Jonathan Clayden, University of Bristol

Jonathan Clayden was born in Uganda in 1968, grew up in the county of Essex in the East of England. He was an undergraduate at Churchill College, University of Cambridge. In 1992 he completed a PhD at the University of Cambridge with Dr Stuart Warren. After postdoctoral work with Professor Marc Julia at the École Normale Supérieure in Paris, he was appointed as lecturer at the University of Manchester in 1994. In 2001 he was promoted to professor, and in 2015 he moved to his current position as Professor of Chemistry at the University of Bristol.

He has published 270 papers, and his research interests encompass areas of synthesis and stereochemistry where conformation has a role to play: dynamic foldamers, atropisomerism, organolithium chemistry, conformationally-induced reactivity and long-range stereochemical effects. His group pioneered the field of dynamic foldamer chemistry, using molecular conformational features to devise synthetic mimics of biological communication devices, including an artificial membrane-bound receptor and a mimic of the vision protein rhodopsin, and he has established the feasibility of stereochemical control over nanometre distances. His work on conformationally induced reactivity has led to new dearomatisation, arylation, and ring expansion chemistry applicable to the synthesis of challenging targets of actual and potential biological activity.

He is a co-author of the widely used textbook “Organic Chemistry” published by Oxford University Press, and his book “Organolithiums: Selectivity for Synthesis” was published by Pergamon in 2002.

He has held an ERC Advanced Grant and senior research fellowships from the Leverhulme Trust and Royal Society. He has received several prizes and awards, most recently the 2018 Tilden Prize of the Royal Society of Chemistry and the 2019 Prix Franco-Britannique of the Société Française de Chimie.