

## **Citation for the 2018 RAS 'G' Gold Medal: Professor Robert White**

The 2018 Gold Medal in Geophysics is awarded to Professor Robert White

Professor White has achieved a lifetime of distinguished achievement in solid Earth geophysics in which he has made fundamental, transformative contributions in five different areas of Earth science: (1) mid-ocean ridges, (2) mantle plumes and flood basalts, (3) continental rifting, (4) convergent margins, and (5) dyke injection, seismicity and volcanism.

Professor White is Professor of Geophysics, Geodynamics and Tectonics at the Bullard Laboratories of the University of Cambridge, first appointed in 1989. Since 2010 he has also been an adjunct Professor at the University of Iceland, where he studies volcanic rift processes and maps movement of magma beneath the surface. He has trained more than 50 students and post-docs many of whom have taken up senior faculty positions in academia and industry.

Professor White's early research career was in marine geophysics where his work on magmatism associated with the early stages of rifting is probably the best known, most influential and most cited in his career so far. More recently, he has worked extensively and fruitfully in Iceland on the elevated Mid-Ocean Ridge where, in 2014-15, his group used an array of 75 broad-band seismometers to record a famous example of lateral melt propagation along a 46 km long dyke culminating in a surface eruption. His 250 peer reviewed publications on geodynamics and geophysics have been cited more than 5,500 times and are testament to the huge impact he has had on our understanding of the solid Earth.

For these reasons, Professor White is awarded the Royal Astronomical Society's Gold Medal.