

## Special Issue

# Special Functions and Polynomials: Theory, Practice, Applications, and Modeling

### Message from the Guest Editors

Special polynomials and numbers have significant roles in various branches of mathematics, theoretical physics, and engineering. The problems arising in mathematical physics and engineering are framed in terms of differential equations. Most of these equations can only be treated using various families of special polynomials which provide new means of mathematical analysis. They are widely used in computational models of scientific and engineering problems. Applications of various properties of special functions and polynomials also arise in problems of number theory, combinatorics, theoretical physics, and other areas of pure and applied mathematics, providing the motivation for introducing a new class of special functions and polynomials. Each paper that will be published in this Special Issue should aim to enrich our understanding of current research problems, theories, applications, and modeling of special functions and polynomials. Potential topics include but are not limited to the following:

- Special functions
- Special polynomials
- Orthogonal polynomials
- $q$ -Analiz
- $p$ -adic analysis
- Umbral calculus
- Differential and integral equations
- Number theory

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### Guest Editors

Dr. Serkan Araci

Prof. Dr. Mehmet Acikgoz

Dr. Ugur Duran

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### Deadline for manuscript submissions

closed (31 March 2023)



## Axioms

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## About the Journal

### Message from the Editor-in-Chief

*Axioms* is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

Prof. Dr. Humberto Bustince

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