National Conference on Mathematics Education

December 20-22, 2024

Organised by

Department of Education in Science and Mathematics,
National Council of Educational Research and Training,
Sri Aurobindo Marg,
New Delhi-110016

Mathematics

The main aim of mathematics education is to develop mathematical thinking and problem-solving skills in students, enabling them to make informed decisions and become autonomous learners. It seeks to promote mathematics education as a tool for sustainable development, aligning with the goals of NEP 2020 and NCF-SE 2023 such as focusing on conceptual understanding, problem-solving, and critical thinking. It emphasizes the development of mathematical thinking, reasoning, and communication skills. It encourages hands-on activities, projects, and real-world applications to make mathematics learning more engaging and relevant. Additionally, its aim is to equip students with mathematical skills and knowledge required for the contemporary Indian context, and to showcase innovative approaches, best practices and reforms in mathematics education.

Patron
Prof. Dinesh Prasad Saklani
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Prof. Sunita Farkya,
Head, DESM, NCERT

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Advisory Committee
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ABOUT THE CONFERENCE
The conference shall explore the history of concepts and ideas in mathematics, recent developments, innovative pedagogical practices, assessment methods, teaching and learning based on NEP 2020 and NCF-SE 2023. The focus is on cutting-edge approaches to teaching mathematics, including the role of Augmented Reality (AR) and Virtual Reality (VR) in enhancing the learning experience. The conference also delves into the future of work in mathematics, including the impact of Artificial Intelligence and Machine Learning, Coding so on. Mathematicians, educationists, and teachers are invited to share their ideas and research. This conference is being held by NCERT to observe the National Mathematics Day to mark the birth anniversary of the legendary Indian mathematician Srinivasa Ramanujan.

OUTCOME OF THE CONFERENCE
The three-day conference will provide the sharing platform for the participants to deliberate on the Mathematics Education scenario. The proceedings of the Seminar will be published and shared with the stakeholders for improvement of the mathematics education.

IMPORTANT DATES
Last Date for Submission of Abstract Along with the full paper — 15 Oct 2024

Acceptance Notification — 31 Oct 2024

ONLINE REGISTRATION
Please fill up the online registration form in the link provided below and submit it by 15 Oct 2024.
Link: https://forms.gle/Lgtq9GEKFQYtEMMAA
If the paper is accepted, a non-refundable registration fee of Rs.500/- is to be deposited by the participant at the time of reporting to the venue.

HOW TO REACH NCERT
NCERT, Delhi can be reached easily by road as well as by Metro. It is around 12kms from IGI airport via road and there is a Metro connectivity from Terminal-1 IGI airport to Hauz Khas. New Delhi and Old Delhi railway stations are well connected by Metro. Participants can take the Metro and get down at Hauz Khas Metro station. Participants can also come by cab/taxi directly to the NCERT.

THEMES and SUBTHEMES OF THE SEMINAR

1. Emerging Trends in Mathematics Education
•Artificial Intelligence in Mathematics Education •Virtual and Augmented Reality in Mathematics Education •Personalized Learning in Mathematics Using AI-powered Tools •Machine Learning in Mathematics Education

2. Inclusive, Equitable and Accessible Mathematics Education
•Supporting Students with Special Needs in Mathematics •Culturally Responsive Mathematics Education •Mathematics Education for Gifted Students •Gender Equity in Mathematics Education

3. Technology-Enhanced Mathematics Learning
•Online and Blended Learning in Mathematics Education •Mathematics Learning through Mobile Devices •Gamification in Mathematics Education •Flipped Classroom Approach in Mathematics •Digital Resources for Mathematics Learning

4. Mathematics Curriculum and Pedagogy
•Recent Development in Mathematics in light of NEP 2020 and NCF-SE 2023 •Analysis / Impact of new NCERT textbooks as per NEP 2020 and NCF-SE 2023 •Language and Mathematics •Classroom Discourse and Mathematics Learning •Metacognition and Mathematics Pedagogy

