

# Dalton Transactions

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## IN THIS ISSUE

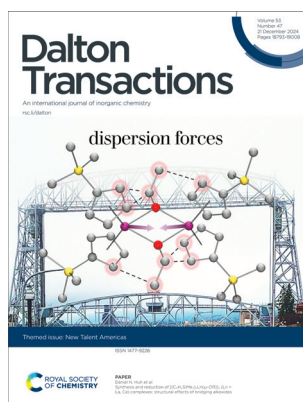
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**Cover**  
See Michael I. Webb *et al.*,  
pp. 18845–18855.

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**Inside cover**  
See Daniel N. Huh *et al.*,  
pp. 18856–18864.

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2024, **53**, 18856.

## EDITORIAL

18802

### New talent: Americas 2024

Tim Storr, Ellen Matson and Ilich Ibarra

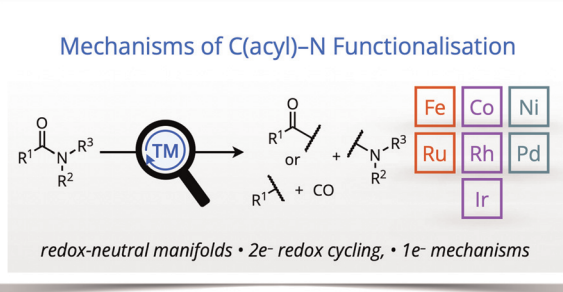


## PERSPECTIVES

18803

### Mechanistic insights on C(acyl)–N functionalisation mediated by late transition metals

Vivek G. Pillai, Kaycie R. Malyk and C. Rose Kennedy\*



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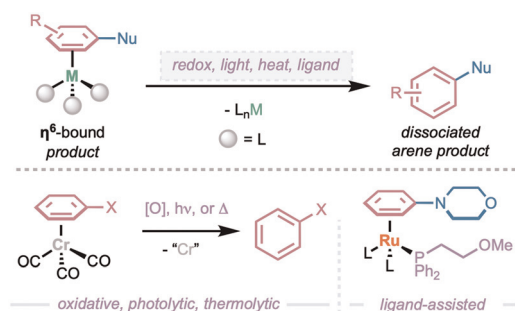
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## PERSPECTIVES

18819

Strategies for arene dissociation from transition metal  $\eta^6$ -arene complexes

Brett Akana-Schneider, Yahui Guo, Bryan Parnitzke and Joseph Derosa\*

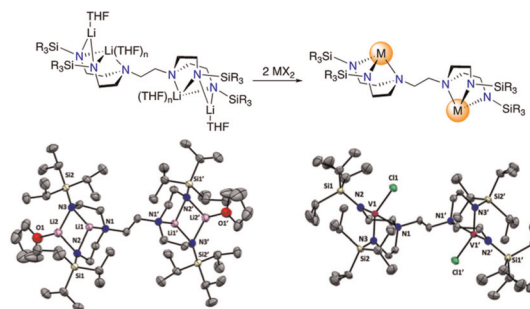


## COMMUNICATIONS

18828

## A twist on a classic scaffold: rational design of a new bimetallic platform

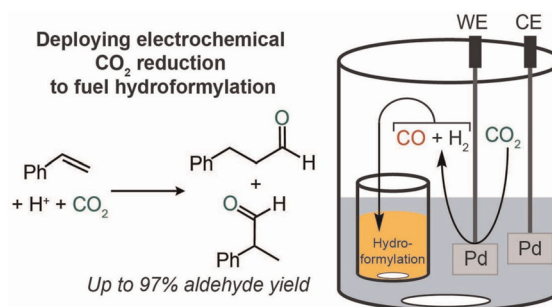
Sultana P. Rumi, Lev N. Zakharov and Addison N. Desnoyer\*



18834

Integrated electrochemical CO<sub>2</sub> reduction and hydroformylation

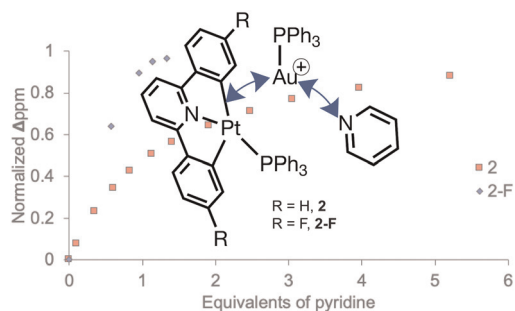
Brandon J. Jolly, Michael J. Pung and Chong Liu\*



