

Editorial

I write this editorial from the high plateau of the Atacama desert of Chile. In this extreme environment, the driest on our planet outside of Antarctica, the view out to the cosmos is superlative. Nations have been flocking to the *Altiplano* over the past decade to build instruments capable of giving us new insights into our universe, ranging from investigating how stars form inside cold, dense cocoons of dust in interstellar space – and then somehow engender planetary systems, to seeking echoes from primordial fluctuations in the microwave background radiation that pervades all of space.

When I am fortunate enough to set my telescope in operation, I am seeing a symphony in motion. The array of skills on display before me is truly magnificent – human insights into science and technology brought together in a engineering marvel that is a telescope and its instrumentation, all to allow me to seek faint signals from exotic molecules existing in environments which can barely be fathomed in the human experience, thousands of light years distant from us. When you have the privilege to conduct this orchestra, a masterpiece of the technological society we live in, it is hard to conceive that there is a parallel world out there where acceptance of science is waning, and belief systems rather than rational argument guide decision making for the human endeavour.

Yet that is the world we live in. Many of the great challenges we face as a civilisation, such as global warming and the

environment, require rational scientific thinking at their very heart to be tackled in a sensible manner. Increasingly, however, they are being given over to ideology and attacks on the scientific method that underlies our very understanding of them and our ability to address them.

This was the subject of the Society's Fellows Lecture this year, given by Distinguished Fellow Professor Barry Jones at the annual dinner. His lecture leads this edition, Volume 147–1 of the *Journal and Proceedings*. It heads a healthy content list, followed by Professor Brynn Hibbert's Mellor Lecture on the changing way in which scientists record their endeavours, and Nobel Laureate Professor Peter Doherty *in Conversation* with Society President Donald Hector. Then follows Council member David Branagan extolling the endeavours the Renaissance writer Georgius Agricola, and papers from three of the Society's student award winners for 2013: Jak Kelly award winner Xavier Zambrana-Puyalto on how to probe the nano-scale with light, and Society Scholarship winners Jessica Stanley on challenges in catalysis and developing sustainable processes, and John Chan informing us about the subject of biosimilars in medicine. I hope you enjoy reading these articles and sampling some of the worthy endeavours taking place today, guided indeed by the tenets taught us by the scientific method.

Michael Burton
Hon. Secretary (Editorial)
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