
Applied Geophysics and Instrumentation

Expertise Instrumentation and measurement-system development and testing, data acquisition and analysis, modeling and simulation.

Education Post-graduate Certificate, (Atmospheric Science), 2004
Cambridge University, UK
B.Sc., (Applied Physics, 1st class Honours), 1999
Glasgow Caledonian University, UK

Honors & Awards SENSYS (University-Industry Collaborative Sponsored Award) Best 4th Year Undergraduate Research Project

Affiliations Member: American Geophysical Union (AGU), American Astronomical Society (AAS); Division of Planetary Science (DPS); Institute of Physics (IOP); IEEE Geoscience and Remote Sensing Society

Professional Experience

2010 - Present Applied Seismology Consultants, Shrewsbury, UK
Applied Geophysics and Instrumentation Scientist

2008 - 2010 AOPP (Planetary Science Group), University of Oxford, UK
Research Assistant, Physics Department

2003 - 2008 Centre for Atmospheric Science, University of Cambridge, UK
Ph.D. Student and Research Assistant, Chemistry Department

2002 - 2005 Cavendish Laboratory, University of Cambridge, UK
University Technical Officer (RF/Microwave Engineer), Physics Department

1999-2001 Bourns Electronics, Cork, Ireland
Characterisation and Test Engineer

Project Experience

Currently working on the development and laboratory testing of microseismic and acoustic emission instrumentation. Previously involved in the development of instrumentation systems, such as a short-period microseismometer instrument for ESA's ExoMars planetary science program (University of Oxford), and a system for in-situ measurements of atmospheric trace gases (University of Cambridge). Assisted in the development of the RF/microwave modules for the Cambridge Arcminute Microkelvin Imager (AMI) telescope array, and several industrial projects, including test system design and integration for semiconductor component testing.