

Friday

Chemistry of Materials: Materials for Energy and Catalytic Applications:

09:00am - 11:20am USA / Canada - Pacific - April 16, 2021

[Claus Lugmair, Organizer](#) | [Timothy Siegler, Presider](#) | [Bharat Baruah, Presider](#)

Exploration of cycloaddition reactions of mono-, di- and triazines with transition metals resulting in nitrogen-rich metallocyclic tetrazene complexes and bistetrazaoles toward novel high energy materials

09:00am - 09:20am USA / Canada - Pacific - April 16, 2021

[Dr. Shivaiah Vaddypally, PhD, Presenter](#)

Gas sieving zeolitic membrane by the condensation of precursor nanosheets

09:20am - 09:40am USA / Canada - Pacific - April 16, 2021

[Kumar Varoon Agrawal, Presenter](#)

Homogeneous mix matrix membranes based on metal-organic polyhedra for carbon capture

09:40am - 10:00am USA / Canada - Pacific - April 16, 2021

[Fan Chen, Presenter](#) | [Hongcai J. Zhou](#)

Withdrawn

10:00am - 10:20am USA / Canada - Pacific - April 16, 2021

Green process for recovery of nickel hydroxide from end of life batteries and its conversion to films and membranes

10:20am - 10:40am USA / Canada - Pacific - April 16, 2021

[Dr Allen Apblett, Ph.D, FACS, Presenter](#) | [Russel Rahman](#) | [Audrey Vecoven](#)

Fabrication of transparent wood infiltrating natural polymer

10:40am - 11:00am USA / Canada - Pacific - April 16, 2021

[Bharat Baruah, Presenter](#) | [Kelsey Peacock](#)

Synthetic control of iodide vacancy mediated broadband light emission in self-assembled quantum-materials towards LED applications

11:00am - 11:20am USA / Canada - Pacific - April 16, 2021

[Adedayo Sanni, Presenter](#) | [Sydney Lavan](#) | [Aaron Rury](#)

Friday

Chemistry of Materials: Nanomaterials:

09:00am - 12:00pm USA / Canada - Pacific - April 16, 2021

[Claus Lugmair, Organizer](#) | [Brandon M. McMurtry, Presider](#) | [Tony Pham, Presider](#)

Structural control, optical properties and exciton dynamics of low dimensional metal halide perovskites

09:00am - 09:20am USA / Canada - Pacific - April 16, 2021

[Dr. Binbin Luo, Presenter](#)

Stabilization of NbTe₃, VTe₃, and TiTe₃ via nanotube encapsulation

09:20am - 09:40am USA / Canada - Pacific - April 16, 2021

[Scott Stonemeyer, Presenter](#) | [Jeffrey Cain](#) | [Sehoon Oh](#) | [Marvin Cohen](#) | [Alex Zettl](#)

Continuous nucleation of metal phosphide and chalcogenide nanocrystals

09:40am - 10:00am USA / Canada - Pacific - April 16, 2021

[Brandon M. McMurtry, Presenter](#) | [Matthew Greenberg](#) | [Michael Campos](#) | [Jonathan De Roo](#) | [Benjamin Abecassis](#) | [Kevin Qian](#) | [Jonathan Owen](#)

Weakly-coordinated ligands for high performance colloidal all-inorganic nanocrystals

10:00am - 10:20am USA / Canada - Pacific - April 16, 2021

[Pengwei Xiao, Presenter](#) | [Yuanyuan Wang](#)

Theoretical and experimental investigations on Co₂FeGe Heusler alloy nanoparticles for spintronics application

10:20am - 10:40am USA / Canada - Pacific - April 16, 2021

[Aquil Ahmad, Presenter](#) | [Sanjeev Srivastava](#) | [Amal Das](#)

Copper@ZIF-8 core-shell nanowires for reusable antimicrobial face masks

10:40am - 11:00am USA / Canada - Pacific - April 16, 2021

[Abhishek Kumar, PhD Student, Presenter](#) | [Anu Sharma](#) | [Yi Chen](#) | [Megan Jones](#) | [Stephen Vanyo](#) | [Changning Li](#) | [Michelle Visser](#) | [Supriya Mahajan](#) | [Rakesh Sharma](#) | [M Swihart](#)

