- Future perspectives on In-service Teacher Training
- Aspirations and Career canvas in Mathematics

## VI. Popularisation of Mathematics teaching among school children

- Mathematics Park, Club and Discussion Forum at Schools
- Gamifications and Brain based Tools for Easy Mathematics
- Mathematics Olympiad-Indian Scenario
- Maths magazines and Journals
- Decentralized Participatory Attempts to popularize Mathematics Teaching
- Co-scholastic Domain in Mathematics
- RAA initiatives of Mathematics
- Mathematics of everyday life

#### **Call for Papers**

Original papers on any one of the above sub-themes are invited from Teacher Educators, Teachers, Academicians, Research Scholars, Students in the prescribed format under the broad conference theme. Papers will be accepted in English only. For research articles, the abstract should include Objectives of the study, Methodology and major findings and for conceptual papers, the abstract should include uniqueness of the concept and expected changes in the present system. The content of the abstract/paper shall be presented as per the following specifications: MS-Word Format, 12 point Times New Roman Font, 1.5 Line Spacing and the citations and references in American Mathematical Society (AMS) style. The minimum word limit for the abstract is 300 and the full paper should be 12-14 pages. Keywords should accompany the abstract. The full length paper and the plagiarism report should be uploaded through registration link provided below. All communications should be made through email: xncmemysuru@gmail.com

Author(s) should mention their designation along with the institutional affiliation and contact details. Full length papers may be sent only on receipt of the communication regarding its acceptance based on the abstract. However, the scrutinising committee will have the exclusive discretionary rights in the selection of the full length paper. Full -length paper submissions will be reviewed by experts in the field and only the submissions that meet the quality requirements will be included in the conference proceedings book. Submit your paper through the registration link provided below.

#### **Important Dates**

- Last date of registration and uploading Abstracts :
   25<sup>th</sup> October 2021
- Last Date for submission of full length paper for the accepted papers: 26th November 2021
- Confirmation of the acceptance: 10th December 2021
- Date of National Conference: 20<sup>th</sup> to 22<sup>nd</sup> December 2021

#### **Registration Details**

Registration link: https://forms.gle/J8h5tRt1rE9dzHNh9

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Prof. Sridhar Srivastava, Director, NCERT

Patron

Prof. Yagnamurthy Sreekanth, Principal, RIEM

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#### **Programme Coordinator**

Dr. Madhu B, DESM





# 10<sup>th</sup> National Conference

### **Mathematics Education**

20-22, December 2021

RIE, Mysuru

REGIONAL INSTITUTE OF EDUCATION (RIE) NCERT, MYSURU



Organized by
Regional Institute of Education (NCERT)
Mysuru-570 006

#### **About the Institute**

Regional Institute of Education, Mysuru (NCERT) established on August 1, 1963, is one of the five such Institutions established by the National Council of Educational Research and Training (NCERT), New Delhi. The RIE, Mysuru caters to the educational needs of the southern states of Telangana, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Union Territories of Puduchery and Lakshadweep. Currently we are running the Master Degree Course, M.Sc. Ed. in Physics, Chemistry and Mathematics which caters preparing the Higher secondary level Teachers. The Regional Institutes of Education (RIEs) (formerly known as Regional Colleges of Education), were started with the main objective of qualitative improvement of school and teacher education through innovative pre-service and in-service teacher training programmes and relevant research, development and extension activities. RIEs are also engaged in counselor education programmes (both pre-service and in-service) at the school sector. The other constituent units of NCERT are NIE New Delhi, CIET New Delhi, PSSCIVE Bhopal, RIE Ajmer, RIE Bhopal, RIE Bhubaneswar and NERIE Shillong.

