Special Issue

Applications of Modern Mathematical Methods in Geosciences

Message from the Guest Editors

This Special Issue publishes the novel developments in the research using advanced mathematical and applied physics tools, including modern mathematical structures (group theory, graphs and networks, fractals, topology, and fuzzy structures), modern modeling methods (e.g., nonlinear dynamic systems, game theory, cellular automata, complex systems, and artificial intelligence), and modern inverse methods (e.g., multi-criteria decision making, artificial intelligence, and modern optimization and meta-heuristic algorithms) in different areas within the earth sciences, such as remote sensing, automated petrography, fractal analysis, analytical methods in fracture mechanics and rock engineering, reservoir modeling and fluid mechanics, slope stability and ground control, acoustic emission and induced seismicity, earthquakes and wave propagation in the earth, mining and rock blasting, tunneling and rock drillability, tribology, geophysics, and geomechanics. The focus of this Special Issue is the development of advanced analytical and computational methods used for solving problems in any field of earth and geosciences.

Guest Editors

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Dr. Manoj Khandelwal

Dr. Reza Khajavi

Dr. Danial Jahed Armaghani

Deadline for manuscript submissions

closed (28 June 2023)

MDPI

About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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