PCE_3 Seminar Series

Thurs, Nov. 2nd - 5 p.m. EDT
2 p.m. PDT

More information & registration:
prebioticchem.org/seminars

@PCE3_Sci

Lauren Lowe

PhD Student
University of New South Wales, School of Chemistry

"Modulating the lipid packing and solute permeability of model protocells"

Juan C. Zapata Trujillo

PhD Student
University of New South Wales, School of Chemistry

"Revealing the Hidden: Molecular Clues from Exoplanet Atmospheres using Quantum Chemistry"

Lauren Lowe

Lauren is a final-year PhD candidate in Anna Wang's group in the School of Chemistry at UNSW Sydney. She completed a Bachelor of Advanced Science (Honours) in 2020 and studied new techniques to probe model protocell permeability for her undergraduate senior thesis. She began her PhD in 2021 and has continued to study model protocells, focusing on how they can access the nutrients required for continual membrane growth, with the goal of building a synthetic cell that can grow and divide using the simplest components possible.

Juan C. Zapata Trujillo

Originally from Colombia, Juan just submitted his PhD in the School of Chemistry at UNSW. Working under the supervision of Dr Laura McKemmish, Juan's research focuses on using computational molecular spectroscopy to calculate vibrational spectral data for thousands of potential biosignature molecules, some of which have incomplete or completely absent spectral data available. With observations from the James Webb Space Telescope (JWST) already providing fascinating insights into the chemical inventory of exoplanetary atmospheres, Juan's data is playing a fundamental role in complementing the identification of new molecular species. Away from research, Juan is also passionate about airplanes, outreach, and science communication, striving to facilitate scientific knowledge to the broader community.