News and Events

Report of C.V. Raman Lecture 2013 – IPA, Indore Chapter

The DAE-CV Raman lecture was organised by the Indore Chapter of IPA at the Golden Jubilee Auditorium, Shri G. S. Institute of Technology & Science, Indore on April 8, 2013. Dr. P. Chaddah, Director, UGC-DAE CSR, delivered the Raman Lecture.

Dr. Chaddah told that water is essential to the occurrence of life, and we survive on Earth because water exists in all its three phases (solid, liquid and gas) transforming through 1st order transitions. Survival of some forms of life does depend on avoiding these 1st order transitions.

Dr. P. Chaddah and organisers of the event with the winners of quiz competition.

Dr. Chaddah and part of audience at DAE-CVRaman lecture at Golden Jubilee Auditorium at SGSITS, Indore.

The talk focussed on physicists' understanding of how these 1st order transitions may be avoided.

Glass is also formed by avoiding a 1st order transition and has, like steel and concrete, shaped our civilization. He discussed how physicists at Indore have used very high magnetic fields and very low temperatures to understand why a material would vitrify and not crystallize. He also discussed an age-old ('since the time of Aristotle') anomaly of hot water sometimes freezing faster than cold water.

Dr. P. Chaddah delivering the DAE-CV Raman Lecture.

Dr. P. Chaddah delivering the DAE-CV Raman Lecture.

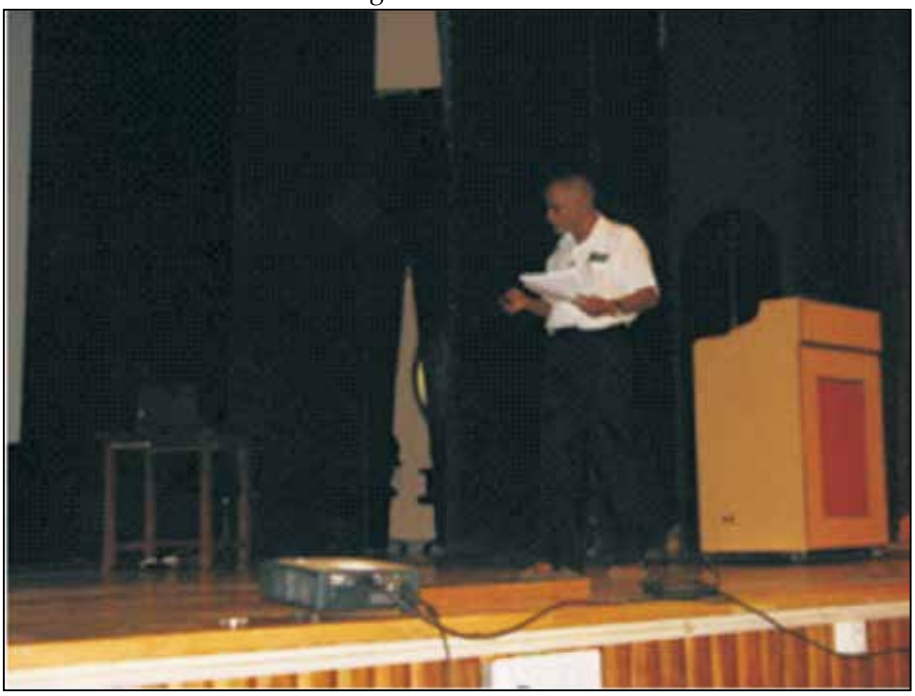
Prof. Pratima Sen, President IPA - Indore chapter, and Dr. Rama Chari, Secretary, IPA-Indore Chapter, welcomed the dignitaries. Prof. S. S. Bhadauria, Director, SGSITS was the chief guest of the function. Prof. P. K. Sen, Head, Department of Applied Physics, SGSITS delivered the welcome address. Prof. P. Sen, President IPA Indore Chapter enlightened the audience about the IPA activities and DAE C.V. Raman lecture series. Dr. J. T. Andrews, Treasurer, IPA - Indore Chapter gave vote of Thanks.

About 300 participants attended the lecture. The audience includes students, teachers and research scholars from colleges and universities. The event was financially supported by Department of Atomic Energy (Mumbai) and organized by Indian Physics Association, Indore Chapter.

Report on C. V. Raman lecture at NISER, Bhubaneswar

On 8th February 2013, the DAE C. V. Raman Lecture was held in National Institute of Science Education and Research (NISER) and Institute of Physics (IOP), Bhubaneswar campus. It was delivered by Prof. JnanadevaMaharana, Raja Ramanna Fellow, Department of Atomic Energy at Institute of Physics, Bhubaneswar.

Prof. Maharana gave a lecture titled "Laws of Universe" The talk encompassed the very large – our Universe, to the very small – the ultimate constitutes of visible matter – quarks and leptons. To an audience consisting of undergraduate students, graduate students, science faculties and other interested people from institutes like NISER, IOP, Utkal University, Indian Institute of Technology, Bhubaneswar, Ravenshaw College, Cuttack and other, he presented the history of development of modern science towards understanding the macroscopic and microscopic world. Further he outlined few of the unsolved problems in physics.



According to Prof. Maharana understanding why the cosmological constant is so small is one of the most important unsolved problem in physics. He ended the talk with a dream and a hope that someone among the young audience will construct an unified theorywhich will address the physics of very small and physics of very large together.

NEWS AND EVENTS

Prof. P A Pandya Endowment Lecture
Sir P. T. Sarvajanik College of Science, Surat

On 25th January, 2013, Indian Physics Association (IPA) in collaboration with Sir P. T. Sarvajanik College of Science, Surat, invited Dr. S. Kailas, Director, Physics Division, Bhabha Atomic Research Centre, Mumbai to deliver a Prof. P. A. Pandya Endowment Lecture at "Taramoti Hall", Sir P. T. Sarvajanik College of Science, Surat. The title of the lecture was "Accelerators as a tool for Science and Technology". Dr. Pruthul Desai, Principal, Sir P. T. Sarvajanik College of Science, extended a warm welcome to all the invited guests and students. Dr. Ajit Kumar Mohanty, Secretary, IPA explained the aims and objectives of IPA.

Dr. Kailas started out by mentioning that it is a befitting tribute to Prof. P. A. Pandya that this lecture is held in the very same college in which he served as a Lecture till his retirement in 1948. He congratulated IPA and the host college for organizing this lecture. Dr. Kailas began by explaining how accelerators have evolved over the years since their inception some 80 years ago. He vividly described how accelerators are used in wide spectrum of fields such as medicine, archeology, nuclear energy, agriculture, national security etc. A large gathering of students and faculty members attended the lecture. The lecture was well received by students and because of large number of questions posed by students the lecture ended with an extended question hour session. At the end vote of thanks was proposed by Dr. Ashok Mody, Treasurer, IPA.

DAE - C. V. Raman Lecture
Wilson College, Mumbai

Indian Physics Association, Mumbai Chapter organised DAE - C. V. Raman Lecture on Saturday, February 23, 2013 at Wilson College, Chowpatty Seaface Road, Mumbai. The lecture was delivered by Prof. Sunil Mukhi, (Professor and Coordinator, Physics Programme, Indian Institute of Science Education and Research, Pune) on Windows onto Nature.

The essence of the lecture was description of theoretical and experimental efforts by high-energy physicists in opening windows onto nature's innermost thoughts. It outlined the fundamental laws and described the efforts in formulating and testing them in fine details with extreme precision. The talk highlighted the many successes of this effort and focus on what new windows may open in the foreseeable future.