Benjamin A. Black is an assistant professor of geology at the City University of New York (New York, USA). His interest in the connections between magmatism, outgassing, and environmental crises began during his PhD at the Massachusetts Institute of Technology (Massachusetts, USA) when he first started exploring the 252 Ma Siberian Traps large igneous province (Russia). His current research projects focus on how volatiles such as carbon and halogens impact on the petrology and evolution of large-scale magmatic systems, including impact melt pools and flood basalt provinces.

Marie Edmonds is a professor in Earth sciences at the University of Cambridge (UK). Her current research focuses on cycling of volatiles between the atmosphere and the mantle and the role that magmatic volatiles play in melting, magma genesis, storage and transport, volcanic eruption style and climate modulation over a range of timescales. Dr. Edmonds develops quantitative frameworks to understand complex physical and geochemical datasets in collaboration with a diverse range of geochemists, geophysicists and volcanologists. As an executive committee member of the Deep Carbon Observatory (DCO), she is responsible for overall scientific and intellectual oversight of DCO’s synthesis and integration activities.

Evelyn Füri is a CNRS researcher at the Centre de Recherches Pétrographiques et Géochimiques (CRPG) in Nancy (France). She obtained a diploma degree in Earth sciences from ETH Zurich (Switzerland) in 2004, and she completed her PhD in 2010 at the Scripps Institution of Oceanography in San Diego (California USA). During her graduate work, she studied the noble gas and carbon geochemistry of mantle-derived rocks and fluids. Since first joining the CRPG as a postdoctoral fellow, her research focuses on using the isotopes of H, C, N, and noble gases to explore the origin and evolution of volatile elements on planetary bodies in the solar system.

Sally A. Gibson is professor of petrology and geochemistry at the University of Cambridge (UK). She has studied large igneous provinces for over 30 years. Sally’s expertise is based on combining observations from field expeditions to the large igneous provinces of Paraná–Etendeka (South America), Deccan (India) and North Atlantic Large Igneous Province with geochemical and geophysical data. A major research focus has been the volatile-rich and the Fe-rich mantle melts that accompany the more voluminous flood basalts. Sally’s research group is currently investigating the source of volatiles in mantle plumes and also the capacity of the lithospheric mantle to sequester and release volatiles. She is currently Chair of the UK’s Volcanic and Magmatic Studies Group and Vice President of the Mineralogical Society of Great Britain and Ireland.

Hehe Jiang is a recent PhD graduate from Rice University (Texas, USA). She uses geochemistry as a tool to understand the interplay between the deep Earth and Earth’s surface processes. She integrates field geology, analytical techniques, and simple geochemical/physical models to reconstruct the evolution of the continental crust, investigate paleohydrologic events in sedimentary basins, and study long-term elemental cycling.

Adrian P. Jones is a professor in petrology at University College London (UK). His laboratory uses experimental high-pressure methods to quantify materials and melting behaviour in Earth’s mantle and investigate the transport of materials to sites of volcanic eruptions. He is particularly interested in the deep carbon cycle: where deep carbon is stored and how it is entrained back to the surface in carbon-rich magmas. Dr. Jones is a founding member of the Deep Carbon Observatory and continues to serve on its executive committee.

Balz S. Kamber is a professor of petrology at the School of Earth, Environmental and Biological Sciences at Queensland University of Technology in Brisbane (Australia). He applies geochemistry to understand the elemental cycles that operate on the Earth, with a particular interest in the mass exchange between the deep Earth and Earth’s surface. As a former resident of Sudbury, Ontario (Canada), he has taken an interest in the fascinating geology of large impact structures and their clues for processes that occur in the aftermath of an impact. His group is active in the development of novel analytical methods at the boundaries between chemistry, geology, material science and environmental science.

N. Ryan McKenzie is an assistant professor at the University of Hong Kong. He obtained his BSc in geology/paleobiology at the University of California at Los Angeles (USA) in 2006; his MS degree in 2009 and his PhD degree in 2012, both from the University of California at Riverside. He was a Jackson Postdoctoral Fellow at University of Texas at Austin between 2012 and 2014 and a Flint Postdoctoral Associate at Yale University (Connecticut, USA) between 2014 and 2016. Ryan’s research focuses on the dynamic coevolution of various components of Earth’s surface system via field and analytical studies of the sedimentary rock record.

Sami Mikhail is a lecturer in Earth sciences at the University of St Andrews (UK). The motivation behind his research is to understand how the interior of a planet affects and controls the composition of its atmosphere. He studies natural samples and combines results on these with high-pressure–high-temperature experiments and theoretical modeling. This approach has been applied to investigating the source of Iceland’s volcanism, diamond-formation in the deep Earth, and on linking mantle processes to the atmospheric chemistry of Earth, Mars, Venus, and a selection of exoplanets.

Joseph A. Petrus is a postdoctoral fellow in the School of Earth Sciences at the University of Melbourne (Australia). He received BSc and MSc degrees in physics from the University of Waterloo and Queen’s University (Canada), respectively, and turned his attention to the Sudbury impact (Canada) for his PhD in Earth science from Laurentian University (Canada). He is particularly interested in applying geochemistry and geochronology to impactites and so better constrain the nature and fate of the rocks involved in large impact events. His research often involves developing and applying novel analytical techniques and data reduction strategies.
**Martin Schobben** is a postdoctoral researcher at Utrecht University (The Netherlands), having received his BSc and MSc degrees in Earth sciences from the same university. His PhD at the Free University of Berlin (Germany) focused on the Permian–Triassic mass extinction, which he examined from carbon, oxygen and sulfur isotope geochemical signatures locked in marine sedimentary rocks and in individual fossils. Recently, he has focused on developing methodological strategies to reliably read these geochemical proxies in terms of the recorded physical and chemical parameters.

**Celina A. Suarez** is an associate professor in the Department of Geosciences at the University of Arkansas (USA). She received her BS degree from Trinity University (Texas, USA), her MS degree from Temple University (Pennsylvania, USA) and her PhD in 2010 from the University of Kansas (USA). She was a National Science Foundation Earth Sciences Postdoctoral Fellow at Boise State University (USA) where she used rare earth elements, stable isotopes, and infrared spectroscopy to understand bone preservation and diagenesis. Dr. Suarez’s research focuses on using the trace element and stable isotope geochemistry of fossil vertebrates, invertebrates, and paleosols to understand the paleoecology and paleo-climatology of ancient continental environments. She is particularly interested in past greenhouse climates and major climate shifts caused by carbon-cycle perturbations, such as the mid-Cretaceous thermal maximum and the end-Triassic extinction.

**Bas van de Schootbrugge** is an assistant professor in the Geosciences Department at University of Utrecht (The Netherlands). His research aims to understand the evolution of the biosphere in deep time. Dr. van de Schootbrugge focuses on major transitions in Earth history, such as the Toarcian Oceanic Anoxic Event and the end-Triassic mass extinction, because these provide snapshots of severe changes to the biosphere, environmental, and climate. He uses a multidisciplinary approach that combines paleontology with inorganic and organic geochemistry. Central to this work is an understanding of the causes and consequences of widespread ocean anoxia and the deposition of organic-rich black shales. To this end, he analyses organic-walled microfossils that provide insight into the response of terrestrial and marine primary producers.

**Paul B. Wignall** is a professor of palaeoenvironments at the University of Leeds (UK). He studies mass extinctions using a combination of palaeontological, sedimentological and geochemical approaches. He has spent over 25 years studying the Permo-Triassic mass extinction and has interests in extinction studies in general. The link between large igneous province volcanism and mass extinctions has been an especial focus of attention over the past 15 years.

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