Special Issue Announcement - Call for Papers

Journal of Innovation Sciences and Sustainable Technologies (JISST)

(online) - A Make in India Creation

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Focus Theme: Financial Engineering – Theory, Models and Software Implementations



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About the Journal

This journal is created to disseminate innovative research under the Make in India initiative. One of the main objectives of this journal is to promote innovation in Science & Technology in the younger generation of researchers and students by fostering greater unification among several disciplines of Science, Engineering, Technology, Medicine, Social Sciences, and Finance. This activity relates to the encouragement of scientific research that focuses on problems of contemporary societal concerns and their solutions, leading to the development of sustainable technologies to better the lives of mankind across the globe. This journal has been registered with several indexing, reviewing, and abstracting agencies. JISST is completely peer-reviewed, multidisciplinary, and unique in nature and supports open-access research. This Journal has published a few special issues on contemporary societal challenges.

Subjects of Interest

Financial Engineering is a multidisciplinary field that applies theoretical as well as computational techniques from a spectrum of disciplines. The extensive innovations in financial engineering led to the evolution of plethora of financial instruments or contracts which are used for the purpose of hedging, speculation and arbitrage. Today these financial contracts are often used in risk management practices of financial institutions. Some of these contracts include options, futures & forwards and swaps (including credit-default-swaps, CDOs and CDS) which are used to hedge and/or trade the risk emanating a s result of participation in the financial markets.

With the evolution of data science and machine learning, the techniques in those areas are now widely applied in financial engineering, to fine tune the models used in the evaluation of financial contracts. This special issue encourages the researchers and practitioners in the field of financial engineering to publish their work in the following areas:

- 1. Derivative pricing
- 2. Portfolio analysis
- 3. Credit risk
- Market risk
- 5. Operational risk

- 6. Stress testing
- 7. Regulatory capital framework
- 8. Computational efficiency of pricing and risk computation algorithms
- 9. Credit securitization
- 10. Collateral management
- 11. Regulatory compliance
- 12. Weather and energy derivatives
- 13. Climate risk
- 14. Sustainable finance
- 15. Carbon pricing
- 16. Algorithmic and high-frequency trading
- 17. FinTech

The scope of the issue is not limited to the above-mentioned topics and papers related to other areas from the domain of financial engineering are also welcome.

It is hoped that the research presented in this issue may pave way for building new products for the benefit of investors.

The Editorial Board will consider **three** types of submissions:

- → Full-length original research papers covering theory, practice, and implementations.
- → Short tutorials and expository articles of an educational nature; and
- → Brief presentations of interesting and timely problems in all related domains and their proposed solutions using known or new innovative techniques.

The main goal of the submitted articles is to bring a privileged level of understanding to both academia and industry on issues and topics that reflect societal concerns and may not usually be readily and easily accessible either to academia or practitioners of interdisciplinary research.