

Special Issue

Neutron and Photon Activation Analyses and Their Application in Geological, Geochemical and Environmental Research

Message from the Guest Editors

Nuclear analytical methods, in particular activation analysis, have become an indispensable tool in geological and geochemical research and mineral prospection. Despite their decline in the post-Chernobyl and Fukushima era and ceding position to ‘safer’ conventional methods, they still have great potential where conventional methods are ineffective or unsuitable. The potential for nondestructive, multielement (both major and trace) bulk analysis competes in situations where conventional surface analysis cannot provide a representative image of a sample whose dissolution or fusion is difficult or undesirable. This Special Issue aims at sharing experience in application of activation techniques in geoscience and analyst practice. Irradiation facilities and laboratories, counting and radioanalytical procedures can be introduced. Filling educational gaps would be appreciated by teachers and students in the geoscience field. The Special Issue is not limited to neutron and photon activation, contributions on activation methods with other irradiation sources or on related nuclear analytical methods are also welcome.

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About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

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