# PREFACE: A SPECIAL ISSUE IN HONOR OF PROFESSOR HARI MOHAN SRIVASTAVA'S 85TH BIRTHDAY

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It is with immense pleasure and profound respect that we present this Special Issue of Applicable Nonlinear Analysis, Volume 2, Number 3 (2025), a collection dedicated to celebrating the groundbreaking work and enduring legacy of Professor Hari Mohan Srivastava on the momentous occasion of his 85th Birthday.

Professor Srivastava is a towering figure in the mathematical community, whose prolific output and intellectual curiosity have spanned and significantly shaped numerous fields of study. His monumental contributions, particularly in the areas of Special Functions (including various polynomials and fractional operators), Geometric Function Theory, Fractional Calculus, and Analytic Number Theory, have served as a foundation for countless researchers worldwide. The diversity and depth of the articles within this volume serve as a powerful testament to the breadth of his influence.

The contributions in this special issue reflect the vibrant research landscape inspired by Professor Srivastava's work.

*Fractional Calculus and Applied Analysis*: The paper explores the application of fractional derivatives, such as the study of Laguerre-Type Fractional Parametric Population Dynamics Models.

*Geometric Function Theory*: Several articles delve into the properties of analytic functions, including new subclasses defined by operators like the Salagean Operator, with a focus on determining coefficient bounds and analyzing Hankel determinants.

*Analytic Number Theory and Special Functions*: Research in this area is highlighted by studies on integral representations and evaluations of Linear Harmonic Euler Sums of both odd and even weights, connecting to the Riemann zeta and polylogarithm functions.

*Partial Differential Equations*: The issue also includes important advances in the analysis of differential equations, such as investigations into the Hölder Regularity of Weak Solutions to Quasi-Linear Elliptic Equations involving generalized variable exponent Laplacians.

This collection brings together a distinguished group of mathematicians who have contributed original research to these diverse yet interconnected areas. We believe this volume is a fitting tribute to Professor Srivastava's extraordinary career—a career marked by rigor, innovation, and an unparalleled commitment to mathematics.

We extend our sincere gratitude to all the contributing authors for their high-quality submissions, the reviewers for their invaluable time and scholarly insights, and the editorial staff for their dedication in bringing this special issue to fruition.

It is our hope that this collection not only honors a true giant of modern mathematics but also provides a stimulating and essential resource for the next generation of researchers.

**Guest Editors**

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