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Professional Experience

11/2020 – present	Section Head, SNS Beamline Operations, Neutron Scattering Division, Neutron Sciences Directorate, Oak Ridge National Laboratory
10/2018 – 10/2020t	Technical Project Manager, Neutron Technologies Division, Neutron Sciences Directorate, Oak Ridge National Laboratory
1/2018 – 9/2018	Director, Neutron Scattering Division, Neutron Sciences Directorate, Oak Ridge National Laboratory
3/2015 – 12/2017	Director, Chemical and Engineering Materials Division, Neutron Sciences Directorate, Oak Ridge National Laboratory
8/2009 – 2/2015	Group Leader, Research Facility Operations, NIST Center for Neutron Research, National Institute for Standards & Technology
7/2012 – 2/2015	Joint Faculty Appointment Senior Research Scientist, Dept. of Materials Science and Eng. University of Maryland
3/2009 – 6/2012	Joint Faculty Appointment Associate Research Scientist, Dept. of Materials Science and Eng. University of Maryland
2003 – 2009	Senior Staff Scientist, ISIS Facility, Rutherford Appleton Laboratory, UK
1987 – 2003	Staff Scientist, ISIS Facility, Rutherford Appleton Laboratory, UK

Track Record

Prior to joining the Neutron Sciences Directorate in 2015, I was head of the Research Facility Operations Group (RFO) at the NIST Center for Neutron Research. The group comprised a 50-plus staff cohort of scientists, engineers, and technicians responsible for operations, maintenance, development, and installation of the center's suite of neutron scattering instruments. The group worked closely with the center's Neutron Condensed Matter Science Group to support both in-house and user-driven research activities. During my tenure, the RFO group was also heavily involved in planning for and successfully executing the center's 5-year \$95 M project to expand its cold neutron measurement capabilities with the installation of a new cold source and five additional supermirror guides and instrumentation.

Before moving to the U.S., I worked for many years at the ISIS spallation neutron source, Rutherford Appleton Laboratory, U.K., as a staff scientist in the Crystallography Group, with overall responsibility for operation and development of the High Resolution Powder Diffractometer (HRPD). I led a series of major upgrades on HRPD, including the design and installation of new detector arrays and of a 100 m long supermirror ballistic guide and played a central role in the ISIS project team which designed and built the medium-resolution General Materials diffractometer (GEM).

Past research interests include application of high-resolution neutron and X-ray powder diffraction in the study of molecular crystals, including phase transition studies and structure determination, and in the structure-property and processing relations in dielectric oxide ceramics.

My peer-reviewed publications include over 160 papers (h-index 40 with over 6900 citations) on these subjects (see below). The use and development of neutron and X-ray synchrotron powder diffraction techniques and sample environments was also a major component of this research.

Education

University of Durham, UK

Geology (Physics & Math subsid.)

B.Sc. 1986

University of Reading, UK

Physics

Ph.D. 1993

Synergistic Activities

NIST Center for Neutron Research Upgrade Review Committee (2019 – present)

UK Neutron Strategic Review panel member, Science and Technology Facilities Council (STFC), United Kingdom, 2016-2017.

American Conference on Neutron Scattering, Co-chair Sources, Instrumentation and Software session, 2014.

Editorial Board for Journal of Neutron Research

Past member of experimental proposal review committees of national user facilities including ISIS, NIST, and SNS/HFIR.

Professional Memberships

Neutron Scattering Society of America

British Crystallographic Association

Publications

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ResearcherID: P-8397-2015

Selection of silicon photomultipliers for a $^6\text{LiF}:\text{ZnS}(\text{Ag})$ scintillator based cold neutron detector, A. Osovizky, K. Pritchard, Y. Yehuda-Zada, J.B. Ziegler, P. Tsai, M. Ghelman, A.K. Thompson, R.M. Ibberson, G.M. Baltic, C.F. Majkrzak, N.C. Maliszewskyj, J. Phys. Commun. **2** (2018) 045009, DOI 10.1088/2399-6528/aab381

Optimization of $6\text{LiF}:\text{ZnS}(\text{Ag})$ scintillator light yield using GEANT4, Y. Yehuda-Zada, K. Pritchard, J.B. Ziegler, C. Cooksey, K. Siebein, M. Jackson, C. Hurlbut, Y. Kadmon, Y. Cohen, R.M. Ibberson, C.F. Majkrzak, N.C. Maliszewskyj, I. Orion, A. Osovizky, Nucl. Inst. Meth. **A892**, 59-69 (2018), DOI10.1016/j.nima.2018.02.099

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Structure determination of alpha- $\text{La}_6\text{W}_2\text{O}_{15}$, M.H. Chambrier, R.M. Ibberson, and F. Goutenoire, J. Solid State Res., **183**, 1297-1302 (2010)

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- Crystal structures and glass phase transition behaviour of cyclohexene.*, R.M. Ibberson, M.T.F. Telling, and S. Parsons, *Cryst. Growth Des.*, **8**, 512-518 (2008)
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$Ba_8CoNb_6O_{24}$: A d^0 dielectric oxide host containing ordered d^7 cation layers 1.88 nm apart, P. M. Mallinson, M. M. B. Allix, J. B. Claridge, R. M. Ibberson, D. M. Iddles, T. Price, and M. J. Rosseinsky, Angew. Chem. Int. Ed., **44**, 7733-7736 (2005)

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