Title	Presenting Author	Start Time	End Time	Day/Date	Presenter Institutions	Presider(s)
Introductory Remarks	Fortenberry, Ryan	8:00 AM	8:05 AM	Thursday 12/16/2021		
Diffusion of atoms and molecules in interstellar and planetary ices	Vidali, Gianfranco	8:05 AM	8:35 AM	Thursday 12/16/2021	Syracuse University	
Free electrons in amorphous water ice	Sander, Wolfram	8:35 AM	9:05 AM	Thursday 12/16/2021	Ruhr-Universitaet Bochum	
Energetic gas-surface interactions leading to molecular embedding, isotope dependent capture, and oxidative reactions in ice	Sibener, Steven	9:05 AM	9:35 AM	Thursday 12/16/2021	University of Chicago	
Oxygen diffusion and recombination on amorphous solid water	Meuwly, Markus	9:35 AM	9:55 AM	Thursday 12/16/2021	University of Basel	Ryan Fortenberry &
Intermission		9:55 AM	10:15 AM	Thursday 12/16/2021		Ralf Kaiser
Cryogenic storage-ring experiments on the collisions and radiative prcesses of interstellar molecules	Nakano, Yuji	10:15 AM	10:45 AM	Thursday 12/16/2021	Rikkyo University; RIKEN	
Cavity ring-down spectroscopy in uniform supersonic flows: A new tool for chemistry at low temperature	Suits, Arthur	10:45 AM	11:15 AM	Thursday 12/16/2021	Univ Missouri	
Preparation, characterization and storage of water vapours highly enriched in its ortho-H2O nuclear spin isomer.	Ayotte, Patrick	11:15 AM	11:35 AM	Thursday 12/16/2021	Université de Sherbrooke	
Development of apparatus for detecting trace adsorbates formed by chemical reaction on ice surface	Ishibashi, Atsuki	11:35 AM	11:55 AM	Thursday 12/16/2021	Hokkaido University	
Gas-phase chemistry in the interstellar medium: there is still much to learn	Balucani, Nadia	1:00 PM	1:30 PM	Thursday 12/16/2021	University of Perugia	
Interstellar PAHs: Detections of distinct PAH species in cold dark clouds and implications for the molecular evolution of large ca	McGuire, Brett	1:30 PM	2:00 PM	Thursday 12/16/2021	Massachusetts Institute of Technology; National F	
Hot nozzles and cold beams shed light on molecular growth processes and dynamics in astrochemical processes.	Ahmed, Musahid	2:00 PM	2:30 PM	Thursday 12/16/2021	Lawrence Berkeley Laboratory	
Electronically excited states as formation pathway to complex organic molecules	Kleimeier, Nils Fal	2:30 PM	2:50 PM	Thursday 12/16/2021	University of Hawaii at Manoa	Chris Bennett &
Intermission		2:50 PM	3:10 PM	Thursday 12/16/2021		Ryan Fortenberry
Experimental studies on the surface reaction of atomic hydrogen with “exotic” molecules at low temperatures	Oba, Yasuhiro	3:10 PM	3:40 PM	Thursday 12/16/2021	Hokkaido University	
Prebiotic Precursors of the RNA-World in the interstellar medium: astronomical detections and (plausible?) formation routes	Rivilla, Víctor	3:40 PM	4:00 PM	Thursday 12/16/2021	Centro de Astrobiologia; Osservatorio Astrofisico	
Direct D atom incorporation in radicals at low temperature: an overlooked pathway to deuterium fractionation?	Suits, Arthur	4:00 PM	4:20 PM	Thursday 12/16/2021	University of Missouri	
Probing the formation of complex organics in cometary ices: A New Laboratory Approach	Milam, Stefanie	8:00 AM	8:30 AM	Friday 12/17/2021	NASA Goddard Space Flight Center	