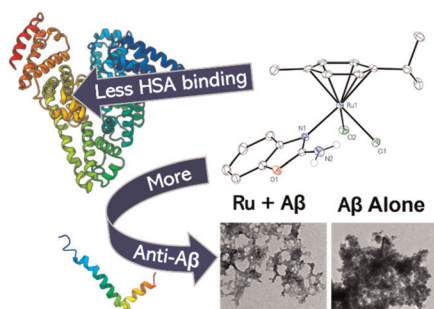
18839

## Stability of metal–metal interactions in transmetallation intermediates based on electronics of bridging arene ligands determined through pyridine titrations

Rana Marghalani and Eric S. Cueny\*



18845

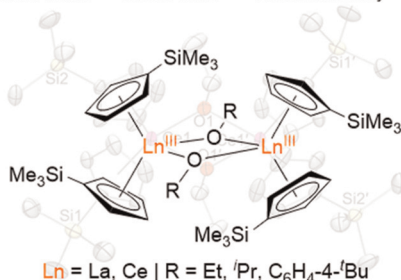


### Ru(II)–arene azole complexes as anti-amyloid- $\beta$ agents

Ryan M. Hacker, Daniela M. Grimard, Katie A. Morgan, Eaman Saleh, Morgan M. Wrublik, Cade J. Meiss, Caitlyn C. Kant, Marjorie A. Jones, William W. Brennessel and Michael I. Webb\*

18856

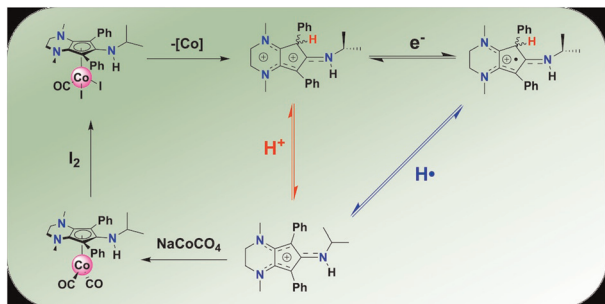
✓ Dispersion Forces ✓ DOSY NMR ✓ Electrochemistry ✓ La<sup>III</sup> EPR



### Synthesis and reduction of $[(C_5H_4SiMe_3)_2Ln(\mu-OR)]_2$ ( $Ln = La, Ce$ ) complexes: structural effects of bridging alkoxides

Adrian N. Brown, Jack N. Kelleher, Alexander M. Brown, Peter Saghy, Joshua J. Bohl, Jerome R. Robinson\* and Daniel N. Huh\*

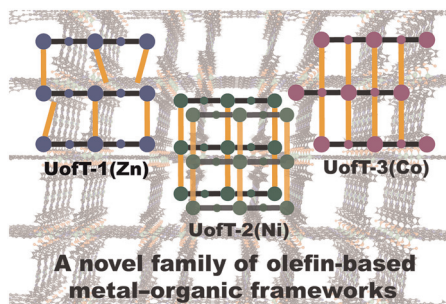
18865



### “Catch and release” of the Cp<sup>N3</sup> ligand using cobalt: dissociation, protonation, and C–H bond thermochemistry

Sanju Luhach, Roger A. Lalancette and Demyan E. Prokopchuk\*

18873



### Design and synthesis of pillared metal–organic frameworks featuring olefinic fragments

Rachel Leigh Mander, Ashley Schmidt, Michael Ruf and Maciej Damian Korzyński\*

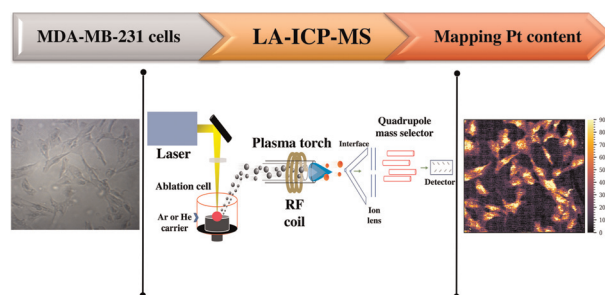


## PAPERS

18880

### Quantitative determination and subcellular mapping of Pt-based drugs in single breast tumour cells via laser ablation-ICP-mass spectrometry

