



2020 ACS Fall National Meeting
August 17-20 | Virtual
*Moving Chemistry from Bench to
Market*



Geochemistry Division Program

Time zone: Pacific Daylight Time (US and Canada)

Broadcast presentations (also available on-demand afterwards)

Monday (8/17) 10-12 pm PDT

- Mario Villalobos Mechanisms of Tl(I) sorption and structural effects on poorly crystalline birnessites as a function of Tl(I) concentration
- Young-Shin Jun Fast photochemically-facilitated formation of MnO₂ nanoparticles in the environment
- Huichun Zhang Redox reactions of Manganese oxides in complex systems
- Mengqiang Zhu Oxidative decomposition of natural organic matter by manganese oxide

Monday (8/17) 1-3 pm PDT

- Vasileios Anagnostopoulos Geochemical controls of bixbyite and manganite on the mobility of Tc-99: TcO₂ oxidative dissolution under anoxic conditions
- Zhenwei Gao Effects of halide ions on photochemically-induced abiotic formation of Mn oxides
- Shannon Eichmann Nanoscale thermal conductivity measurements of kerogen-rich shales using atomic force microscopy
- Nithya Subramanian Understanding coexistence of montmorillonite swelling states through mixing energetics

Tuesday (8/18) 10-12 pm PDT

- Martial Taillefert Development of a gene-centric kinetic model for competitive terminal electron-accepting processes in sediments
- Nan Xie Development of a kinetic model to investigate the mechanism of dark ROS production during microbially-driven Fenton reactions
- Jimmy Murillo Gelvez Abiotic reduction of the munitions compounds DNAN and NTO by AQDS and Leonardite humic acid
- Kevin Hickey Modeling the reduction of nitroaromatics by humic acid using quantum chemically computed reaction energies and quinone functional groups

Tuesday (8/18) 1-3 pm PDT

- Yaguang Zhu Sulfate induces a compact and thick CaCO₃ formation that helps protect Portland cement from supercritical CO₂ attack
- KungWon Choi Stability of mineralized carbon and structural distortion of calcite by Mg²⁺
- Jing Zhang Adsorption of mono- and poly-molybdate (MoO₄²⁻) onto iron oxides: A multi-technique approach
- Jennifer Bjorklund First-principles investigation of Keggin-type nanocluster stabilization and reactivity

Wednesday (8/19) 10-12 pm PDT

- Arindam Malakar Ferrihydrite soil amendment limit arsenic uptake in rice by promoting iron plaque formation
- Meret Aepli Is carbon mineralization in floodplains controlled by the redox reactivity of iron minerals?
- Qian Wang Speciation evolution of lead and nickel during (hydro)thermal treatments of sewage sludge
- Swapnil Patil Metagenomics study of soil microcosms to evaluate the bioremediation of textile dyes in a contaminated ecosystem

Wednesday (8/19) 1-3 pm PDT

Adebola Adeyi	Impact of abandoned quarry mine sites on the environment and human health
Vallery Kalinichenko	Biogeosystem technique paradigm for the world water scarcity surmounting
Karen Morrison	Scientific advancements and applications in pesticide regulation

On-demand presentations

Anastasia Ilgen	Sr stable isotope fractionation during adsorption on Fe and Al oxides and clay minerals
Mark Schlautman	Rates of abiotic MnII oxidation by O ₂ : Influence of various multidentate ligands at high pH
Haesung Jung	Redox cycling driven transformation of layered Manganese oxides to tunnel structures under low temperature geochemical condition
Sassi Benkaddour	Using macroscopic and ultrafast spectroscopic approaches to decouple the effect of structural properties on the reactivity of manganese oxides
Piotr Zarzycki	Prediction of the mobility of uranium(VI) complexes in smectite interlayers
Clare Johnston	“Effect of aluminum substitution on the reactivity and growth of goethite and hematite nanoparticles”
Hal Gokturk	Interaction of methane with crown ether molecules
Hidemitsu Katsura	Variation of air radiation dose rates from October 2019 to December 2019 inside cabin flights from Singapore to Tokyo

Sci-Mix posters

Alex Nowak	Speciation of vanadium in sulfidic natural waters
Hal Gokturk	Interaction of methane with crown ether molecules

GEOC Division Networking / Social Hour

Date: Aug 19, 2020

Time: 4–5 pm Pacific Daylight Time (US and Canada)

Access information available soon!

CALL FOR SYMPOSIA

Spring 2021 ACS National Meeting March 21-25, San Antonio, TX

The Spring 2021 ACS National Meeting will be held from March 21-25 in San Antonio, TX. The meeting theme is “*Macromolecular Chemistry: The Second Century*”. Please consider organizing a symposium in areas of broad interest to the geochemistry community, as well as topics aligned with the meeting theme.

ACS currently plans to hold this meeting in person, but has also planned to implement a virtual component for all future meetings.

If you are interested in organizing a symposium, please send an email to Program Chair Yuanzhi Tang (yuanzhi.tang@eas.gatech.edu) with the following information:

- Title of the proposed symposium
- A brief description of the symposium
- Name, affiliation, and contact information of the organizer(s)
- Potential co-sponsoring divisions/programs

Symposia proposals are due by **August 28th, 2020**.

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