



CONVOCATION 2012



Director's Report

JULY 25, 2012



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI
Knowledge City, Sector 81, SAS Nagar, PO Manauli 140 306, Punjab, India.

Board of Governors (2007-10)

Professor P. Rama Rao, Former Secretary to Government of India, DST, ARCI, Hyderabad - Chairman
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Professor S. V. Kessar, Panjab University, Chandigarh
Professor A. K. Sood, IISc, Bangalore
Professor Ashutosh Sharma, IIT Kanpur
Professor S. G. Dani, TIFR, Mumbai
Shri S. K. Ray, Joint Secretary & Financial Adviser, MHRD, New Delhi
Professor Ramesh Kapoor, IISER Mohali
Professor C. G. Mahajan, IISER Mohali
Professor N. Sathyamurthy, Director, IISER Mohali
Shri J. P. Singh, Registrar, IISER Mohali

Board of Governors (2010-13)

Dr. R. A. Mashelkar, National Research Professor and CSIR Bhatnagar Fellow, NCL, Pune - Chairman
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Professor M. K. Surappa, Director, IIT Ropar
Professor K. N. Ganesh, Director, IISER Pune
Dr. Lalji Singh, CCMB, Hyderabad
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Professor Arvind, IISER Mohali
Professor Sudeshna Sinha, IISER Mohali

Research Advisory Committee (2008-11)

Dr. Girish Sahni, Director, IMTECH, Chandigarh - Chairman
Professor C. S. Dey, NIPER, Mohali
Professor S. G. Dani, TIFR, Mumbai
Professor Ashutosh Sharma, IIT Kanpur
Professor R. N. Mukherjee, IIT Kanpur
Professor Arvind, Dean R & D, IISER Mohali

Research Advisory Committee (2011-14)

Dr. S. Sivaram, NCL Pune - Chairman
Dr. S. Rath, NII, New Delhi
Professor H. S. Mani, CMI, Chennai
Professor Rajinder Bhatia, ISI, New Delhi
Professor J. S. Bagla, Dean R&D, IISER Mohali

Administration (2007-)

Director - Professor N. Sathyamurthy
Registrar - Shri J P Singh/ Dr. P. Bapaiah
Dean Academics - Professor R Kapoor/ Professor Kapil Paranjape
Dean Students - Professor C G Mahajan/ Professor Arvind
Dean R & D - Professor Arvind/ Professor J. S. Bagla
Dean Faculty - Professor A. K. Bachhawat
Coordinator - Dr. Jagdeep Singh, (Punjab Govt.)
Librarian/Deputy Librarian - Shri R Mishra/Dr. P. Visakhi
Honorary Counsellor - Mrs. Suguna Sathyamurthy
Assistant Registrar - Sandeep Ahlawat, Mukesh Kumar
Stores & Purchase Officer - Shri Kulwant Singh
Executive Engineer cum Estate Officer - Shri P.K. Srivastava

List of Graduates (BS-MS)

Sl. No.	R. No	Name
1	MS07002	Achyut Priya Shukla
2	MS07003	Amita Agrawal
3	MS07004	Deshmukh Amol Arvind
4	MS07005	Amol Ratnaparkhe
5	MS07006	Anurag Kanaujia
6	MS07007	Bharat Kohli
7	MS07008	Chandan Kumar Pandey
8	MS07009	Chandan Kumar
9	MS07010	Dharmendra Kumar Singh
10	MS07011	Kirandeep Kaur
11	MS07012	Mrinal Shekhar
12	MS07013	Mohit Satish Tanga
13	MS07014	Naveen Kumar
14	MS07016	Parul Gupta
15	MS07017	Prashant Mishra
16	MS07018	Rajni Ranjan
17	MS07019	Rishi Raj Trivedi
18	MS07020	Sajan Gupta
19	MS07021	Sameep Chandel
20	MS07022	Shalender Jain
21	MS07023	Singamsetti Srinivasulu
22	MS07026	Tishu Nandan
23	MS07028	Varun Singh
24	MS07029	Vinit Kumar
25	MS07030	Rakesh Kumar
26	MS07031	Apurv Saxena

“Remember that your knowledge and intellectual attainment is the most sacred wealth of the nation. You shall, therefore, use it in a manner befitting the honour and dignity of your country and of your alma mater. You shall make every effort, in all circumstances, to uphold the dignity of your profession and integrity of your character. You shall endeavour, in every way, through thought, word and action, to bring about the well being of the people. You must live a well disciplined life. Never forget the commandment of the sacred scriptures: ‘Thou shalt perform deeds that are commendable and no others’.”

Doctor of Philosophy
(Honoris Causa)

Professor C. N. R. Rao

Director's Report

The Indian Institute of Science Education and Research (IISER) Mohali was established by the Ministry of Human Resource Development, Government of India as a part of the government's efforts to set up a number of academic institutions of international standards that would train specialized manpower in science and technology.

