

Michael Strafford Scholz

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Education

2016–	Doctor of Philosophy in Chemistry , University of Melbourne, Parkville. Thesis: <i>Electronic spectroscopy and structure of gas-phase ions</i> Advisor: Professor Evan Bieske.
2012–2015	Bachelor of Science (First Class Honours) in Chemistry , University of Melbourne, Parkville. Thesis: <i>Collisional activation of ions in a tandem drift tube ion mobility mass spectrometer.</i> Advisor: Professor Evan Bieske.

Awards

2018	Nico Nibbering Travel Award, International Mass Spectrometry Conference 2018, Florence Student Travel Scholarship, Pacific Conference on Spectroscopy and Dynamics 2018, San Diego
2017	Runner up, Best Talk, RACI Victoria Inorganic Student Symposium, La Trobe University Study Abroad Travelling Scholarship, University of Melbourne, Parkville
2016–2019	Australian Postgraduate Award / Research Training Program scholarship, University of Melbourne and Australian Government
2016	Best Poster, RACI Physical Chemistry 2016 Meeting, Christchurch Dixon Scholarship, University of Melbourne, Parkville Dean's Honours List, University of Melbourne, Parkville

Presented talks

2018	University of Melbourne–Tohoku University Chemistry workshop, The University of Melbourne, invited Experimental Quantum Biophysics seminar, Aarhus University, invited Electronic and Photonic Materials seminar, University of New Mexico, invited Pacific Conference on Spectroscopy and Dynamics, San Diego, contributed
2017	RACI Victoria Inorganic Student Symposium, La Trobe University, contributed
2016	University of Melbourne–USA Chemistry Symposium, The University of Melbourne, invited RACI Physical Chemistry Student Conference, Katoomba, contributed

Presented posters

2019	RACI Physical Chemistry 2018 Meeting, University of Western Australia
2018	RACI Victoria Inorganic Student Symposium, Monash University 22nd International Mass Spectrometry Conference, Florence
2017	Australian and New Zealand Society for Mass Spectrometry 26 Conference, Flinders University
2016	RACI Physical Chemistry 2016 Meeting, University of Canterbury

Teaching

Mar. 2017– Jun 2019	Laboratory demonstrator , CHEM30015 (“Advanced Practical Chemistry”, Physical Chemistry laboratory), University of Melbourne, Parkville
Mar. 2019	Teaching assistant , CHEM30016 (“Reactivity and Mechanism”, Properties of Solids and Statistical Thermodynamics), University of Melbourne, Parkville
Mar. – Oct. 2016	Laboratory demonstrator , CHEM10004 and CHEM10006 (“Chemistry 1” and “Chemistry for Biomedicine”), University of Melbourne, Parkville.

Publications

- M. S. Scholz, G. Muller, N. I. Bartlett, U. Jacovella, E. J. Bieske
Electronic spectrum of the ferrocenium cation
in preparation for *J. Chem. Phys.* (preprint available upon request)
- 18 E. Carrascosa, C. Petermayer, M. S. Scholz, J. N. Bull, H. Dube, E. J. Bieske
Reversible photoswitching of isolated ionic hemiindigos with visible light
in press at *ChemPhysChem*, doi:10.1002/cphc.201900963.
- 17 H. Ma, A. McKay, A. Mravak, M. S. Scholz, J. White, R. Mulder, E. J. Bieske, V. Bonačić-Koutecký, R. A. J. O’Hair
Structural characterisation and gas-phase studies of the $[\text{Ag}_{10}\text{H}_8\text{L}_6]^{2+}$ nanocluster dication
in press at *Nanoscale*, doi:10.1039/C9NR08321A.
- 16 J. N. Bull, M. S. Scholz, E. Carrascosa, M. K. Kristiansson, G. Eklund, N. Punnakayathil, N. de Ruelle, H. Zettergren, H. T. Schmidt, H. Cederquist, M. H. Stockett
Ultraslow radiative cooling of C_n^- ($n = 3-5$)
J. Chem. Phys. **2019**, *151*, 114304.
- 15 G. Muller, K. J. Catani, M. S. Scholz, U. Jacovella, N. I. Bartlett, and E. J. Bieske
Electronic spectra of diacetylene cations (HC_4H^+) tagged with Ar and N_2
J. Phys. Chem. A **2019**, *123* (20), 7228–7236.
- 14 J. N. Bull, G. da Silva, M. S. Scholz, E. Carrascosa, E. J. Bieske
Photo-initiated intramolecular proton transfer in deprotonated para-coumaric acid
J. Phys. Chem. A **2019**, *123* (20), 4419–4430.
- 13 J. N. Bull, J. T. Buntine, M. S. Scholz, E. Carrascosa, E. J. Bieske
Photodetachment and photoreactions of substituted naphthalene anions in a tandem ion mobility spectrometer
Faraday Discuss. **2019**, *217*, 34–46.