Titan in a Jar: Structural Studies of Small Organic Molecules as Models for Minerals on Titan, Saturn’s Moon	Runcevski, Tomce	8:30 AM	8:50 AM	Friday 12/17/2021	Southern Methodist University	
Carbon isotopic fractionation in molecular clouds	Colzi, Laura	8:50 AM	9:10 AM	Friday 12/17/2021	Centro de Astrobiología (CSIC-INTA); INAF-Osserv	
Generation of electronic spectra for thin solid films	Wallace, Austin	9:10 AM	9:30 AM	Friday 12/17/2021	University of Mississippi	
Intermission		9:30 AM	9:50 AM	Friday 12/17/2021		Fabian Kleimeier &
Sources of Phosphorus for Life on Earth and Beyond	Abbott-Lyon, Heath	9:50 AM	10:20 AM	Friday 12/17/2021	Kennesaw State University	Ralf Kaiser
Mineral mediated prebiotic chemistry on an early rocky planet	Orlando, Thomas	10:20 AM	10:50 AM	Friday 12/17/2021	Georgia Institute of Technology; Georgia Institute	
Rovibrational quartic force fields of metal dicarbides and tricarbides	DeYonker, Nathan	10:50 AM	11:10 AM	Friday 12/17/2021	The University of Memphis	
Reaction dynamics of silanethione (H2SiS) and the thiosilaformyl radical (HSiS) via crossed molecular beams	Goettl, Shane	11:10 AM	11:30 AM	Friday 12/17/2021	University of Hawai'i at Manoa	
Astrochemistry Does Not (Always) Need Carbon	Fortenberry, Ryan	11:30 AM	11:50 AM	Friday 12/17/2021	University of Mississippi	
Laboratory Astrochemistry and the Data Revolution: Exploring Discovery Space with New Analysis Tools	McCarthy, Michael	1:00 PM	1:30 PM	Friday 12/17/2021	Harvard-Smithsonian Center for Astrophysics	
Missing mechanisms in interstellar grain-surface and ice chemical models	Garrod, Robin	1:30 PM	2:00 PM	Friday 12/17/2021	University of Virginia	
Machine learning for astrochemical discovery	Lee, Kin Long Kelvi	2:00 PM	2:20 PM	Friday 12/17/2021	Massachusetts Institute of Technology; Center for	
The Electronic Spectrum of VH	Varberg, Tom	2:20 PM	2:40 PM	Friday 12/17/2021	Macalaster College	
Intermission		2:40 PM	3:00 PM	Friday 12/17/2021		Ryan Fortenberry &
On the Experimental and Computational Accuracy of Band Strengths of Astrochemical Species in the Condensed Phase	Bennett, Christoph	3:00 PM	3:20 PM	Friday 12/17/2021	University of Central Florida	Nathan DeYonker
Collision coefficients for quantitative molecular assessments: uses, limits and perspectives	Wiesenfeld, Laure	3:20 PM	3:40 PM	Friday 12/17/2021	CNRS/ U Paris-Saclay	
(T)+EOM quartic force fields for theoretical vibrational spectroscopy of electronically excited states	Davis, Megan	3:40 PM	4:00 PM	Friday 12/17/2021	University of Mississippi	
How accurate knowledge of photochemical reaction kinetics can better explain the formation of large organic complexes in Tita	Barua, Shiblee	4:00 PM	4:20 PM	Friday 12/17/2021	NASA Goddard Space Flight Center; Universities S	
Inorganic Oxides for Machine Learning	Valencia, Efrain	4:20 PM	4:40 PM	Friday 12/17/2021	University of Mississippi	
Laboratory and observational search for aminomethanol	Widicus Weaver, S	6:00 PM	6:20 PM	Friday 12/17/2021	University of Wisconsin-Madison	
Formation of carbonaceous materials in deep space	Mebel, Alexander	6:20 PM	6:35 PM	Friday 12/17/2021	Florida International University	
On the Importance of Laboratory Astrophysics and Astrochemistry and Interdisciplinary Research: Two Success Stories	Sciamma-O'Brien,	6:35 PM	6:55 PM	Friday 12/17/2021	NASA Ames Research Center	
