

PRESS RELEASE

NEW BOOK: "Volcanology. Processes, Deposits, Geology and Resources," Springer Nature, Switzerland, 2024, Authors: Ray Cas, Guido Giordano and John Wright

'[Volcanology. Processes, Deposits, Geology and Resources](#)', Springer Nature, Switzerland, 2024, by Ray Cas (Monash University, Clayton, Australia), Guido Giordano (Department of Science, University of Roma Tre, Rome, Italy) and John Wright (Consultant, Spanish Water, Curaçao) is just published. It is a well-structured, comprehensive introduction for students at all levels, as well as a reference for all professionals working in the field of active or extinct volcanic areas, e.g. for environmental protection, risk prevention and mitigation, and the search for energy and mineral resources. The book offers a vast overview of eruption-types and volcanic processes of the past and present, in looking at examples from all over the world including the active volcanoes Campi Flegrei, Vesuvius, Stromboli and Etna.

Rome, 10 July 2024 - Publication of the textbook: ['Volcanology. Processes, Deposits, Geology and Resources'](#), Springer Nature, Switzerland, 2024. This book is a thoroughly updated and extended new edition of the classic textbook Volcanic Successions, by Ray Cas and John Wright 1987, that has educated and influenced generations of students, researchers and professionals in the field of volcanology.

The new volume has a third author, **Professor Guido Giordano, a volcanologist from the Department of Science at the University of Roma Tre**. The book takes up the challenge of recounting volcanology in its incredible scientific and technological development of the last forty years, harmoniously integrating the direct academic and professional experiences of the authors - all internationally renown volcanologists - who integrated a comprehensive bibliography produced by the scientific community. The book has the methodological rigor, scientific completeness and clarity of exposition that makes it a fundamental textbook and reference work for readers ranging from students on master's degree courses to doctoral students, researchers, and University professors, as well as all professionals working in active or extinct volcanic areas for environmental protection, risk prevention and mitigation, and the search for energy and mineral resources.

The book is split into 6 parts and a total of 18 chapters, taking the reader from the fundamentals of volcanology, such as the properties of magmas and their interaction with the rocks within which they migrate and the environment in which they erupt, to the treatment of eruptive styles, the products of eruptions, their impacts on the environment, gradually broadening the view from the formation of individual pumice to the methods used to reconstruct the history of entire volcanoes and volcanic provinces in their complexity and within their geodynamic context.

All chapters, in addition to the theoretical treatment of the physical and chemical processes, comprehensively present practical case studies actually tackled by the authors, so that the photographic documentation and accompanying explanatory diagrams are largely original and of the highest quality, which is essential for understanding the text and enabling the reader to better visualize the theoretical descriptions.

Guido Giordano, Professor of Volcanology in the Department of Science at the University of Roma Tre, says: "When Prof. Ray Cas proposed me as co-author of this book twenty years ago, I was immensely honoured, given that his previous book had trained me as a volcanologist and that he himself had become my mentor over the years. The venture allowed me not only to tell what I had learnt, but to grow tremendously in my understanding of volcanic systems, having the opportunity to study them in depth and learning how to look at them from the microscopic scale to the overall view, always keeping the theoretical and experiential parts well connected, trying to convey the importance of both touching the volcanic rocks and observing the eruptive processes directly. I believe this is the philosophical heart and uniqueness of the book, which we shared fully with Ray and John Wright. And it is precisely the approach that is necessary for those who, like me, in the Italian context, deal with active volcanoes mainly from the point of view of their hazard".

In fact, the book offers a vast overview of eruptions and associated processes from present and past cases from all over the world, but also deals with many Italian cases, including the active volcanoes Campi Flegrei, Vesuvius, Stromboli and Etna.

INFORMATION

The book is available both in print (it comes printed in 2 volumes) and as an [ebook](#).

PRESS CONTACTS

Communication Office

Alessia del Noce - 339 5304817

Francesca Vitalini – 339 3390878

ufficio.comunicazione@uniroma3.it