Guided by Honourable Prime Minister Sheikh Hasina's esteemed leadership and the essence of independence, the inception and establishment of the Military Institute of Science and Technology (MIST) took place on April 19, 1998. Going beyond its military emphasis, MIST plays a substantial role in nation-building by providing engineering education to civilian students. This institute aims at attaining its ultimate goal to be a 'Center of Excellence' by the concerted efforts of all its members.

At the heart of MIST's scholarly endeavors is the MIST International Journal of Science and Technology (MIJST), a peer-reviewed open-access publication released biannually. MIJST actively seeks contributions addressing solutions to the unique challenges faced by the developing world.

We take great pleasure in unveiling the December issue, Vol. 11 of our online journal MIJST. This edition is dedicated to exploring the forefront of technical excellence and its profound impact on our daily lives. Let us collectively harness the power of engineering to lay the groundwork for a future that is not only better but also more intelligent and sustainable. This is a shared endeavor to enhance the quality of life through innovation and advanced thinking.

I would like to express my gratitude to the dedicated editorial board whose hard work has culminated in the successful publication of the current edition. Special appreciation goes out to the reviewers who provided invaluable recommendations and insights for the papers featured in this issue. I extend my sincere congratulations to all the authors whose contributions have enriched the content of the journal. I extend my deepest thanks to all the National and International Advisory Board Members of MIJST for their continual guidance and recommendations aimed at elevating the standard of our journal. Together, let us continue striving for excellence and contributing to the advancement of technology on a global scale.

I wish continued success of MIJST in the years to come!

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Major General Mohammed Saidul Islam, rcds, ndc, psc  
Commandant, MIST, Bangladesh  
Chief Patron, MIJST, Bangladesh