

SHORT CV FOR RICHARD A. J. O'HAIR

School of Chemistry, University of Melbourne, Victoria 3010, Australia

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Personal Information

Date and Place of Birth: December 28, 1964; Palo Alto, USA.

Nationality: USA and Australian.

Marital Status: Married, one daughter (born May 24, 1998).

Languages: English and German.



Education and Degrees Awarded

D.Sc., University of Adelaide, 2005.

Ph.D., University of Adelaide, 1991.

B.S. (Top 1st class Honours), University of Adelaide, 1986.

Society Fellowships and Memberships

Fellow of the Royal Australian Chemical Institute (FRACI).

Fellow of the Australian and New Zealand Society for Mass Spectrometry (FANZSMS).

American Society for Mass Spectrometry.

American Chemical Society.

Research and Teaching:

11/2023 - 12/2023 Visiting Research Professor (with Dr. Luke MacAleese) at Laboratoire de Spectrometrie Ionique et Moleculaire, Université Claude Bernard (UCB), Lyon, France.

9/2016 – 4/2017 Senior Humboldt Fellow (with Prof. Konrad Koszinowski), Institut für Organische und Biomolekulare Chemie, Georg-August-Universität Göttingen, Germany.

7/2006 - present Professor, School of Chemistry, University of Melbourne.

12/2012 - 2/2013 Visiting CRNS Research Fellow (with Prof. Philippe Dugourd) at Laboratoire de Spectrometrie Ionique et Moleculaire, Université Claude Bernard (UCB), Lyon, France.

6/2010 - 7/2010 Visiting Research Professor (with Prof. Philippe Dugourd) at Laboratoire de Spectrometrie Ionique et Moleculaire, Université Claude Bernard (UCB), Lyon, France.

6/2009 - 7/2009 Visiting Research Professor (with Prof. Jean-Claude Tabet) at Laboratoire de Chimie Biologique Organique et Structurale, Université Pierre et Marie Curie (UMPC), Paris, France.

1/2003 - 6/2006 Associate Professor and Reader, School of Chemistry, University of Melbourne.

8/1996 - 12/2002 Senior Lecturer, School of Chemistry, University of Melbourne.

5/1996 - 8/1996 U.S. Department of Energy (DOE) Faculty Fellow at Oak Ridge National Laboratory (ORNL) – worked with Dr. Scott McLuckey.

8/1993 - 5/1996 Assistant Professor, Department of Chemistry, Kansas State University.

7/1991 - 7/1993 Postdoctoral Fellow, Department of Chemistry & Biochemistry, University of Colorado at Boulder, Colorado, USA (worked with the late Prof. Chuck DePuy and Prof. Ronnie Bierbaum).

1-7/1991 Postdoctoral Fellow, Department of Organic Chemistry University of Adelaide (worked with Prof. John Bowie).

1/1990 - 1/1991 Postdoctoral Associate, Chemistry Department, University of Wollongong (worked with Assoc. Prof. Roger Truscott).

Service to University:

2020-2022	Head of School of Chemistry, University of Melbourne.
2018-2019	Founding co-chair School of Chemistry Equity & Diversity Committee.
2012-2015	Deputy Head of School of Chemistry, University of Melbourne.
2010-2012	Associate Dean (Research & Industry), Faculty of Science, University of Melbourne.
2011-2012	Member, Melbourne Neuroscience Institute Executive Committee.
2010-2012	Member, Melbourne Materials Institute Management Committee.
2009	Deputy Head of School of Chemistry, University of Melbourne.
2006-2009	Member University of Melbourne Course Standing Committee for New Generation Bachelor of Science.
2006-2009	Chair, School of Chemistry Academic Programs Committee.

Awards and Recognition

2021	ANZSMS Medal, Australian and New Zealand Society for Mass Spectrometry.
2016	Senior Humboldt Fellowship.
2014	Elected Fellow of the Australian and New Zealand Society for Mass Spectrometry (FANZSMS).
2009	Associate Editor of the Journal of the American Society for Mass Spectrometry.
2007	Morrison Lecturer, Australian and New Zealand Society for Mass Spectrometry.
2004	Elected Fellow of the Royal Australian Chemical Institute (FRACI).
2002	David Syme Research Prize.
2002	Gilmour Research Award.
2001	The Royal Society of Chemistry Travel Award.
1998	The Selby Research Award.
1996	U.S. Department of Energy (DOE) Faculty Research Fellowship at ORNL.
1991	Australian Research Council Postdoctoral Research Fellowship.
1988	The Heddle Research Award.
1987	Commonwealth Postgraduate Scholarship.
1986	The Rennie Scholarship for Distinction in Chemical Research.