Although India has a long and rich tradition of pursuit of knowledge, it lags behind in certain areas of science and technology. For a nation of 1.2 billion people the number of qualified scientists available is disproportionately small. Therefore the government consciously set up 5 Indian Institutes of Science Education and Research (IISERs) to train quality scientific manpower. Chronologically, IISER Mohali was the third one to be established. The foundation stone for the Institute was laid by the Hon'ble Prime Minister of India - Dr. Manmohan Singh on September 27, 2006. The founder Director took charge on June 18, 2007 and the first batch of BS-MS dual degree students were admitted in July 2007. The classes started on August 16, 2007 in a transit campus in the Mahatma Gandhi State Institute of Public Administration Punjab (MGSIPAP) complex, Chandigarh. The first batch of PhD students were admitted in July 2008.

We are grateful to the Punjab Government for allotting 125 acres of land in June 2008 in the Knowledge City in Sector 81, SAS Nagar, where we are located now. The Master Plan was prepared by Shri D. S. Bhui, Cosmic Design, Lucknow. The Bhoomi Pujan for the boundary wall was done on December 29, 2008. Construction work was undertaken by the Central Public Works Department (CPWD). The boundary wall was constructed in a year's time and the first building housing the Central Analytical Facility was formally inaugurated by the then Chairman Professor P. Ramarao, on March 3, 2010.

The National Institute of Technical Teachers' Training and Research (NITTTR) Chandigarh was supportive of IISER Mohali from day one, by providing hostel accommodation for the students and extending some of their teaching and sports facilities. We are grateful to Professor S. C. Laroia, the then Director NITTTR for his support. MGSIPAP gave full support in terms of infrastructure, hostel accommodation and mess facility for a large number of students.

The first hostel in our permanent campus was inaugurated on December 3, 2010 by the first Dean Students Professor C. G. Mahajan and about 250 students moved in. The second hostel was inaugurated on January 26, 2011 by Professor Ramesh Kapoor, the first Dean Academics and the remaining students moved in.

While the teaching activity shifted from the transit campus in MGSIPAP complex, Sector 26, Chandigarh to Sector 81, SAS Nagar in July 2011, a part of the research activity continues to take place in the transit campus. The common rooms of the students in hostels 5 & 7 were converted into class rooms and teaching laboratories. The administration and a large number of faculty members shifted their offices to Hostel 7 and now they are ready to move into Academic Block I. Hopefully, we will complete the exercise of shifting all the research laboratories to the permanent campus by September 2012.

dual degree programme in the first year. Today we have a total of 408 students of which 89 are pursuing their PhD thesis research.

Year	BS-MS	Ph.D.
2007-08	26	15
2008-09	37	16
2009-10	89	33
2010-11	89	10
2011-12	78	15

The process of admission to the five year BS-MS dual degree programme is through KVPY, IIT-JEE merit list and the top 1% of the State and Central Boards. For the Ph.D. programme, candidates who have passed one of the National level tests are admitted after conducting interviews. We have started admitting students to the Post-BSc Integrated MS-PhD programme from the current academic year.

The candidates admitted to the BS-MS dual degree programme learn all basic sciences in their first two years. They choose their major subject only at the end of two years. IISER Mohali offers courses in interdisciplinary areas like earth and environmental sciences, astronomy and astrophysics, computational sciences, and humanities and social sciences. All our students undertake summer research either in house or elsewhere. Naturally, our graduates are well equipped to undertake research in frontier areas!

All the five IISERs work together in many ways. There is a common course structure and philosophy that is followed. The curriculum development at IISER Mohali was undertaken by a national level curriculum committee. The "Courses of Study" booklet that followed is available for the asking.

The Institute is aware of the difficulties faced by the students coming out of their homes for the first time. The demanding curriculum is only one of them. The counseling service tries to alleviate some of them. We are grateful to Mrs. Sathyamurthy, the Honorary Counselor for her services all these five years.

The Institute is proud of its Central Analytical Facility, which consists of a 400 and a 600 MHZ NMR spectrometer, single and powder X-ray diffractometers, AFM/NSOM/Micro Raman, confocal microscope and a femtosecond laser facility, among others.

The institute has a PTRMS facility that monitors various protonated species in the atmosphere. Our "Blue eye in the sky" monitors the pollutants round the clock. I am happy to report that gases like carbon monoxide and ozone are within the globally acceptable levels. The Institute is committed to build a green campus. This commitment is reflected in various aspects of construction and the follow up work. We have solar water heaters and solar streetlights.