Computing rovibrational, vibrational, and cascade emission spectra for comparison to astronomical observations	Lee, Timothy	6:55 PM	7:15 PM	Friday 12/17/2021	NASA Ames Research Center	
Hydrogen-atom abstraction reactions in solid para-hydrogen and their astronomical implications	Lee, Yuan-Pern	7:15 PM	7:35 PM	Friday 12/17/2021	National Yang Ming Chiao Tung University; Acade	
An experimental study of cold ion-polar molecule reactions toward the application to astrochemistry	Okada, Kunihiro	7:35 PM	7:55 PM	Friday 12/17/2021	Sophia University	
Intermission		7:55 PM	8:05 PM	Friday 12/17/2021		Tim Schmidt &
Nuclear-spin conversion of molecular hydrogen physisorbed on cryogenic surface	Sugimoto, Toshiki	8:05 PM	8:25 PM	Friday 12/17/2021	Institute for Molecular Science	Naoki Watanabe
Chemists supporting astronomy: what are molecular spectroscopic line lists, how are they made and why are they crucial.	MCKEMMISH, Laur	8:25 PM	8:45 PM	Friday 12/17/2021	University of New South Wales	
Challenges in astrochemistry: an integrated rotational spectroscopy – quantum chemistry strategy	Puzzarini, Cristina	8:45 PM	9:05 PM	Friday 12/17/2021	University of Bologna	
Electronic spectroscopy of molecular ions for astrochemical consideration	Campbell, Ewen	9:05 PM	9:25 PM	Friday 12/17/2021	University of Edinburgh	
Carbon dust and molecules in space: diversity or selectivity?	Pino, Thomas	9:25 PM	9:45 PM	Friday 12/17/2021	CNRS	
On the spectra of comets	Schmidt, Timothy	9:45 PM	10:00 PM	Friday 12/17/2021	UNSW	
Pathways to Detection of Strongly-Bound Inorganic Species: The Vibrational and Rotational Spectral Data of AlH2OH, HMgOH, A	Watrous, Alexandr	7:00 PM	9:00 PM	Sunday 12/19/2021	University of Mississippi	
Continuing the investigation of third row molecules in space.	Palmer, Charles	7:00 PM	9:00 PM	Sunday 12/19/2021	University of Mississippi	Ryan Fortenberry
Quartic force field calculations and reaction mechanisms of cyclic, aluminum-containing compounds of astrochemical relevanc	Harwick, Olivia	7:00 PM	9:00 PM	Sunday 12/19/2021	University of Mississippi	
Quantum chemical analysis for the detection of new molecules in space	Flint, Athena	7:00 PM	9:00 PM	Sunday 12/19/2021	University of Mississippi; Yale University	
Computational Molecular Spectroscopy Towards New Physics	Syme, Anna-Maree	7:00 PM	9:00 PM	Saturday 12/18/2021	University of New South Wales	
Formation, Abundance Distribution and Evolution of Complex Organic Molecules in Starless/Pre-stellar Cores	Jimenez-Serra, Iza	7:00 PM	9:00 PM	Saturday 12/18/2022	Astrobiology Center (CSIC/INTA)	
The Role of Computational Quantum Chemistry in the Search for Outer Space Life	Zapata Trujillo, Jua	7:00 PM	9:00 PM	Saturday 12/18/2023	University of New South Wales	
Detection of OH radical produced by photodissociation of H2O on water ice	Miyazaki, Ayame	7:00 PM	9:00 PM	Saturday 12/18/2024	Institute of Low Temperature Science, Hokkaido U	Tim Schmidt
The spectroscopic exploration of cyanide ices: a story of troublesome crystals.	Ennis, Courtney	7:00 PM	9:00 PM	Saturday 12/18/2025	University of Otago	
Nucleobase photochemistry in prebiotic planetary conditions	de Vries, Mattanja	7:00 PM	9:00 PM	Saturday 12/18/2026	UCSB	