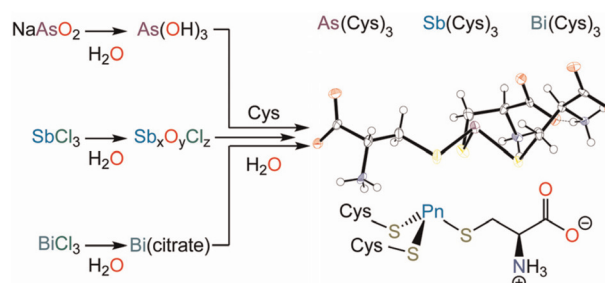
Legna Colina-Vegas, Thibaut Van Acker, Wilmer Villarreal, Olivier De Wever, Alzir Azevedo Batista, Joaquim Araújo Nóbrega and Frank Vanhaecke\*



18890

### Synthesis and structural characterization of the heavy tricysteinylniactines, models of protein-bound As(III), Sb(III), and Bi(III)

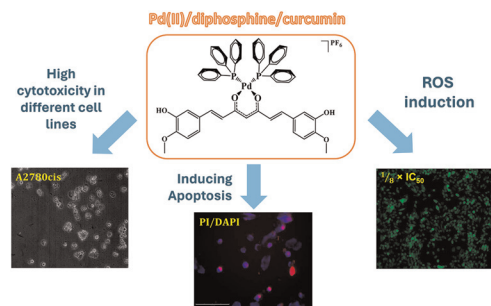
Sophia E. Hollow and Timothy C. Johnstone\*



18902

### Pd(II)/diphosphine/curcumin complexes as potential anticancer agents

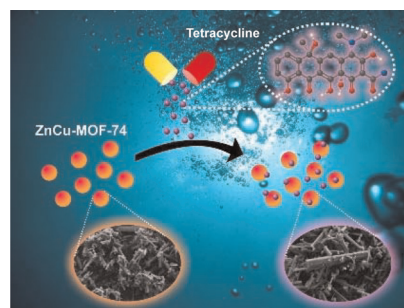
Jocely L. Dutra,\* João Honorato, Angélica Graminha, Carlos André F. Moraes, Kleber T. de Oliveira, Marcia R. Cominetti, Eduardo E. Castellano and Alzir A. Batista\*



18917

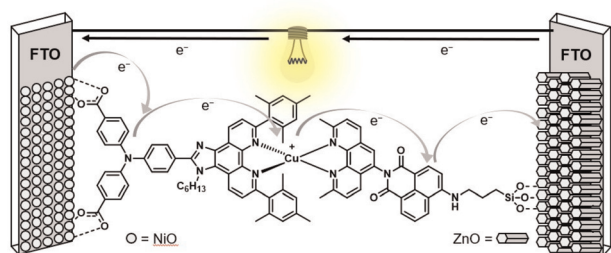
### Room-temperature synthesis of bimetallic ZnCu-MOF-74 as an adsorbent for tetracycline removal from an aqueous solution

Catalina V. Flores, Andy Machín-Garriga, Juan L. Obeso, J. Gabriel Flores, Ilich A. Ibarra, Nora S. Portillo-Vélez,\* Carolina Leyva\* and Ricardo A. Peralta\*



## PAPERS

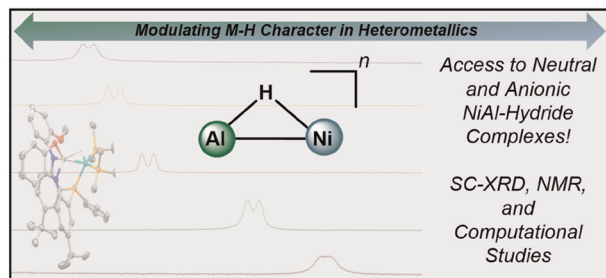
18923



### Charge separation in a copper(I) donor–chromophore–acceptor assembly for both photoanode and photocathode sensitization

Zujhar Singh, Joseph D. Chiong, Joseph F. Ricardo-Noordberg, Saeid Kamal and Marek B. Majewski\*

