

Varinder Aggarwal



Varinder Aggarwal was born in India in 1961. He studied chemistry at Cambridge University and received his Ph.D. in 1986 under the guidance of Dr. Stuart Warren. After postdoctoral studies (1986-1988) under Prof. Gilbert Stork, Columbia University, he returned to the UK as a Lecturer at Bath University. In 1991 he moved to Sheffield University, where he was promoted to Professor in 1997. In 2000 he moved to Bristol University where he holds the Chair in Synthetic Chemistry. He has received numerous awards including RSC Hickinbottom Fellowship (1997); RSC Corday Morgan Prize (1999); Novartis Lecturship (1999/2000); Liebigs Lecturship (Germany), (1999/2000) (inaugural); RSC Green Chemistry Award (2003); RSC Reaction Mechanism Award (2004); RSC/GDCh-Alexander Todd-Hans Krebs Lectureship (2007) (inaugural); RSC Tilden Lecturer (2007), RSC Stereochemistry Award (2009); GSK, AZ & Pfizer prize for Process Research (2009); Elected Fellow of the Royal Society (2012). His current research interests center on the development of new catalytic processes for asymmetric synthesis.

Selected Publications

- 1 'Stereocontrolled organocatalytic synthesis of prostaglandin PGF₂ α in seven steps', G. Coulthard, W. Erb, V. K. Aggarwal, *Nature*, **2012**, 489, 278-281.
- 2 'Ate-Complexes of Secondary Boronic Esters as Chiral Organometallic-Type Nucleophiles for Asymmetric Synthesis.' R. Larouche-Gauthier, T G. Elford, V. K. Aggarwal, *J. Am. Chem. Soc.*, **2011**, 133, 16794-16797.
- 3 'Total Synthesis of (+)-Erogorgiaene using Lithiation-Borylation Methodology, and Stereoselective Synthesis of Each of its Diastereoisomers' T. G. Elford, S. Nave, R. P. Sonawane, V. K. Aggarwal, *J. Am. Chem. Soc.*, **2011**, 133, 16798-16801.
- 4 'Enantioselective Construction of Quaternary Stereogenic Centers from Tertiary Boronic Esters: Methodology and Applications' R. P. Sonawane, V. Jheengut, C. Rabalakos, R. Larouche-Gauthier, H. K. Scott, V. K. Aggarwal, *Angew. Chem. Int. Ed.*, **2011**, 50, 3760-3763.
- 5 'Asymmetric Total Synthesis of Solandelactone E: Stereocontrolled Synthesis of the 1,4-diol-2-ene core via Lithiation-Borylation-Allylation Sequence' A. Robinson, V. K. Aggarwal, *Angew. Chem. Int. Ed.*, **2010**, 49, 6673-6675.
- 6 'Practical and Highly Selective Sulfur Ylide-Mediated Asymmetric Epoxidations and Aziridinations Using a Cheap and Readily Available Chiral Sulfide. Application to the Total Synthesis of Quinine and Quinidine', O. Illa, M. Arshad, A. Ros, E. M. McGarrigle, V. K. Aggarwal, *J. Am. Chem. Soc.*, **2010**, 132, 1828-2830.
- 7 Stereocontrolled Synthesis of Carbon Chains Bearing Contiguous Methyl Groups by Iterative Boronic Ester Homologations. Application to the Total Synthesis of (+)-Faranal, G. Dutheil, M. P. Webster, V. K. Aggarwal, *Angew. Chem. Int. Ed.*, **2009**, 48, 6317-6319.
- 8 Highly Enantioselective Conversion of Secondary Alcohols into Tertiary Alcohols with Broad Scope, J. L. Stymiest, V. Bagutski, R. M. French, V. K. Aggarwal, *Nature*, **2008**, 456, 778-782.