EDITORIAL

This Special Issue of the *Kragujevac Journal of Science* is devoted to the *International Year of Quantum Science and Technology*. The year 2025 marks the 100th anniversary of Werner Heisenberg's groundbreaking introduction of matrix mechanics - a pivotal moment in the development of quantum mechanics. Heisenberg's formulation offered a radically new way for describing the behavior of matter at atomic and subatomic levels. Departing from the principles of classical physics, matrix mechanics laid the foundation for the quantum revolution, including the development of the famous Schrödinger equation just one year later. In recognition of this scientific milestone, the United Nations has declared 2025 the International Year of Quantum Science and Technology, aiming to inspire a year-long, worldwide celebration that raises public awareness of the importance and impact of quantum science and its applications. Considering this historical occasion, Professor Dugic initiated the preparation of this special issue. This initiative was warmly supported by the editorial board of the *Kragujevac Journal of Science*.

The contributions to this issue are due to invitation only. We hope the readers will benefit from the articles presenting quantum science and technology starting from a historical and foundational perspective up to the open issues of modern quantum cosmology. As a special part of the Issue, we want to emphasize a collection of the answers of the authors who responded to our query on the future of Quantum Science and Technology. We want to express gratitude to all the authors for their time and effort to set this special issue. We would also like to thank the Editorial Board of the Journal for disseminating awareness of the scientific importance and global relevance of Quantum Science and Technology.

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