#### **Initiatives of NCERT**

The National Council of Educational Research and Training (NCERT) is an autonomous organization setup in 1961 by the Government of India to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education. Major objectives of the NCERT and its constituent units are to undertake, aid, promote and coordinate research in areas related to school education; Prepare and publish model textbooks, supplementary material, newsletters, journals and other related literature; Organise pre-service and in-service training of teachers; Develop and disseminate innovative educational techniques and practices; Collaborate and network with state educational departments, universities, NGOs and other educational institutions; Act as a clearing house for ideas and information in matters related to school education; Act as a nodal agency for achieving goals of universalisation of elementary education.

#### **About the Conference**

There is a need for a wider discussion of the social, ethical, and political dimensions of Mathematics Education for disseminating theoretical frameworks, discussing methodological issues, sharing and discussing research, planning for action and the development of a strong research network on Mathematics Education. The main goal of Mathematics Education is to develop the ability of mathematization of the child's thinking. Clarity of thoughts and pursuing assumptions to logical conclusions is central to the mathematical enterprise. Mathematics Education

provides the opportunity to handle abstractions and develop problem solving and decision making abilities.

The National Education Policy 2020 has come up with many newer and much demanded recommendations emphasizing developing strong literacy and numeracy foundation so as to make Mathematics learning more meaningful to the students. The focus is now on the development of competencies by ensuring well-defined class-specific outcomes. Despite current difficulties, continuing to make progress by strengthening and developing new educational programs is crucial for every society. Thus, during this critical period of the pandemic, it is important for math educators to discuss the new opportunities, approaches, and challenges that are emerging in the field and ways to integrate new educational approaches into Mathematics teaching and learning.

This conference intends to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Mathematics Education and Learning. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Mathematics Education and Learning.

National Conference on Mathematics Education is organized in NIE and various constituent units of NCERT during December every year. The 9th National Conference was held at RIE Bhopal in December 2020 in online mode. This year, the conference will be held at RIE Mysuru during 20-21, December 2021. The conference will be held offline/online mode depending on the pandemic situation and the Government Guidelines.

#### Objectives of the Conference

The conference is aimed at knowing the current practices in school education programme with specific focus on the following:

To propagate the vision of Mathematics Teaching as per the NEP 2020 among the Mathematics teachers and teacher educators; To provide best practices of teaching Mathematics; To share the state initiatives in preparation of textbooks with local content and flavour as NEP 2020 envisioned and to provide the teachers to share their experience in using the technology in Mathematics teaching during the period of pandemic and hindrances and concerns about issues of online education like digital divide.

#### Themes and Sub Themes

Themes and Subthemes for the 10th National Conference on Mathematics Education

#### I. Mathematics Education from the perspective of NEP 2020

- Development of Mathematics Education in India.
- Issues and challenges to Mathematics Education with reference to foundational numeracy.
- Impact of NEP 2020 reforms on Mathematics Education
- Strategic planning and use of Mathematics Text Books
- Assessment in Mathematics in the light of NEP 2020
- Indigenous knowledge system in Mathematics
- Professional Standards and Quality concerns in Mathematics Education

#### II. Innovations in teaching of Mathematics.

- Exploring Digital Domain for result oriented Mathematics
   Education
- Innovative instructional designs to address digital divide
- Propelling pedagogical issues and initiatives
- Reflections on the action research in Mathematics
- Roadmap to inclusiveness in Mathematics Education
- Pedagogical Dimensions of Pure and Applied Mathematics

#### III. Mathematics and New Generation Skills

- Innovations in skill oriented Mathematics
- New generation literacies and Mathematics Education
- Action skills towards Mathematization
- Problem solving skills in Mathematics.

# IV. Learning Resources for Mathematical pedagogical processes

- Path breaking in Mathematics Teaching via Technology
   Tools
- Establishing Mathematics labs in schools-issues and challenges
- Effective utilisation of Mathematics kit in Schools
- Teaching Mathematics through Toys

#### V. Professional development of Mathematics teachers

• Issues and Concerns of Pre-service Teacher Training before and during pandemic



To,

## Regional Institute of Education (NCERT)

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