Tuning the selectivity between C₂H₂ and CO₂ in molecular porous materials

11:00am - 11:20am USA / Canada - Pacific - April 16, 2021

[Tony Pham, Presenter](#) | [Katherine Forrest](#) | [Kai-Jie Chen](#) | [Douglas Franz](#) | [Michael Zaworotko](#) | [Brian Space](#)

Bright blue CdSe nanoplatelets: Synthesis and size control

11:20am - 11:40am USA / Canada - Pacific - April 16, 2021

[Alessio Di Giacomo, Presenter](#) | [Carmelita Rodà](#) | [Ali Khan](#) | [Iwan Moreels](#)

Sub-5 nm pattern transfer via self-assembly of colloidal nanocrystal monolayers

11:40am - 12:00pm USA / Canada - Pacific - April 16, 2021

[Austin W. Keller, Presenter](#) | [Christopher Murray](#) | [Cherie Kagan](#)

Friday

Coordination Chemistry: Characterization and Applications:

09:00am - 12:00pm USA / Canada - Pacific - April 16, 2021

[Anna Larsen, Organizer](#) | [Andrea M. Potocny, Presider](#) | [Patrick Desrochers, Presider](#)

On earth and in the heavens: The chemistry of Fe²⁺ with CN⁻ and CO, the first extraterrestrial transition metal complexes

09:00am - 09:20am USA / Canada - Pacific - April 16, 2021

[Dr Stephen A. Koch, Presenter](#)

Nickel(II) complexes supported by the bispicen ligand family: Reactivity with superoxide

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[Niharika Krishna Botcha, Presenter](#) | [Sandugash Yergeshbayeva](#) | [Michael Shatruk](#) | [Anusree Mukherjee](#)

In situ investigation of the gas sorption in the ZIF-type materials.

09:40am - 10:00am USA / Canada - Pacific - April 16, 2021

[Dr Alexander Missyul, Presenter](#) | [Jesus Gandara Loe](#) | [Joaquin Silvestre Albero](#)

DFT study of C-H amination and other reactions of 3d transition metal organoazide complexes

10:00am - 10:20am USA / Canada - Pacific - April 16, 2021

[Colton Lund, Presenter](#) | [Yuyang Dong](#) | [Theodore Betley](#) | [Thomas Cundari](#)

Harnessing intermolecular interactions to promote photoinduced electron transfer from copper phenanthroline chromophores

10:20am - 10:40am USA / Canada - Pacific - April 16, 2021

[Andrea M. Potocny, Presenter](#) | [Brian Phelan](#) | [Emily Sprague-Klein](#) | [David Tiede](#) | [Lin Chen](#) | [Karen Mulfort](#)

Rational design of iron-heteroscorpionates with spin crossover, chirality and Lewis basicity toward additional metal ions

10:40am - 11:00am USA / Canada - Pacific - April 16, 2021

[Patrick Desrochers, Presenter](#) | [Ali Abdulrahim](#) | [Makenzie Long](#) | [Nikolay Gerasimchuk](#) | [Carlos Gomez-Garcia](#)

Reactivity of low-valent iron corroles

11:00am - 11:20am USA / Canada - Pacific - April 16, 2021

[Kenneth Caulfield, Presenter](#)

Evaluation of the effect of dissimilar push/pull ligands in octahedral metallosurfactants in the modulation of the LUMO/Fermi gap required for rectification

11:20am - 11:40am USA / Canada - Pacific - April 16, 2021

[Samudra Amunugama, Presenter](#) | [Claudio Verani](#)

Homocysteine specific novel optical sensors for diagnostic use

11:40am - 12:00pm USA / Canada - Pacific - April 16, 2021

[SNEHASISH DEBNATH, Presenter](#) | [Pabitra Chatterjee](#)

Friday

Solid-State Inorganic Chemistry:

09:00am - 12:00pm USA / Canada - Pacific - April 16, 2021

[Viktor V. Poltavets, Ph.D., Organizer, Presider](#)

Inadvertent interstitials: Metal hydrides and carbides grown from flux

09:00am - 09:20am USA / Canada - Pacific - April 16, 2021

[Mary Hertz](#) | [Ashini Jayasinghe](#) | [Susan Lattner, Presenter](#)

