In an effort to inspire young minds in science, and to first arrest and then reverse the alarming trend of brilliant minds being distanced from the fascinating world of sciences, the Indian Academy of Sciences, Bangalore, along with Central Mechanical Engineering Research Institute, Durgapur organized a week-long Science Education Programme on Foundations of Physics during May 16-21, 2005. 34 students chosen from Durgapur, Jamshedpur, Purulia and Asansol were accommodated in the Programme. One student each from Chennai and Hyderabad also participated in the Programme. The Science Education Programme was aimed at bringing a group of bright senior school students, with a strong motivation towards science, in close contact with a number of outstanding professors and researchers of the country.

The course, the first of its kind in this country, purported to familiarise the students with the conceptual foundations of physics so that this exposure helps the students to come out with a much better and deeper understanding of the most fundamental concepts of the basic branch of physical sciences. Another important outcome that this programme envisaged was inculcation within the students a correct understanding of the process how scientific theories evolve. Possessing a better idea of the working of science can be immense help to students during their future career.

The faculty included such luminaries of academia as Professor Amitabha Ghosh, the erstwhile
Director of IIT, Kharagpur and currently Professor of IIT, Kanpur, Prof. H.S. Mani of the Institute of Mathematical Sciences, Chennai, Prof. A.K. Mallik and Prof. P. Gupta Bhaya of IIT, Kanpur and Prof. J.K.Bhattacharjee of the IACS, Kolkata.

The broad topics of the course were:

(a) Evolution of Newtonian Dynamics  
(b) Gravitation  
(c) Special Topics on Newtonian Dynamics  
(d) Analytical Mechanics  
(e) Thermodynamics  
(f) Concept of Special Theory of Relativity  
(g) Physical Foundation of General Theory of Relativity  
(h) Foundation of Quantum Physics  
(i) Nonlinear and Chaotic Dynamics

There were 33 hours of lecture and tutorial sessions to cover the above topics. Apart from lectures, regular interactions took place among the students and faculty members. Each student was provided with a complete set of The Feynman Lectures on Physics as referral material. Arrangements were also made to visit two laboratories of the Institute, viz. Robotics and Rapid Prototyping to acquaint the participants with real life research conditions.

A separate Interactive Session was also organised on one evening to discuss the effectiveness of such programmes and to assess the status of scientific awareness among the people, especially young minds. There were 150 participants in the session from academic institutions, students, parents and science loving persons. While everybody thanked the IAS and CMERI for organising such a programme, most of the persons opined that the students and general people were not aware of the interesting career opportunities after science education. They requested to publicize them through different media as done for other professional streams.

In the concluding session, the students welcomed the effort and expressed that they had learnt many things within one week, which they did not come across during their academic classes. They suggested to introduce such programmes for class X students and also to increase the duration in future. The faculty members encouraged the boys to raise scientific temperament in their future careers which ever they prefer to choose. They also assured the students that they would take care of all their suggestions in the subsequent programmes.