

CURRICULUM VITAE - Dr A. Hugh Mortimer

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Academic Qualifications:

2004-2007 DPhil (PhD) University of Oxford, Department of Physics
Ph.D. thesis title “Development of a miniaturised spectrometer for the remote sensing of planetary atmospheres”
1997-2001 Masters Degree University of Sheffield, Department of Physics.
MPhys Physics (Hons) Degree

Scientific Employment History:

2008 – Present Senior Research Scientist and PI of the STFC Newton Agritech Programme with China – Rutherford Appleton Laboratory, RAL Space, STFC, Harwell Science and Innovations Campus, Oxfordshire, OX11 0QX

2008 – 2012 Post Doctoral Research Associate Joint Appointment– Oxford University and Rutherford Appleton Laboratory, Space Science and Technology Department, Oxfordshire, OX11 0QX

2004 – 2008 Post Graduate Studies, Atmospheric Oceanic and Planetary Physics Group, University of Oxford, OX1 3PU

2001 - 2004 Research Scientist. National Physical Laboratory (NPL), Environmental and Optical Division, Queens Road, Teddington.

Awards:

RAL Technology and Innovation Award	2008 – 2009
STFC Advanced Development Fellow	2014 – Present
Recipient of China Foreign Expert Researcher Program	2016 - Present

Patent:

Mortimer H, “Compact interferometer spectrometer”, WO/2011/086357 filed, 14th January **2011**

Mortimer H, McCormack E. “Compact heterodyne interferometer” PCT/GB2018/050275, filed on 31st January **2018**

Publications:

Q. Wang, L. Yan, **H. Mortimer**, et al. “True orthophoto generation using Line segment matches” The Photogrammetric Record, **2018**

Q. Xie, J Dash, W. Huang, D Peng, Q Qin, **H Mortimer**. “Vegetation Indices Combining the Red and Red-Edge Spectral Information for Leaf Area Index Retrieval” Applied Earth Observations and Remote Sensing, **2018**

Gandolfo, D.S., **Mortimer, H.**, Woodhall, J.W. and Boonham, N. “Fourier transform infra-red spectroscopy (FTIR) using the attenuated total reflection (ATR) method to analyse Japanese larch (*Larix kaempferi*), pine (*Pinus* spp.) and citrus (*Citrus* spp.) in healthy and diseased states”. Journal of Applied Spectroscopy **2016**

Smith, D; Nightingale, T; **Mortimer, H**; et al. “Calibration approach and plan for the sea and land surface temperature radiometer”, journal of applied remote sensing, **2014**

M. Palomino, T. Taylor, G. McBride, **H. Mortimer**, R. Owen and M. Depledge, "Optimising Web-Based Information Retrieval Methods for Horizon Scanning Using Relevance Feedback", FedCSIS **2013**

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M. A. Palomino, T. Taylor, G. McBride, **H. Mortimer**, R. Owen, and M. Depledge, "The Impact of Relevance Feedback on Web-based Information Retrieval for Horizon Scanning Applications", in Business Informatics, J. Korczak, H. Dudycz, and M. Dyczkowski, Eds. Wroclaw, Poland: Publishing House of Wroclaw University of Economics, **2013**

Mortimer H, "The Spatially Modulated Interferometer: A Space Based Microsatellite Instrument for Planetary Atmospheric Remote Sensing Applications." D.Phil thesis, **2008**

ESA Science document: ref:SCI-PA/2008.002/Marco-Polo, Issue: 2, **2008**.

Mortimer H, Calcutt S, Reininger F, "Development of a miniaturised remote sensing interferometer" American Astronomical Society, DPS, 39, 34.09, **2007**

Invited Presentations

AAAS "Developing international science programmes" Austin Texas February **2018**

Atmospheric, Oceanic and Planetary Physics Seminar, "A review of hyperspectral imaging techniques for the remote sensing of planetary atmospheres" Oxford University **April 2016**

American Meteorological Society, "A novel miniature Fourier Transform Spectrometer: The MicroFTS" Atlanta, US, **January 2010**

QA4EO Meeting, "Best practice procedures in infrared calibration of Earth Observation instrumentation" Turkey, **October 2009**

Atmospheric, Oceanic and Planetary Physics Seminar, "A miniaturised infrared spectrometer for the remote sensing of planetary atmospheres" Oxford University **November 2008**

International Astronautics Congress, Glasgow, UK. **October 2008**

Division of Planetary Sciences, Florida, US, "The spatially modulated interferometer: A miniaturised infrared spectrometer for the remote sensing of planetary atmospheres". **September 2007**

Science, Engineering and Technology for Britain, "Infrared spectroscopy from space" Houses of Parliament, **April 2006**

European Geosciences Union, Vienna, Austria, **April 2006**

Division of Planetary Sciences, Pasadena, California, US. **September 2006**

Division of Planetary Sciences. Cambridge, Cambridgeshire, UK, **October 2005**

UKSpace Conference, **April 2009**

Public Engagement

Scientific Advisor on the international art project "Invisible Dust". **2010 – Present**

Scientific Advisor Art Collaboration "8 Minutes" Alexander Whitely Dance Company **2016 – Present**

Scientific Advisor Art Collaboration "Substance" Phil Coy **2016 – Present**

Scientific and Technical Advisor "Year One Million", Discovery Channel **2016** Scientific Advisor Theatre Collaboration "New Atlantis" LAS theatre – **2013**

Scientific Advisor Art Collaboration "8 Minutes" Alexander Whitely Dance Company **2012 – 2013**

Scientific Advisor on the film "Guardians of the Galaxy", Marvel **2012 – 2013**

Scientific Advisor Art Collaboration "Sunlight" Elizabeth Price **2012 – 2014**

Scientific Advisor on the film "Prometheus" 20th Century Fox. **2010 – 2011**

Science Oxford – Cafe Scientifique, "Space Exploration" **July 2009**

Lord Florey Talk, Lincoln College, "Infrared Space Instrumentation" Oxford University: **May 2008**

Leicestershire Astronomical Society. "Space exploration: Man Vs. Machine" National Space Science Centre. **January 2007**