Research at a glance:

(a) Research Interests - Fundamental and Applied Mass Spectrometry: Mass spectrometry, MS, is a powerful tool to analyse a wide range of molecules and to study fundamental chemistry in the gas phase. Research in my group is focused on the use of advanced MS techniques and molecular modelling methods to explore contemporary problems in chemistry and at the chemistry/biology interface. I am particularly interested in understanding the mechanisms of reactions widely used in synthesis, including organometallic reactions and transition metal catalysed reactions. Another key area is the development of radical based methods for the analysis of biomolecules via MS. Our applied MS work has involved identification of small bioactive molecules and the revitalisation of the Twin Ion Method to study metabolism of exogenous small molecules (e.g. insecticides or drugs) in animal models *in vivo*. These studies are often carried out in collaboration with workers in the USA, France and Germany and with collaborators at the Bio21 Institute of Molecular Science and Biotechnology.

(b) Research Funding: Since August of 1996, I have attracted around \$4M worth of internal and external funding, including three single investigator - three year Large Australian Research Council (ARC) grants, five joint ARC Discovery Grants and one ARC Linkage Infrastructure Grant. I was also a Founding Chief Investigator of the ARC Centre of Excellence for Free Radical Chemistry and Biotechnology.

(c) Research Students: I have graduated 1 MSc and 1 PhD student from Kansas State, and 18 MSc, 1 MPhil and 17 PhD students from Melbourne. I have also

supervised 22 honours and over 30 undergraduate students at the University of Melbourne. Three of my former PhD students have gone on to academic careers (Freitas is at Ohio State University, Reid is at University of Melbourne and Rijs is at UNSW), and my students have found employment in a wide range of national and international research laboratories and in industry. Three PhD graduates have been employed by a leading Australian Biotech company (CSL). I have mentored 9 postdoctoral fellows, two of whom have gone on to become academics (Donald at UNSW, Vikse at Rice University).

(d) Publications: Over 360. Citations: over 10,000. H-index of 51 (WOS, 7 November 2023). ORCID: 0000-0002-8044-0502

(e) Presentations: Over 200 group presentations, including invited keynote lectures and plenary lectures at international conferences (Gordon, Pacifichem, etc.).

Service to Chemistry Community

- Associate Editor of the Journal of the American Society for Mass Spectrometry.
- Editorial Advisory Board Member of international Chemistry journals: "Organometallics"; "Chinese Journal of Chemistry" and "Zeitschrift für Physikalische Chemie".
- Editorial Advisory Board Member of 5 leading international mass spectrometry journals: "Journal of the American Society for Mass Spectrometry"; "Rapid Communications in Mass Spectrometry"; "International Journal of Mass Spectrometry"; "European Journal of Mass Spectrometry"; "Mass Spectrometry Reviews".
- Guest Editor for special issues published in: Australian Journal of Chemistry; European Journal of Mass Spectrometry; and Journal of the American Society for Mass Spectrometry.
- Key executive committee roles (secretary, conference convenor, vice president and president) in the Australian and New Zealand Society for Mass Spectrometry.

Contributions to Chemistry Education

University Level: I have developed course material and teaching lecture and laboratory Organic Chemistry to University students at all year levels (large 1st year classes to small post-graduate classes). As Chair of the Academic Programs Committee, School of Chemistry (2006-2009) I was responsible for overseeing and implementing the restructuring of the Chemistry Major accompanying introduction of the Melbourne Model.

High School Level: I have contributed via involvement in the:

- VCE Science Expert Advisory Studies Committee (responsible for making recommendations on the review of the Victorian curricula of year 11 and 12 high school Chemistry, Biology and Environmental Science).
- VCE Chemistry Review Committee (responsible for developing a new Victorian curriculum for year 11 and 12 high school Chemistry).

Role as External Assessor

Review of Chemistry Department: I have been a panel member of a review committee charged with examining all aspects (operational and strategic in teaching and research) of a Chemistry Department at an Australian University.

Journals: I routinely review manuscripts for top international chemistry journals.

Proposals: I review proposals for a range of agencies (e.g. ARC, PRF, ANSTO).

PhD & Habilitation Theses: I have reviewed numerous local and international theses.

Promotions: I have provided recommendations for promotions at a range of levels (tenure through to full Professor) for local and international Universities.