

PROCEEDINGS



NCTSEM'22

NATIONAL CONFERENCE
ON TRENDS IN SCIENCE, ENGINEERING & MANAGEMENT



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Campus Address: G.T. Road Khanna, Ludhiana (Pb.)
Email: info@ggi.ac.in



TOLL FREE NUMBER **1800 137 0800**
HELPLINE NUMBER **+91 9914 666 777**

Proceedings of

**National Conference on Trends in Science,
Engineering
&
Management
(NCTSEM'22)**

Editor

Dr. Deepti Sharma
&
Dr. Sarbjeet Kaushal

By

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PREFACE

The National Conference on Trends in Science, Engineering, and Management (NCTSEM-2022) is being organized at Gulzar Group of Institutions, Libra Khanna (Punjab), India on the auspicious occasion of the successful completion of one decade.

The purpose of this conference is to provide a forum for scientists, engineers, and academicians from the institutions, universities, and industries around the Nation to share their research activities and their achievements in addressing the challenges being faced. We would like to thank all participants for their contributions to the conference.

This conference proceeding contains papers presented during NCTSEM-2022. This conference aims to disseminate the latest research in Science, Engineering & Management.

It is hoped that the friendliness and candidness of NCTSEM-2022 shall enhance the ability of the delegates to grow by interacting with experienced resource persons and young researchers.

My gratitude is due to S. Gurcharan Singh, Chairman, Gulzar Educational Charitable Trust, who has been very encouraging and supportive. The holding of this conference and the publication of the proceedings have been possible due to the wholehearted support of the Management of GGI. A fundamental role in the conference preparation has been played by the local organizing committee and the members of the staff, each of which gave an outstanding contribution. Last but not least I thank one and all for their support to make this conference a milestone in all aspects.

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