The Nature of the Chemical Concept
Keith S Taber University of Cambridge, UK

All chemistry teachers know that chemistry is a conceptual subject, especially at the upper end of secondary school and at university level, and that some students struggle to understand many chemical ideas. This book offers a step-by-step analysis and discussion of just why some students find chemistry difficult, by examining the nature of chemistry concepts, and how they are communicated and learnt. The book considers the idea of concepts itself; draws upon case studies of how canonical chemical concepts have developed; explores how chemical concepts become represented in curriculum and in classroom teaching; and discusses how conceptual learning and development occurs. This book will be invaluable to anyone interested in teaching and learning and offers guidance to teachers looking to make sense of, and respond to, the challenges of teaching chemistry.

Hardback | 378 pages | ISBN 9781782624608 | £99.99 | $140.00 | 14/05/2019

MicroRNAs in Diseases and Disorders
Philip V Peplow University of Otago, New Zealand
Bridget Martinez University of California, Merced, USA
George A Calin MD Anderson Cancer Center, USA
Aurora Esquela-Kerscher Eastern Virginia Medical School, USA

MicroRNAs have a distinct role in the development and progression of a variety of diseases including cancer, neurological disease and metabolic disease amongst others. As such, there is considerable interest in the potential utilisation of microRNAs in precision and personalised medicine, by increasing our understanding of the role of microRNA in the pathology of disease it allows an opportunity to identify potential therapeutic targets. With an international team of authors this book covers the global perspective from pathology to treatment with a comprehensive review of how drugs can be designed to target microRNAs in a variety of diseases.

Hardback | 472 pages | ISBN 9781788013949 | £179.00 | $250.00 | 29/05/2019

Eggs as Functional Foods and Nutraceuticals for Human Health
Jianping Wu University of Alberta, Canada

Often described as ‘nature’s perfect food’, perceptions of egg consumption and human health have evolved substantially over the past decades. This book presents recent developments on the processing of eggs for nutritional, biomedical, functional food, nutraceutical and other value-added applications, as well as providing new evidence around egg consumption on cardiovascular diseases, metabolic syndrome, weight management, mental development, eye, muscle, and ageing health. It will appeal to food scientists, food chemists, researchers in human nutrition specialising in eggs and dairy nutrition, and those involved in egg production.

Hardback | 406 pages | ISBN 9781788012133 | £179.00 | $250.00 | 16/05/2019