South University (CSU, 2008), China, I was offered a PhD project led by Dr. Hailiang Dong, at the Department of Geology & Environmental Earth Science, Miami University, US. I graduated with a diverse area of interest and experience in aqueous geochemistry with an interest in contributing to the overall understanding of Fe geochemical cycling and soil organic matter at play between the geo-, hydro-, and biosphere. I also taught a practical TEM and SEM lab course (in support of corresponding formal class instruction by other faculty) to multidisciplinary students at both undergraduate and graduate levels. This hands-on course is challenging to teach because it is both intensive in time and comprehensive in scope, aiming to individually train students with varying lab experiences from initial sample preparation to the ultimate independent operation of the TEM/SEM for sample analysis and imagery interpretation.

Postdoc HONGYAN ZUO



PhD: GEOMICROBIOLOGY – Miami University (US) Bachelor: GEOLOGY – Central South University (China)



Zuo H., et al., 2021

KEY PUBLICATIONS (first author)

Zuo, H., et al., 2021.

Reduction of Structural Fe(III) in Nontronite by Humic Substances in the Absence and Presence of Shewanella putrefaciens and Accompanying Secondary Mineralization. American Mineralogist.

Zuo, H., et al., 2020.

Role of clay-associated humic substances in catalyzing bioreduction of structural Fe (III) in nontronite by Shewanella putrefaciens CN32. Science of The Total Environment.

Zuo, H., et al., 2016.

Typomorphic feature of chromium sericite in granite hosted gold deposits in Jiaodong Peninsula, China. Applied Clay Science

PROFESSIONAL EXPERIENCE

ORCID: 0000-0002-3343-3131

Ongoing - 2021 - Macau University of Science and Technology, Macao (China) - Post Doctoral

2021 – 2020 – Focus e-Beam Technology Co., Ltd (China) – Field Application Engineer

2018 – 2016 – Center for Advanced Microscopy and Imaging, Miami University – EM teaching Assistant

2020 – 2015 – Department of Geology & Environmental Earth Science, Miami University – Research Assistant

GRANTS

科技部国家重点研发计划2021YFF0701404:

数字化低纹波高稳定度高压电源-课题负责人2022-2024