5. Assessment and Evaluation in Mathematics Education
•New Ideas on Assessments in Mathematics Education •Technology-Enhanced Assessment in Mathematics •Competency-Based Assessment in Mathematics •Challenges in Assessment

6. Teacher Professional Development in Mathematics Education
•Teacher Training in Mathematics Education for the 21st Century •Collaborative Professional Development in Mathematics Education •Teacher Initiative and Leadership in Mathematics

7. Mathematics Education for the Future
•Preparing Students for the Future in Mathematics •Challenges of Students in Mathematics Career Progression •Role of Mathematics Education for Sustainable Development •Coding

8. Mathematics Education in the 21st century
•Dialogues in Mathematics Classroom •Collaboration in Mathematics Education •Critical Thinking And Creativity in Mathematics

9. Popularisation of Mathematics
•Mathematics kit, puzzles, toys, and games •Mathematics Storybooks and children's literature •Everyday Mathematics •Mathematics Club, Societies, Organisations •Mathematics Magazines, Newsletters, Journals

10. Indian Heritage of Mathematics Education
•Indian Knowledge System of Mathematics •Ancient Mathematics in India •Vedic mathematics •Ethno-mathematics •Incorporating Indigenous Mathematics Knowledge in Classrooms

11. Challenges related to Mathematics Education
•Students' struggles in learning mathematics •Social and Psychological barriers in Mathematics Learning •Issues, Concerns and Reforms in School Mathematics •Instructional Problems in Mathematics Education

12. Innovative practices in Mathematics Education
- Best practices in
  - Early Childhood/ Foundational Stage
  - Preparatory Stage
  - Middle Stage
  - Secondary Education
  - Teacher Education

13. Interdisciplinary Approaches in Mathematics Education
•Integrating Mathematics with Science and Technology •Mathematics and Humanities: A Collaborative Approach •Project-Based Learning in Mathematics •Mathematics and Environmental Studies •Psychology of Mathematics

14. Lifelong Learning and Mathematics
• Mathematics for Adult Education •Community-Based Mathematics Learning •Mathematics for Vocational Education •Lifelong Skills through Mathematics Education

Plagiarism Alert:
Please ensure that all submissions are original work and properly cite any sources to maintain academic integrity.
Plagiarism will not be accepted in and any instances of academic dishonesty will be taken seriously.

CALL FOR PAPERS
Interested Researchers, Teachers, Teacher Educators, Pedagogues, Research Scholars, Students are requested to send abstracts in the prescribed format.
Format: The abstract and the full paper should be typed in MS Word with Font Size 12, line spacing 1.5, and should be within 300 words. The full paper is also to be written in the same format within 5000 words related to the themes and subthemes of the Seminar. The Abstract should be accompanied by 4/5 key words. Pictures/ Diagrams used in the paper to be sent separately in JPG file along with the paper. The paper should be organised in the following format:
*Abstract with Key Words *Introduction *Objectives *Method & Procedure *Results & Discussion *Conclusion and *References
The abstract and full paper should be submitted through the given google form while registration https://forms.gle/Lgtq9GEKFQYtEMMAA within specified dates. Acceptance notification will be communicated through email only. Add this email ID mathconferencencert24@gmail.com in the contact list to avoid receiving any communication as spam. The proposed presentation may also be sent to the same email ID after acceptance of the paper.

TRAVEL AND STAY PROVISIONS
TA (only III AC Train / Bus / Shared Taxi fares) will be provided on production of tickets booked from authorized source as per NCERT norms, for only one Author of a paper.
Arrangements for food and accommodation will be made in NIE Guest Houses/ Hostels, on request basis for the non-local participants (for maximum one author of a paper).

WEATHER INFORMATION
In Delhi, the month of December is generally cold so, we advise the participants to come with sufficient winter clothes like Jacket, Sweater, Inner, Shawl or any other warm clothes as per their requirement. It is also advised to check the weather forecast of Delhi before coming for the conference.