

David R. Worton

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Education

- 2001 – 2005** UNIVERSITY OF EAST ANGLIA. School of Environmental Sciences, Norwich, UK - **Ph.D.** Atmospheric Chemistry.
- 2000 – 2001** UNIVERSITY OF LEEDS. Department of Earth Sciences, Leeds, UK – **M.Sc.** Environmental Geochemistry with Distinction.
- 1996 – 1999** UNIVERSITY OF NOTTINGHAM. School of Chemistry, Nottingham, UK - **B.Sc.** (Honours) Chemistry in the First Class.
- Workshops:** (1) US/Nordic Workshop on Biogenic Secondary Organic Aerosols (2007 – 2008).
(2) Young Atmospheric Scientists Network Workshop on Atmospheric Composition. Climate Change and the Impacts on Tourism (2004).
(3) European Research Course Atmospheres (2002).
- Honors:** F. S. Kipping Award for Academic Achievement (1998).
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Research Experience

- 08/06 – present** UNIVERSITY OF CALIFORNIA - BERKELEY - **Postdoctoral Research Scientist. Department of Environmental Sciences, Policy and Management, Division of Ecosystem Sciences.**
Advisor: Prof. Allen H. Goldstein.
Development and field deployment of a novel in-situ Thermal desorption Aerosol Gas chromatography mass spectrometer (2D-TAG) instrument utilizing a two dimensional (GCxGC) separation to investigate the origin and composition of carbonaceous of aerosol particles with hourly time resolution.
- 11/05 – 08/06** UNIVERSITY OF EAST ANGLIA - **Senior Research Associate. School of Environmental Sciences. Advisors: Dr. William T. Sturges and Dr. Claire E. Reeves.**
Analysis of various halogenated and nitrate containing trace gas species in the contemporary atmosphere and in polar firn air and glacial ice using a variety of GC-MS techniques.
- 10/01 – 11/05** UNIVERSITY OF EAST ANGLIA - **Ph.D. Graduate Student. School of Environmental Sciences. Advisor: Dr. William T. Sturges**
Instrument development of a thermal desorption GC-MS system and

optimization for the analysis of alkyl nitrates and halocarbons. Reconstruction of 20th century atmospheric trends of alkyl nitrates, hydrocarbons and halocarbons from the analysis of polar firm air from both hemispheres.

09/00 – UNIVERSITY OF LEEDS - M.Sc Graduate Student.
10/01 Department of Earth Sciences. Advisors: Dr. Liane Benning, Dr. Crispin Little and Prof. Robert Raiswell.

Laboratory based research project investigating iron sulphide chemistry at hydrothermal vents with implications for the fossil pyritisation of vent fauna communities.

09/99 – RHONE-POULENC AGRICULTURE LTD. - Environmental
01/00 Analyst. Environmental Chemistry Division.

Conducted metabolism fate studies on research and development pesticides in a radiation (Carbon-14) controlled laboratory.

Project Involvement and Field Work Experience

BEARPEX – Biosphere Effects on AeRosols and Photochemistry EXperiment.
SCOUT-O3 – Stratospheric Climate interactions with emphasis On the Upper Troposphere and lower stratosphere.
CRYOSTAT – CRYOspheric STudies of Atmospheric Trends in stratospherically and radiatively important gases.
CHABLIS – Chemistry of the Antarctic Boundary Layer and Interaction with Snow
TORCH – Tropospheric ORganic CHEmistry experiment.
NAMBLEX – North Atlantic Marine Boundary Layer EXperiment.

Teaching Responsibilities and Experience

2001 – 2004 **UNIVERSITY OF EAST ANGLIA – Graduate Student Instructor.**
Organised and demonstrated M.Sc. Atmospheric Sciences practical class at the University of East Anglia using GC-FID. Maintained instrument, planned and conducted field excursions and provided interpretive advice to students.

2003 – 2004 **UNIVERSITY OF EAST ANGLIA – Tutor.**
Private tutor for Undergraduate Chemistry and High School Mathematics.

2001 – 2005 **UNIVERSITIES OF LEEDS AND EAST ANGLIA – Member of the Graduate Affairs Committees.**
Working alongside department faculty to maintain and improve the working conditions for graduate students.

Professional Affiliations

American Geosciences Union (AGU), European Geosciences Union (EGU), American Association for Aerosol Research (AAAR) and the New York Academy of Sciences (NYAS).