Michael Strafford Scholz

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Education

Doctor of Philosophy in Chemistry, University of Melbourne, Parkville.
 Thesis: Electronic spectroscopy and structure of gas-phase ions
 Advisor: Professor Evan Bieske.

 Bachelor of Science (First Class Honours) in Chemistry, University of Melbourne, Parkville.
 Thesis: Collisional activation of ions in a tandem drift tube ion mobility mass spectrometer.
 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
	Dixson 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. – Oct. 2016	Laboratory demonstrator, CHEM10004 and CHEM10006 ("Chemistry 1" and
	"Chemistry for Biomedicine"), University of Melbourne, Parkville.
Mar. 2017-	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

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)
- J. N. Bull, M. S. Scholz, E. Carrascosa, M. K. Kristiansson, G. Eklund, N. Punnakayathil, N. de Ruette, H. Zettergren, H. T. Schmidt, H. Cederquist, M. H. Stockett

 Ultraslow radiative cooling of C_n^- (n = 3-5)

 J. Chem. Phys. in press, doi:10.1063/1.5114678.
- G. Muller, K. J. Catani, M. S. Scholz, U. Jacovella, N. I. Bartlett, and E. J. Bieske Electronic spectra of diacetylene cations (HC₄H⁺) tagged with Ar and N₂ *J. Phys. Chem. A* 2019, *123* (20), 7228–7236.
- 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.
- 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.
- 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.

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.

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.

- 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.
- 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.
- 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.
- 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.
- 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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