

Dr Paul Raston

Fellowship location: School of Chemistry & Physics

Previous position: Postdoctoral Fellow; University of Georgia, USA.



Research focus: Over the last ten years Paul has learned a variety of different experimental techniques which he will draw from when designing and constructing a machine for investigating weakly bound clusters. This research will be made possible through the generous support of the Ramsay Fellowship, and will hopefully allow for us to gain a deeper understanding of the forces which govern the interactions between atmospherically important species.

About Paul: Paul was born in Subiaco, Western Australia, in December of 1977. After spending a decade there, his family decided it was best to hop aboard the Indian-Pacific train and relocate to Brisbane where he attended MacGregor State High School. Upon graduating he decided to pursue a career in Chemistry (against the advisement of his teachers). He started out by earning a Bachelor of Science from Griffith University in 1999 where his favourite classes were Astrophysics and Toxicology.

Paul then moved to North America and dabbled in the (seemingly) black arts of Inorganic and Organic Chemistry, but soon realized that his passion laid elsewhere (Physical Chemistry/Chemical Physics). Becoming fascinated with quantum solids, Paul eventually earned his PhD in Chemistry from the University of Wyoming in 2007, with his dissertation titled "Spectroscopy and Dynamics of Rare Gas and Chlorine Atoms in Solid Hydrogen". The ultimate application of this research was in synthesizing monopropellants such as atomic oxygen in solid hydrogen for the propulsion of the next generation of rockets.

Then began his postdoctoral studies...He first ventured deep into the subarctic landscape of Canada to study finite sized superfluidity in helium and hydrogen at the University of Alberta. There, he gained evidence for frictionless flow in clusters containing only a few atoms or molecules. Following this, he moved to the South and is currently probing highly reactive species that are isolated in one of nature's most fascinating solvents, superfluid helium. While enjoying his time at the University of Georgia (go Dawgs!), looking to return to Oz, he applied for the Ramsay Fellowship and was fortunate enough to get it!

Paul enjoys Italian westerns, Cosmos, vortices (quantized and otherwise), long walks in the mountains, etc...

Paul will be taking up the Ramsay Fellowship in mid 2013.