



PREFACE TO THE SPECIAL ISSUE OF THE JOURNAL OF DECISION MAKING AND HEALTHCARE CELEBRATING THE 85TH BIRTHDAY OF PROFESSOR HARI MOHAN SRIVASTAVA

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We are pleased to present this special issue of the *Journal of Decision Making and Healthcare* (Volume 2, Issue 2, August 2025), dedicated to celebrating the 85th birthday of Professor Hari Mohan Srivastava—an eminent mathematician whose profound contributions have shaped a wide spectrum of mathematical sciences, particularly in the areas of special functions, fractional calculus, and mathematical modeling.

The motivation for this special issue was to provide a platform for showcasing current research developments that align with Professor Srivastava's scholarly legacy and to foster academic discourse inspired by his influential work. Over his distinguished career, Professor Srivastava has authored or co-authored hundreds of research papers and books, collaborated with researchers across the globe, and served on the editorial boards of numerous journals. His lifelong dedication to mathematical sciences continues to be a source of inspiration for the global academic community.

This issue features a carefully selected collection of papers that reflect both theoretical advancements and applied methodologies in diverse yet interconnected domains of decision-making, healthcare modeling, operational research, and mathematical analysis. The included articles address topics such as environmental efficiency assessment, proximal algorithms in optimization theory, inventory models with demand and deterioration factors, and numerical methods for integral equations—each contributing meaningfully to the broader scientific discourse promoted by this journal.

The first paper introduces a window slack-based data envelopment analysis framework to assess environmental efficiency across EU nations. Using ecological footprint and climate change indices, the study evaluates performance over time. The Global Malmquist-Luenberger index is employed to capture dynamic advancements toward sustainable development.

The second article proposes a relaxed proximal point algorithm for solving generalized inclusion problems involving comonotone operators. It extends classical proximal methods beyond monotonicity assumptions in Hilbert spaces. The convergence analysis underscores the role of comonotonicity and averaged resolvents.

The third paper develops a supply-chain inventory model for deteriorating goods under simultaneous trade credit and cash discount policies. The model addresses price and stock-dependent demand and includes both crisp and fuzzy environments. Numerical illustrations validate the approach and offer managerial insights for effective inventory decisions.

In a related contribution, fourth paper examines an EOQ inventory model incorporating Weibull deterioration and price-sensitive demand under complete backlogged shortages. The analysis is performed in both crisp and fuzzy contexts. The study emphasizes optimal policy derivation and sensitivity to key inventory parameters.

The fifth article presents an approximate method for solving Volterra integral equations of the first kind with special kernels. The technique leverages Taylor series expansion and transforms the integral

equation into a system of linear equations. This approach provides a closed-form, computation-friendly solution framework.

We sincerely thank all the authors who contributed high-quality submissions to this special issue and express our appreciation to the reviewers for their insightful and constructive evaluations. We are also grateful to the editorial office of the *Journal of Decision Making and Healthcare* for their support throughout the editorial process.

As Guest Editors, it is our privilege to dedicate this volume to Professor Srivastava. We hope this issue not only honors his remarkable academic contributions but also encourages ongoing research that builds upon his foundational ideas.

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