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Having obtained an undergraduate degree in chemistry from the University of Oxford, Jonathan moved to the University of Cambridge for his doctoral work on natural product total synthesis under the supervision of Professor Andrew Holmes. He conducted post-doctoral work in Paris with Professor Alexandre Alexakis before returning to Cambridge to begin his independent career. In 2007 he moved to Oxford and as University Lecturer and then Associate Professor of Organic Chemistry; he is currently Professor of Organic Chemistry. His research interests include all aspects of synthesis and structure determination with particular focus on: oxonium ions, complexity generating reactions, reactive intermediates, and the total synthesis of complex natural products. He is a tutorial fellow of Somerville College.

Selected Publications

(1) Chan, H. S. S.; Nguyen, Q. N. N.; Paton, R. S.; Burton, J. W. Synthesis, Characterization, and Reactivity of Complex Tricyclic Oxonium Ions, Proposed Intermediates in Natural Product Biosynthesis. *J. Am. Chem. Soc*. **2019**, *141*, 15951-15962.

(2) Chan, H. S. S.; Thompson, A. L.; Christensen, K. E.; Burton, J. W. Forwards and backwards – synthesis of Laurencia natural products using a biomimetic and retrobiomimetic strategy incorporating structural reassignment of laurefurenynes C–F. *Chem. Sci.* **2020**, *11*, 11592-11600, 10.1039/D0SC04120C. DOI: 10.1039/D0SC04120C.

(3) Smith, O.; Hindson, M. J.; Sreenithya, A.; Tataru, V.; Paton, R. S.; Burton, J. W.; Smith, M. D. Harnessing triaryloxonium ions for aryne generation. *Nat. Synth.* **2023**, *3* (1), 58-66. DOI: 10.1038/s44160-023-00408-1.

(4) Smith, O.; Popescu, M. V.; Hindson, M. J.; Paton, R. S.; Burton, J. W.; Smith, M. D. Control of stereogenic oxygen in a helically chiral oxonium ion. *Nature* **2023**, *615* (7952), 430-435. DOI: 10.1038/s41586-023-05719-z

(5) Astle, S. M.; Guggiari, S.; Frost, J. R.; Hepburn, H. B.; Klauber, D. J.; Christensen, K. E.; Burton, J. W. Enantioselective Synthesis of Sealutomicin C. *J. Am. Chem. Soc.* **2024**, *146* (26), 17757-17764. DOI: 10.1021/jacs.4c02969

(6) Chan, H. S. S.; Li, Y.; Sutro, J. L.; Brown, D. S.; Paton, R. S.; Burton, J. W. Synthesis and properties of allylic, benzylic, propargylic and allenylic oxonium ions. *Nature Synthesis* **2026**. DOI: 10.1038/s44160-025-00964-8.