- 12 J. N. Bull, M. S. Scholz, E. Carrascosa, G. da Silva, E. J. Bieske
A double molecular photoswitch driven by light and collisions
Phys. Rev. Lett. **2018**, *120* (22), 223002.
- 11 E. Carrascosa, J. N. Bull, M. S. Scholz, N. J. A. Coughlan, S. Olsen, U. Wille, E. J. Bieske
Reversible photoisomerization of the isolated green fluorescent protein chromophore
J. Phys. Chem. Lett. **2018**, *9* (10), 2647–2651.
- 10 M. S. Scholz, J. N. Bull, E. Carrascosa, B. D. Adamson, G. K. Kosgei, J. J. Rack, E. J. Bieske
Linkage photoisomerization of an isolated ruthenium sulfoxide complex: sequential versus concerted rearrangement
Inorg. Chem. **2018**, *57* (9), 5701–5706.
- 9 J. N. Bull, E. Carrascosa, N. Mallo, M. S. Scholz, G. da Silva, J. E. Beves, E. J. Bieske
Photoswitching an isolated donor-acceptor Stenhouse adduct
J. Phys. Chem. Lett. **2018**, *9* (3), 665–671.
- 8 J. N. Bull, M. S. Scholz, E. Carrascosa, E. J. Bieske
From *E* to *Z* and back again: reversible photoisomerisation of an isolated charge-tagged azobenzene
Phys. Chem. Chem. Phys. **2018**, *20*, 509–513.
- 7 M. S. Scholz, J. N. Bull, N. J. A. Coughlan, E. Carrascosa, B. D. Adamson, E. J. Bieske
Photoisomerization of protonated azobenzenes in the gas phase
J. Phys. Chem. A **2017**, *121* (34), 6413–6419.
- 6 S. F. Lim, B. L. Harris, G. N. Khairallah, E. J. Bieske, P. Maître, G. da Silva, B. D. Adamson, M. S. Scholz, N. J. A. Coughlan, R. A. J. O’Hair, M. Rathjen, D. Stares, J. M. White
Seleniranium ions undergo π -ligand exchange via an associative mechanism in the gas phase
J. Org. Chem. **2017**, *82* (12), 6289–6297.
- 5 J. N. Bull, E. Carrascosa, M. S. Scholz, N. J. A. Coughlan, E. J. Bieske
Online measurement of photoisomerization efficiency in solution using ion mobility mass spectrometry
Analyst **2017**, *142*, 2100–2103.
- 4 J. N. Bull, M. S. Scholz, N. J. A. Coughlan, E. J. Bieske
Isomerization of an intramolecularly hydrogen-bonded photoswitch: protonated azobis(2-imidazole)
Phys. Chem. Chem. Phys. **2017**, *19*, 12776–12783.
- 3 D. C. Georgiou, M. A. Haghighatbin, C. F. Hogan, M. S. Scholz, J. N. Bull, E. J. Bieske, D. J. Wilson, J. L. Dutton
A strong *cis*-effect in an imidazole-imidazolium-substituted alkene
Angew. Chem. Int. Ed. **2017**, *56* (29), 8473–8480.

- 2 | J. N. Bull, M. S. Scholz, N. J. A. Coughlan, A. Kawai, E. J. Bieske
Monitoring isomerization of molecules in solution using ion mobility mass
spectrometry
Anal. Chem. **2016**, 88 (24), 11978–11981.
- 1 | N. J. A Coughlan, M. S. Scholz, A. J. Trevitt, C. S. Hansen, B. D. Adamson, E. J.
Bieske
Photo and collision induced isomerization of a cyclic retinal derivative: an ion
mobility study
J. Am. Soc. Mass. Spectrom. **2016**, 27, 1483.

References

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