We are in the process of setting up storage batteries to harvest solar energy in a big way. We have a distributed system of Sewage Treatment Plants to recycle water coming from the hostels and residences. The recycled water is used for watering the lawns. Right from its inception, the institute has been planting a large number of saplings. We have avoided cutting trees in the process of development. To the best of my knowledge, only about 20 poplar trees were cut in the beginning. After that we have tried to save every single tree in the campus. Wherever needed, Dr. Bilga has transplanted several trees and most of them have survived.

I am happy to say that all the students and most of the faculty and staff reside in the campus enabling them to pursue their studies round the clock. The textbook library and the digital library function in a substation building. They will move to the Informatics Centre, which is under construction.

We are grateful to the Hon'ble Minister for Human Resource Development, Government of India for his liberal financial support in our endeavour to build the IISER Mohali campus.

We have recruited excellent faculty from within India and abroad. Applications are invited through a rolling advertisement displayed on the website of the institute.

The selection of the faculty is being made by duly appointed committees consisting of eminent scholars. As of today we have appointed 53 faculty members on a regular basis and about 10 visiting/adjunct/ honorary professors. Eminent scientists from all over the country are invited to deliver lectures and to interact with the faculty and the students.

Research output as reflected in terms of number of publications in international journals is increasing steadily from 8 in 2007-08 to 21 in 2008-09, 27 in 2009-10, 39 in 2010-11 and more than 60 in 2011-12. A few books have been published by our colleagues. One of them particularly worth mentioning is, "Symmetry: An interdisciplinary Perspective".

Some of our faculty members have already received laurels and recognitions. We have 3 Bhatnagar Awardees, 6 Fellows of the Indian National Science Academy and a similar number of Fellows of Indian Academy of Sciences, Bangalore in our faculty. We have 4 J. C. Bose Fellows and there are three young colleagues, who are recipients of DBT-Wellcome grant. We have several Ramanujan and Ramlingaswamy Fellows with us. Two of them have been chosen for Young Innovative Biotechnologist Awards by the Department of Biotechnology and one faculty member has been chosen a DAE Young scientist, recently. In addition, Professor I B S Passi received the Khosla award from IIT Roorkee and P C Mahalanobis medal from the Indian National Science Academy, New Delhi. I hope fervently that every single faculty member recruited in this institute would grow to his/her fullest potential and do the institute and the Nation proud.

Our faculty members have so far raised Rs. 9.0 crores through sponsored projects from various Government agencies. The Institute is looking forward to raising resources from non-government agencies. The first batch of students would be looked upon as the pioneer batch by the future generations and we hope that each one of the 26 graduating students would become a star in their chosen areas of work. We definitely expect some of them to choose science as a career

number of them are planning to continue in science, and are joining PhD programmes in India and abroad. I am certain that the broad based science education and the research training that they have received at IISER Mohali will go a long way in shaping their thinking as working scientists, intellectuals and academicians.

We are grateful to Professor P. Rama Rao the first Chairman, Board of Governors and Dr. R.A. Mashelkar, current Chairman, Board of Governors for their unstinted support and continuous guidance in building this institute. We are grateful to all the members of the Senate, Board of Governors and the Research Advisory Committee for their enlightened support and guidance in the last five years.

It was the vision of Professor C.N.R. Rao to recommend to the Prime Minister to set up the Indian Institutes of Science Education and Research. It is befitting that Professor Rao is receiving the first honorary doctorate degree of IISER Mohali, thus setting a high standard that will be difficult to match in the years to come. We are grateful to him for kindly agreeing to be with us today and receiving the Honorary Doctorate Degree.

There are a large number of individuals in the Punjab Government and the Central Government, who have stood by us all these 5 years and have brought us to where we are today. We are grateful to all of them. We would particularly like to acknowledge the support of the Hon'ble Chief Minister of Punjab, the Chief Secretaries of Punjab, Sh. R. I. Singh, Sh. S.C. Agarwal and Sh. Rakesh Singh, Dr. Jagdeep Singh, the Coordinator, and the Secretaries of Higher Education in MHRD, Sh. R.P. Agarwal, Madame Vibha Puri Das and Sh. Ashok Thakur.

In closing, on behalf of the faculty, staff and students of IISER Mohali, and on my own I would like to express our gratitude to Sh. Kapil Sibal, the Hon'ble Minister for Human Resource Development, Government of India for sparing his valuable time and being with us today. MHRD had planned to invest Rs. 500 crores in IISER Mohali in the first seven years. We have received and spent Rs. 325 crores in the 11th Plan period towards building the Phase I of the infrastructure. We are grateful to the Hon'ble Minister and his team for their fullest co-operation and support.

All my colleagues in IISER Mohali have given me unstinted support in the last five years. I am grateful to all of them. Finally, I would like to publicly acknowledge the support given by my wife Suguna Sathyamurthy from the day I accepted the responsibility of being the first Director of IISER Mohali. I want to thank everyone of you for being with us today to celebrate our first convocation.

Jai Hind



Lecture Hall Complex