

Editorial

# Introducing the Journal of Nuclear Engineering: An Interdisciplinary Open Access Journal Dedicated to Publishing Research in Nuclear and Radiation Sciences and Applications

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In 1938, Strassmann, Hahn and Meitner discovered neutron-induced nuclear fission in uranium, forever changing our world and opening multiple paths to developing nuclear energy, nuclear medicine, instrumentation, space propulsion, environmental monitoring, remediation and nuclear security. Nuclear physics and engineering provide the foundation for all of these fields, and I am pleased to inform our scientific community that MDPI has hereby launched the internationally open access *Journal of Nuclear Engineering* (JNE, ISSN 2673-4362) to serve our scientific community. The *Journal of Nuclear Engineering* (JNE) publishes peer-reviewed technical articles, technical notes and critical reviews containing original research, ideas and developments related to the science and application of nuclear and radiation processes. JNE also publishes rapid communications, historical reviews and letters to the Editor-in-Chief, which provide expeditious exposition of high-quality work of immediate interest to the readership of JNE. The scope of the journal includes (but is not limited to) the following areas:

- Reactor systems design
- Reactor thermal hydraulics
- Nuclear fission
- Nuclear fusion technologies and materials
- Reactor control systems
- Reactor physics and shielding
- Sensitivity analysis, uncertainty quantification and predictive modeling
- Nuclear fuels
- Fuel cycles
- Next generation reactors and advanced reactors
- Fission reactor materials
- Fusion reactor materials
- Radioactive materials
- Nuclear physics
- Nuclear chemistry and biochemistry
- Nuclear biology
- Nuclear medicine and medical imaging
- Mathematical and experimental nuclear technology
- Radioactive waste management

- Radiation application and protection
- Nuclear safety and risk assessment
- Accelerators, spectrometers and detectors
- Radiation measurements
- Radiation physics and chemistry
- Nuclear instrumentation
- Nuclear magnetic resonance spectroscopy
- Nuclear policy, economics and human resource development

As a former Associate Editor (March 1984–June 1986) and subsequently the longest-serving (June 1986–November 2019) Editor (in-Chief) of *Nuclear Science and Engineering* (NSE), the first (1957) research journal of nuclear engineering in the world, I am very honored to have been selected by MDPI to serve as the Founding Editor-in-Chief of the *Journal of Nuclear Engineering* (JNE). I personally have a long-standing research interest in all aspects of nuclear engineering, having published, as Editor, the comprehensive *Handbook of Nuclear Engineering* [1], the largest such undertaking to date. Together with a team of dedicated editors, external reviewers and Members of the Editorial Board, we aim to establish the *Journal of Nuclear Engineering* as an outstanding forum for publishing, in paper-free Open Access online form, advances in nuclear engineering and related sciences, technologies and policy studies. We are aware that nuclear energy production releases less radiation into the environment than energy production from any other major source [2].

I am thankful to our Members of the Editorial Board for agreeing to serve, and am hereby inviting them to organize Special Issues of JNE, as well as to contribute their own research for publication in JNE. Our team and I cordially invite you, members of our scientific community, to join us by sending contributions which fall within the broad scope of the *Journal of Nuclear Engineering*. Together, we aim at building a high-quality scientific journal that will provide a distinguished forum for those seeking new horizons in all areas of nuclear engineering.

**Conflicts of Interest:** The author declares no conflict of interest

## References

1. Cacuci, D.G. *Handbook of Nuclear Engineering*; Springer Science & Business Media: Berlin, Germany, 2010.
2. Rhodes, R. Why Nuclear Power Must Be Part of the Energy Solution. *Yale Environment* 360, 19 July 2018. Available online: <https://e360.yale.edu/features/why-nuclear-power-must-be-part-of-the-energy-solution-environmentalists-climate> (accessed on 19 April 2020).



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