

From Interstellar Ices to Polycyclic Aromatic Hydrocarbons

A symposium to honor Lou Allamandola's Contributions to the Molecular Universe

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Sublimation Studies at Submillimeter Wavelengths: A New Technique

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The chemistry of interstellar ice analogues has been a topic of great interest to astrochemists over the last 20 years. Currently, the models of interstellar chemistry feature icy-grain reactions as a primary mechanism for the formation of many astrochemical species as well as potentially astrobiochemically-relevant complex organic molecules. This talk presents new spectral results collected by a millimeter and submillimeter spectrometer coupled to a vacuum chamber designed to study the sublimation or sputtered products of icy-grain reactions initiated by thermal-processing or photo-processing of interstellar ice analogues. Initial results from thermal desorption and UV photo-processing experiments of pure water ice and water + methanol ice mixtures will be presented.