Valence tuning in rare-earth fullerides at ambient and elevated pressures

09:20am - 09:40am USA / Canada - Pacific - April 16, 2021

[Naoya Yoshikane, Presenter](#) | [Keisuke Matsui](#) | [Takeshi Nakagawa](#) | [Hitoshi Yamaoka](#) | [John Arvanitidis](#) | [Kosmas Prassides](#)

Synthesizing novel actinide intermetallic compounds using Al/Ga flux

09:40am - 10:00am USA / Canada - Pacific - April 16, 2021

[Ashini Jayasinghe, Presenter](#) | [Ryan Baumbach](#) | [Susan Lattner](#)

Laser Bridgman growth, columnar disorder and low temperature twisting of kagomé layers in intermetallics

10:00am - 10:20am USA / Canada - Pacific - April 16, 2021

[Mekhola Sinha, Presenter](#) | [Hector Vivanco](#) | [Cheng Wan](#) | [Maxime A. Sieglar](#) | [Veronica J. Stewart](#) | [Lucas A. Pressley](#) | [Tanya Berry](#) | [Ziqian Wang](#) | [Isaac Johnson](#) | [Mingwei Chen](#) | [Thao Tran](#) | [W. Adam Phelan](#) | [Tyrel McQueen](#)

Intermission

10:20am - 10:40am USA / Canada - Pacific - April 16, 2021

Growth of semimetallic silicides from Mg/Al and Mg/Zn flux reactions

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[John Haddock, Presenter](#)

Role of carbonate and halides in the hydrothermal synthesis of iron molybdates

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[Mahsa Foroughian, Presenter](#) | [Tiffany Pellizzeri](#) | [Colin McMillen](#) | [Joseph Kolis](#)

Impact of deposition parameters on surface properties of ferroelectric strontium barium niobate (SBN) thin films

11:20am - 11:40am USA / Canada - Pacific - April 16, 2021

[Surbhi Gupta, Presenter](#) | [Vinay Gupta](#) | [Monika Tomar](#)

The shape of porphyrins: Using 6800 crystal structures to evaluate synthetic strategies to macrocycle distortion

11:40am - 12:00pm USA / Canada - Pacific - April 16, 2021

[Dr. Christopher J. Kingsbury, Presenter](#) | [Mathias Senge](#)

Friday

Main Group Chemistry:

09:00am - 11:30am USA / Canada - Pacific - April 16, 2021

[Todd Hudnall, Organizer, Presider](#) | [Thomas Baumgartner, Presider](#)

Helically chiral organoboron compounds: Modular synthesis, optical properties and configurational stability

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[Dr. Agnieszka Nowak-Krol, Presenter](#) | [Julian Full](#) | [Santosh Panchal](#) | [Julian Götz](#)

Phosphaviologens - powerful redox-active, multifunctional materials

09:20am - 09:40am USA / Canada - Pacific - April 16, 2021

[Thomas Baumgartner, Presenter](#) | [Monika Stolar](#) | [Colin Bridges](#) | [Vanessa Beland](#)

Phosphanylidenephosphoranes as phosphinidene-sources

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[Priyanka Gupta](#) | [Jan-Erik Siewert](#) | [Malte Fischer](#) | [Samuel Nees](#) | [Thomas Kupfer](#) | [Holger Braunschweig](#) | [Christian Hering-Junghans, Presenter](#)

Toward ultrastable organic radicals derived from N-Heterocyclic carbenes (NHCs)

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[Eunsung Lee, Presenter](#)

Intermission

10:20am - 10:30am USA / Canada - Pacific - April 16, 2021

New synthetic strategies towards cyclophosphazane macrocycles

10:30am - 10:50am USA / Canada - Pacific - April 16, 2021

[Dr Felipe Garcia, Presenter](#)

[Isolable fluorinated trityl salts of HCB11Cl11-: Properties of more potent hydride abstractors](#)

10:50am - 11:10am USA / Canada - Pacific - April 16, 2021

[Olivia Gunther, Presenter](#) | [Chun-I Lee](#) | [Nattamai Bhuvanesh](#) | [Oleg Ozerov](#)

[Synthesis and reactivity of compounds featuring Lewis acidic carbenium ligands](#)

11:10am - 11:30am USA / Canada - Pacific - April 16, 2021

[Elishua Litle, Presenter](#) | [François Gabbaï](#)