Methods and Applications of Geochronology

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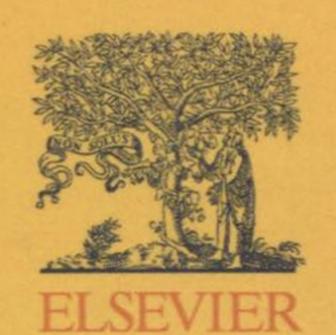
Methods and Applications of Geochronology provides a comprehensive, practical guide to the rapidly developing field of geochronology. Chapters are written by leading experts in their specific field of geochronology and discuss practical information and best practices for establishing laboratories, using appropriate analytical equipment, and handling data. Methods and Applications of Geochronology is an authoritative guide not only for the foundational principles of geochronological research, but also descriptions of analytical methods, guidance for sample selection, all the way to data reduction and presentation.

Key Features

- Features the latest techniques and recommended tools for the most common geochronological methods.
- Includes perspectives from a variety of well-respected researchers in the field, each representing different specialties of geochronology.
- · Bridges the gap between theory and application, offering practical advice and relevant case studies throughout.
- J. Gregory Shellnutt is a Professor in the Department of Earth Sciences, National Taiwan Normal University. His research focuses on the geochemistry and geochronology of magmatic rocks from large igneous provinces, Precambrian mafic dyke swarms, the Central African Orogenic Belt, and the Appalachian Orogeny. He was awarded Young Scientist awards from the Mineralogical Association of Canada and Academia Sinica, the Ministry of Science and Technology (Taiwan) Outstanding Research Award in 2015 and 2022, and the Ma Ting Ying and Wang Hanzhuo awards from the Geological Society of Taiwan. Greg is currently the Co-Editor-in Chief of Lithos, Associate Editor of the Journal of the Geological Society of India, and editorial board member of Scientific Reports and Frontiers in Earth Science.

Steven W. Denyszyn is an Assistant Professor in the Department of Earth Sciences at Memorial University of Newfoundland, Canada. Previous affiliations include the University of Toronto, the Berkeley Geochronology Center, and the University of Western Australia. He primarily uses high-precision U-Pb geochronology to study the timing and rates of igneous processes, particularly large igneous provinces and magmatic ore deposits, as well as mass extinctions, paleocontinental reconstructions, and tectonics.

Dr. Kenshi Suga is a Research Fellow in the Department of Earth Sciences, National Taiwan Normal University. He is the manager of the LA-ICP-MS/MS laboratory and focuses on the development of analytical methods for in situ dating using alpha (U-Pb) and beta (e.g. Lu-Hf, Rb-Sr, Re-Os) decay systems and provides lectures and training to visiting faculty and graduate students. Kenshi has served on the editorial board of Frontiers in Earth Science. As of 2024, he is a researcher with a glass and ceramic products company in Japan with expertise in geosciences.





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