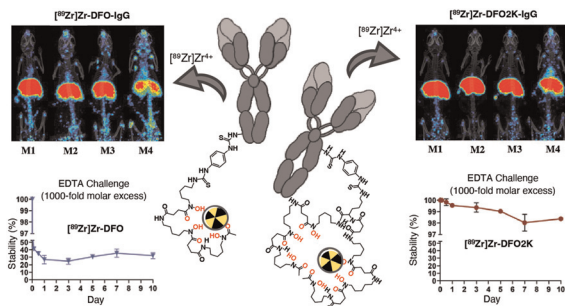
18932



### Synthesis and characterization of NiAl-hydride heterometallics: perturbing electron density within Al–H–Ni subunits

Aleida G. Gonzalez, Fernando Gonzalez, Edgardo De Leon, Kaitlyn M. Birkhoff, Sam Yruegas, Haoyuan Chen\* and Manar M. Shoshani\*

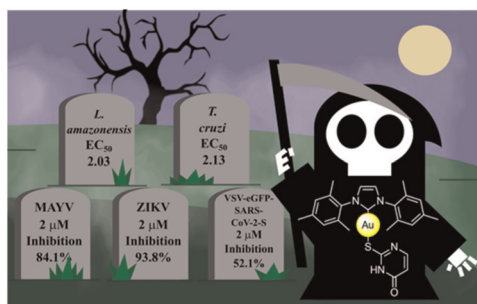
18946



### Synthesis and evaluation of bifunctional DFO2K: a modular chelator with ideal properties for zirconium-89 chelation

Akam K. Salih, Elaheh Khozeimeh Sarbisheh, Shvan J. Raheem, Moralba Dominguez-Garcia, Hillary H. Mehlhorn and Eric W. Price\*

18963



### Exploring antiviral and antiparasitic activity of gold N-heterocyclic carbenes with thiolate ligands

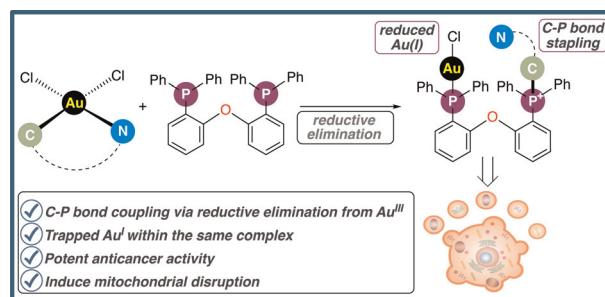
Igor S. Oliveira, Marcus S. A. Garcia, Natasha M. Cassani, Ana L. C. Oliveira, Lara C. F. Freitas, Vitor K. S. Bertolini, Jennyfer Castro, Gustavo Clauss, João Honorato, Fernanda R. Gadelha, Danilo C. Miguel, Ana C. G. Jardim and Camilla Abbehausen\*



18974

### Carbon–phosphorus stapled Au(I) anticancer agents via bisphosphine induced reductive elimination

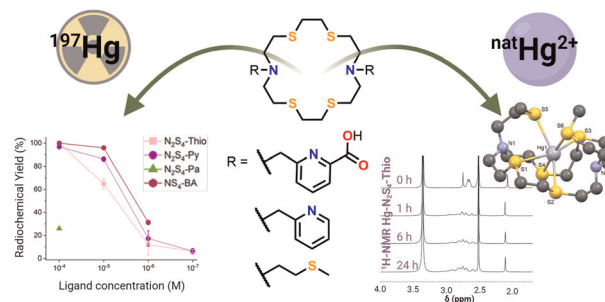
Sean T. Gilpatrick, Oluwatosin A. Obisesan, Sean Parkin and Samuel G. Awuah\*



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### Development of thiacrown ligands for encapsulation of mercury-197m/g into radiopharmaceuticals

Parmissa Randhawa, Cailum M. K. Stienstra, Shaohuang Chen, Yang Gao, Georg Schreckenbach, Valery Radchenko and Caterina F. Ramogida\*



18998

### Unveiling the impact of enhanced hydrophobicity of ZIF-71 on butanol purification: insights from experimental and molecular simulations

Norma Tiempos-Flores, Oscar I. Arillo-Flores, Eugenio Hernández-Fernández, Victor M. Ovando-Medina, Marco A. Garza-Navarro, Sandra Pioquito-García and Nancy E. Davila-Guzman\*

