

# W. Lester S. Andrews Festschrift

## Virtual Special Issue

<b>Matrix Isolation Spectroscopy</b>		
Photoinduced Reversible Electron Transfer Between the Benzhydryl Radical and Benzhydryl Cation in Amorphous Water–Ice	Soumya Radhakrishnan, Joel Mieres-Perez, Murthy S. Gudipati, Wolfram Sander	<a href="https://doi.org/10.1021/acs.jpca.7b05466">10.1021/acs.jpca.7b05466</a>
Observation and Characterization of $\text{CH}_3\text{CH}_2\text{-MH}$ , $(\text{CH}_2)_2\text{-MH}_2$ , $\text{CH}_2=\text{CH-MH}_3$ , and $\text{CH}_3\text{-C}\equiv\text{MH}_3^-$ Produced by Reactions of Group 5 Metal Atoms with Ethane	Han-Gook Cho, Lester Andrews	<a href="https://doi.org/10.1021/acs.jpca.7b06571">10.1021/acs.jpca.7b06571</a>
Matrix Infrared Spectra of Insertion and Metallacyclopropane Complexes [ $\text{CH}_3\text{CH}_2\text{-MH}$ and $(\text{CH}_2)_2\text{-MH}_2$ ] Prepared in Reactions of Laser-Ablated Group 3 Metal Atoms with Ethane	Han-Gook Cho, Lester Andrews	<a href="https://doi.org/10.1021/acs.jpca.7b06785">10.1021/acs.jpca.7b06785</a>
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Infrared Spectroscopic and Theoretical Studies on the $\text{OMF}_2$ and $\text{OMF}$ ( $\text{M} = \text{Cr}, \text{Mo}, \text{W}$ ) Molecules in Solid Argon	Rui Wei, Qingnuan Li, Yu Gong, Lester Andrews, Zongtang Fang, K. Sahan Thanthiriwatte, Monica Vasiliu, David A. Dixon	<a href="https://doi.org/10.1021/acs.jpca.7b08088">10.1021/acs.jpca.7b08088</a>
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Heptavalent Actinide Tetroxides NpO <sub>4</sub> <sup>−</sup> and PuO <sub>4</sub> <sup>−</sup> : Oxidation of Pu(V) to Pu(VII) by Adding an Electron to PuO <sub>4</sub>	John K. Gibson, Wibe A. de Jong, Phuong D. Dau, Yu Gong	<a href="https://doi.org/10.1021/acs.jpca.7b09721">10.1021/acs.jpca.7b09721</a>
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## Gas Phase Spectroscopy

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## Theoretical Studies

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The Atmospherically Important Reaction of Hydroxyl Radicals with Methyl Nitrate: A Theoretical Study Involving the Calculation of Reaction Mechanisms, Enthalpies, Activation Energies, and Rate Coefficients	Maggie Ng, Daniel K. W. Mok, Edmond P. F. Lee, John M. Dyke	<a href="https://doi.org/10.1021/acs.jpca.7b05035">10.1021/acs.jpca.7b05035</a>
A Coupled Cluster Investigation of SNO Radical Isomers and Their Reactions with Hydrogen Atom: Insight into Structures, Conformers, Barriers, and Energetics	Manoj Kumar, Joseph S. Francisco	<a href="https://doi.org/10.1021/acs.jpca.7b06344">10.1021/acs.jpca.7b06344</a>
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MRMP2, CCSD(T), and DFT Calculations of the Isomerization Barriers for the Disrotatory and Conrotatory Isomerizations of 3-Aza-3-ium-dihydrobenzvalene, 3,4-Diaza-3-ium-dihydrobenzvalene, and 3,4-Diaza-diiium-dihydrobenzvalene	Jeffrey D. Veals, Kimberley N. Poland, William P. Earwood, Spencer M. Yeager, Kari L. Copeland, Steven R. Davis	<a href="https://doi.org/10.1021/acs.jpca.7b08227">10.1021/acs.jpca.7b08227</a>
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