



Read about the Chemistry  
Open Access Advantage



Learn more

Advertisement

(<https://www.wiley.com/en-us>)

# Full Schedule & My Itinerary

Through this page you will:

- Add Sessions or Presentations to Your Calendar (Click "Add to Calendar")
- Add Sessions or Presentations to Itinerary with the Platform (Click "Add to Itinerary")
- Join Live Sessions (Click "Attend Session" and a Zoom window will open for Scientific Sessions)

Below is the full schedule for Pacifichem 2021. Within this page you can search for a Symposia Title, Presentation Title, and/or Presenter Name; and filter by Date, Topic Area, and Session Type. You can also change the preferred time zone so you can view in your own timezone (the default is Hawaii Standard Time).

For best search results please put the words you are searching in quotation marks. For example, if you want to view all sessions and talks for a symposia please put the full symposia name in the search field between quotation marks.

Collapse All

↻ Submit
↺ Reset (<https://pacifichem.digitellinc.com/pacifichem/live/5/page/47/1>)

Advanced Filters ▼

**Filter by Date**


**Topic Area**

**Session Type**

No

**Upcoming Sessions Only**

**Live Support**

**Preferred Time Zone**Eastern Standard Time (EST)  Event Itinerary My Itinerary 2**Analytical Development Relevant to Environmental Exposure and Effects (#27)** 

06:00pm - 10:00pm Eastern Standard Time (EST) - December 18, 2021 | Room: Virtual

Xing-Fang Li, Session Host; Prof. Dongchan Jang, Session Host


Topic Area: (01) Analytical

Session Type: Oral - Virtual

**+** (<https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary>)

Topic Area: (01) Analytical

Symposium Organizers: X. Li, S. Richardson, G. Jiang, S. F. Nakayama

**Resolving identities of emerging per and polyfluoroalkyl substances isomers based on COSMO-RS derived retention factor and mass fragmentation patterns** 

Saturday

06:45pm - 07:15pm Eastern Standard Time (EST) - December 18, 2021 | Room: Virtual

Scott Simpson, Presenter; Mary Grace Guardian; Diana Aga

Topic Area: (01) Analytical

Session Type: Oral - Virtual

**×** (<https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary>)**Hydrogen-rich systems: Materials chemistry for energy storage and delivery (#163)** 

01:00pm - 05:00pm Eastern Standard Time (EST) - December 21, 2021 | Room: Virtual

Godwin Severa, Session Host; Vitalie Stavila, Session Host

Topic Area: (12) Chemistry of Energy

Session Type: Oral - Virtual

**+** (<https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary>)

Topic Area: (12) Chemistry of Energy

Symposium Organizers: Z. Huang, M. Bowden, C. Yoon, T. HE, G. Severa

**Live Support**

## Search for molecular corks beyond carbon monoxide: A quantum mechanical study of N-heterocyclic carbene adsorption on Pd/Cu(111) and Pt/Cu(111) single atom alloys

Tuesday

04:05pm - 04:30pm Eastern Standard Time (EST) - December 21, 2021 | Room: Virtual

Scott Simpson, Presenter

Topic Area: (12) Chemistry of Energy

Session Type: Oral - Virtual

[✕ \(https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary\)](https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary)

Periodic Density Functional Theory calculations reveal the potential application of 10 imidazole based N-heterocyclic carbenes to behave as “molecular corks” for hydrogen storage on single atom alloys, comprised of Pd/Cu(111) or Pt/Cu(111). Calculations show that functionalizing the NHC with different electron withdrawing/donating functional groups results in different binding energies of the NHC with the alloy surfaces. The results are compared to DFT calculations of carbon monoxide bound to these alloys. The Huynh electronic parameter (is calculated for several simple imidazole NHCs to gauge  $\sigma$ -donor ability, while Se-NMR of and P-NMR calculations of selenourea derivatives and carbene-phosphinidene adducts, respectively, have been utilized to gauge  $\pi$ -acidity of the NHCs. It is demonstrated that consideration of both  $\sigma$  and  $\pi$  donating/accepting ability must be considered when predicting the surface-adsorbate binding energy. It was found that electron withdrawing groups tend to weaken the NHC-surface interaction while electron withdrawing substituents tend to strengthen the interaction.

© 2022 Digitell, Inc. All Rights Reserved

[Privacy Center](#)<https://pacifichem.digitellinc.com/pacifichem/rest/liveevents/itinerary>

Live Support