## **National Seminar on Science Education**

National Seminar on 'Science Education' was organized from 21st November, 2017 to 23rd November, 2017 at Regional Institute of Education, NCERT, Ajmer to provide a common platform to all stakeholders working in the field of science education to share their experiences, researches, innovative practices and their impact in improving the quality of school education in general and science education in particular. In this seminar 500 abstracts pertaining to theme and sub themes were received from School Science Teachers, Science Education Researchers and Faculty of DIETs, CTEs, SCERTs, SIERTs, SIEs, IASEs, NCERT, IISERs, NISER, Teacher Training Institutions, Colleges, Universities and NGOs etc. for oral and poster presentation. Review committee recommended 153 abstracts of researchers for presentations in different technical sessions. Out of 153 presentations, 127 presenters made their presentation in different technical sessions of the seminar. In addition to these presentations, 3 plenary lectures and 9 keynote addresses were also delivered by the invited speakers. Plenary lectures were delivered by Prof. Sudhakar C. Agarkar, Prof. Oum Prakash Sharma and Prof. K.K.Sharma and keynote addresses by Prof. K. B. Rath, Prof. V.P. Gupta, Dr. Sharad Sinha, Prof. H.C. Jain, Prof. P.C. Agarwal, Prof. B. Barthakur, Prof. G. V. Gopal, Prof. V. K. Kakria and Prof. Dinesh Kumar. Review/Editing committee recommended 63 full length papers for publication in the proceedings. Deliberations in the seminar were focused on themes and sub themes viz. Recent Trends in Science Education, Scientific Knowledge and Skill Development, ICT for Quality Science Education, Resources for Science Education, Evaluation in School Science - Past and Present Practices and Future Perspectives, Learning Outcomes with Special Reference to Science, Innovative Practices in Science Education, Constructivist Approaches in Facilitating Learning of Science, Science Education beyond Constructivism, Innovative Pedagogies for Effective Teaching Learning of Science, Alternative Frameworks in Science, Myths, Facts and Science Education, Advancement in Science and its Utility for School Education, Professional Development of Science Teachers, Ancient Indian Scientific Knowledge and its Relevance in Modern Time, Science Curriculum for Life-Long Learning and Value Development, Science Education for Sustainable Development, Science Education for Inclusive Classroom, Status of Science Education in India and other Countries and Science, Technology and Society Perspectives. Knowledge of ancient Indian scientific knowledge and its relevance in present science education should be a part of curriculum. The seminar was inaugurated by Prof. Vasudev Devnani, Honourable Education Minister, Government of Rajasthan as Chief Guest. Dr. R.G. Sharma, Emeritus Scientist, Inter University Accelerator Centre, New Delhi was the Guest of Honour. Prof. G. Viswanathappa, Principal, welcomed and introduced the Chief Guest. Prof. J.P.Bagchi, Dean of Instructions welcomed and introduced Guest of Honour. Prof. Nagendra Singh, Dean of Research introduced Prof. Sudhakar C. Agarkar. Prof. S.V.Sharma, Head DESM & Organising Secretary stated the specific objectives and rationally behind organising the seminar. Prof. V.P.Singh, Head DEE proposed a vote of thanks to all the Guests, delegates and participants of the seminar.



Prof. Vasudev Devnani, Chief Guest, Honourable Education Minister, Government of Rajasthan is releasing the Souvenir of the Seminar. Dr. R.G. Sharma, Emeritus Scientist, Inter University Accelerator Centre, New Delhi, Prof. G. Viswanathappa, Principal, Prof. J.P.Bagchi, Dean of Instructions, Prof. Nagendra Singh, Dean of Research, Prof. Sudhakar C. Agarkar, Plenary Speaker and Prof. S.V. Sharma, Head DESM & Organising Secretary accompanying the Chief Guest.

The organizers could successfully organise the seminar due to the proper guidance and all supports of Prof. Hrushikesh Senapaty, Director NCERT. Prof. C.B.Gena, Former Vice-Chancellor, Maharaja Ganga Singh University, Bikaner was the Chief Guest during valedictory session and he delivered valedictory address & distributed the certificates to the participants of the seminar.



Prof. C.B.Gena, Chief Guest, Former Vice-Chancellor, Maharaja Ganga Singh University, Bikaner distributed the certificate to the participants of the Seminar during valedictory session.

National Seminar came to closure with National Anthem. Following main recommendations emerged out from the deliberations of the seminar:

- Flipped classroom should be introduced in science education.
- Technological development should be incorporated for teaching learning the science to realize the access of technology anywhere, anytime and any once.
- Development and availability of open educational resources in digital format be made available free of cost for teaching learning of science.
- Science education beyond constructivism also needs to be encouraged in the classroom situation.
- Science education should be promoted in such a way so as to develop thought processes, thinking skills, scientific temperament and values amongst learners to visualize in new prospective.
- STEM education should be incorporated in school science curriculum.
- Educational software and DER achievement be made available to the learners.
- Data based learning which helps in promoting learners' creativity be encouraged.
- Library method and web-browsing method is effective to access global information for science education be accessible to the students.
- Knowledge of ancient Indian scientific knowledge and its relevance in present science education should be a part of curriculum.