

John Husband

Associate Professor, Department of Chemistry Office 2045 Telephone +968 24142235 Fax +968 24141469
E-mail johnh@squ.edu.om Credentials PhD (University of Massachusetts - Amherst, 2001) Postdoctoral Fellowship (University of California and LBNL – Berkeley; JILA, University of Colorado – Boulder) Specialization Photo & Computational Chemistry.

Experience and Research Interest

My research is based on the application of computational chemistry in support of experimental work carried out within the department. An ongoing study involves investigation of the molecular properties of a series of molecules with the ability to both accept and donate hydrogen bonds. The immediate aim is to characterize their ground and excited state properties when hydrated by water. The work in this area is complimented by experimental results from the group of Dr Osama Abou-Zied. Other recent projects include molecular modeling calculations undertaken to support the work of Dr Majekodunmi Fatope including the use of predicted NMR spectra to aid in the assignment of the stereochemistry; and calculations of NMR and vibrational spectra in support of work by Dr Wajdi Zoghaib and collaborators.

Teaching Interest

In the last few years, I have taught a range of courses including general chemistry, upper-level physical chemistry with its lab, and computers in chemistry. I am very interested in how students learn and have advised several student projects tasked with the development of practicals aiming to give students more hands-on experience with topics taught in the classroom.

Courses: CHEM3391, CHEM4433, CHEM4435, CHEM5501, CHEM5502.