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Message

Adjutant General, Bangladesh Army Member, Board of Trustees



I am very delighted to know that Bangladesh Army University of Science and Technology (BAUST), Saidpur has recently published the fourth issue of the BAUST Journal. This event is a hallmark to the continuous endeavor of BAUST Saidpur to become a center of excellence for education and research activities in the fields of engineering, technology, science, arts, and business administration.

Bangladesh Army, while fulfilling its mission to serve the motherland, has set an additional goal to actively assist in nation building through quality education. BAUST, Saidpur is leading the effort through their state-of-the-art research and development activities. BAUST Journal will play a vital role in this journey by providing a platform for educators and young researchers to present their research activities. Such research and development works will shape up the future leaders in their fields of study and help them to contribute in the development of our country.

I would like to convey my sincere appreciation to the Vice Chancellor of BAUST Saidpur for his noble initiative and continuous support for successfully publishing the BAUST Journal. My heartfelt gratitude goes to the members of the editorial board, the reviewers, and all others involved in achieving this success. I would like to congratulate the authors on publication of their research papers. I advise the students and the faculty members of BAUST to continue the culture of research and innovative activities. I wish “BAUST Journal” a glorious future. May Almighty Allah bless us all.

Major General Shakil Ahmed SPP, BGBM, nswc, afwc, psc
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Message

Vice Chancellor Bangladesh Army University of Science and Technology



I am extremely happy on the occasion of publishing the second issue of volume 2 of the BAUST Journal. Bangladesh Army University of Science and Technology (BAUST), Saidpur is striving forward to fulfil its mission in becoming the center of excellence in engineering and technology, science, arts and business administration through core research in the fields of interest along with a state-of-the-art education system. The fourth publication of the BAUST journal is a testimony to its ever-broadening footprint of research and innovation in the fields of academia. BAUST, Saidpur boasts of an impressive team of qualified faculty members and aspiring students. The quantity and the quality of research and innovation have been continuously improving, which is reflected in the impressive collection of peer-reviewed articles. BAUST Journal is a gateway to the local and international researchers to publish their core research outcomes. This serves the country's and Bangladesh Army's initiative to spread quality education among the future leaders of the country.

I am thankful to the reviewers, the authors, the editorial team, the members of the BAUST Journal committee, and the Board of Trustees members of Bangladesh Army University of Science and Technology for their efforts which resulted in the publication of the current issue. My heartfelt gratitude goes to Bangladesh Army Welfare Trust and Army Headquarter Rangpur area for their contribution to the development of BAUST and their support in the publication of BAUST Journal. I wish BAUST Journal all its success in becoming an outlet of the center of excellence in the country's teaching, research, and innovation activities. May Almighty Allah bless us all and help us in our noble endeavors.

Brigadier General Professor Dr. Engr. Md Lutfor Rahman (Retired)

Vice Chancellor

Bangladesh Army University of Science and Technology (BAUST), Saidpur, and
Chief Patron, BAUST Journal

Message

Chief Editor BAUST Journal



The publication of the second issue of the second volume of the BAUST Journal delights me immensely. This issue contains a total of six research articles dealing with various current issues of science and technology, business studies, social science and literature. I congratulate all the researchers for their valuable contributions. I strongly believe that their scholarly write-ups will go a long way to motivate other promising researchers to engage themselves in further research into their respective fields of interest.

The articles published in this issue were all reviewed by a panel of experienced reviewers. Their valuable comments on the articles and suggestions for their improvement have been highly appreciated. On behalf of the editorial board, I am expressing our deepest gratitude to all these reviewers for their sincere co-operation.

I would also like to thank our chief patron, honorable Vice Chancellor of BAUST, Brigadier General Professor Dr. Engr. Md. Lutfor Rahman (Retired), for his strong support and guidance for the publication of this journal. I also thank all members of the editorial board for their hard work and sincere co-operation. I hope readers will highly benefit from reading each and every article showcased in this journal. Any suggestion for the improvement of our effort will be cordially received and highly appreciated. I am looking forward to quality articles for the next volume of our prestigious journal.

J. Islam

Professor Md. Jahurul Islam

Dean

Faculty of Science and Humanities, and
Chief Editor, BAUST Journal



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