

# Special Issue

## Advances in Topological Graph Theory

### Message from the Guest Editor

Dear colleagues, Topological graph theory is a branch of graph theory that deals with the geometric aspects and challenges related to graphs and graphs models.

Topological graph theory is a promising area of research because of its wide range of applications. It crosses many disciplines, including combinatorics, geometry, design theory and low-dimensional topology, and it is filled with a wide range of problems, ranging in sophistication from simple examples to the material for elaborate research projects. The purpose of this Special Issue is to advance the literature by introducing high-calibre research, and to increase the appeal and popularity of the subject matter. Potential topics include, but are not limited to, the following: 1. Graph embeddings; 2. Planar graphs; 3. Duality; 4. Topological combinatorics; 5. Crossing numbers; 6. Symmetric maps; 7. Voltage graphs; 8. Graph constructions; 9. Surfaces and imbeddings; 10. Genus; 11. Topological indices of graphs; 12. Chemical applications of graph indices; 13. Mathematical properties of graph indices; 14. Graph spectra; 15. Graph energy; 16. Algebraic graph theory 17. Chromatic graph theory.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 November 2023)



## Mathematics

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### 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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