



# Journal of Contemporary Studies in Science and Innovation

## (JCSSI)



Peer-Reviewed • Open-Access • International Bi-Annual Journal

Published by

**Debra Thana Sahid Kshudiram Smriti Mahavidyalaya**  
**(Autonomous)**

Chakshyampur, Paschim Medinipur, West Bengal, India

Peer-Reviewed, Open-Access, International Bi-Annual Journal

Published by **Debra Thana Sahid Kshudiram Smriti Mahavidyalaya**  
**(Autonomous),**

in the broad fields of **Natural and Applied Sciences**, including



**Biological Sciences**



**Environmental & Earth Sciences**



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# About the Journal



The ***Journal of Contemporary Studies in Science and Innovation (JCSSI)*** is a peer-reviewed, open-access, international bi-annual journal published by Debra Thana Sahid Kshudiram Smriti Mahavidyalaya (Autonomous). It aims to promote high-quality original research, review articles, and short communications in the broad fields of Natural and Applied Sciences, including Biological Sciences, Environmental and Earth Sciences, Chemistry, Physics, Mathematics, Computer Science, Agriculture, and related disciplines. The journal provides a platform for researchers, academicians, and practitioners to share innovative ideas, methodologies, and discoveries that contribute to scientific advancement and technological innovation. JCSSI follows a double-blind peer review process to ensure the integrity, quality, and originality of all published works.

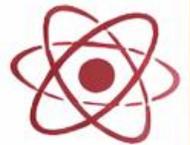


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# Aim & Scope



The Journal of Contemporary Studies in Science and Innovation is a Peer-Reviewed, Open-access, Bi-annual electronic International Journal published by Debra Thana Sahid Kshudiram Smriti Mahavidyalaya (Autonomous). It is committed to promoting original unpublished work in the fields of for Natural and Applied Sciences. The journal publishes original research papers, review articles, and short communications in all major areas of applied and natural sciences, including but not limited to:

1. Biological Sciences and Biotechnology
2. Environmental and Earth Sciences
3. Chemistry and Chemical Engineering
4. Physics and Materials Science
5. Agriculture and Food Technology
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7. Mathematical Science



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## Editorial Note



It is with great pleasure and pride that we present the inaugural issue of the *Journal of Contemporary Studies in Science and Innovation (JCSSI)*, Volume 1, Issue 1 (July–December 2025).

JCSSI is envisioned as a peer-reviewed, open-access, international bi-annual journal dedicated to fostering high-quality research in the broad domains of Natural and Applied Sciences. The journal aims to provide a dynamic platform for researchers, academicians, and practitioners to disseminate innovative findings and contribute to the advancement of scientific knowledge across disciplines, including Biological Sciences, Environmental and Earth Sciences, Chemistry, Physics, Mathematics, Computer Science, Agriculture, and other related fields.

The successful launch of this inaugural issue marks an important milestone for Debra Thana Sahid Kshudiram Smriti Mahavidyalaya (Autonomous). We are committed to maintaining rigorous peer-review standards, ensuring academic integrity, and promoting interdisciplinary research of global relevance.

We sincerely acknowledge the dedicated efforts of our editorial board members, reviewers, and authors whose valuable contributions have made this issue possible. Their commitment to excellence has laid a strong foundation for the journal's future growth and impact.

We hope that the articles published in this issue will inspire further research, encourage academic dialogue, and serve as a valuable resource for the scientific community.

We warmly invite researchers from across the globe to contribute to upcoming issues of JCSSI and be a part of this growing academic endeavor.

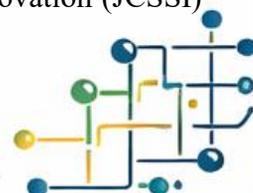
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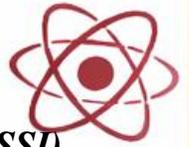


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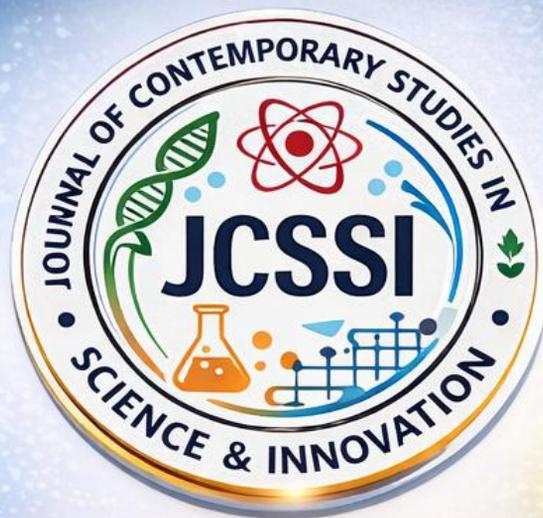
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