

MAJOR ACHIEVEMENTS OF INSTITUTE OF PHYSICS, BHUBANESWAR DURING 2015-16

The Institute of Physics (IOP) has a vibrant research programs in the fields of theoretical and experimental condensed matter physics, theoretical high energy physics and string theory, theoretical nuclear physics, ultra-relativistic heavy-ion collisions and cosmology, quantum information and experimental high energy nuclear physics. The main accelerator facilities at IOP are a 3MV Pelletron accelerator and a low-energy implanter. These are being used for studies in low energy nuclear physics, ion beam interactions, surface modification and analysis, trace elemental analysis, materials characterization, and radiocarbon dating studies. One of the important research areas in the Institute is the field of Nanoscience and Nanotechnology in general and surface and interface studies in particular. The Institute has several advanced facilities for sample preparation and for the study of various physical and chemical properties of nanostructures and bulk condensed matter systems. The Institute is actively involved in the International Collaborations with CERN (Switzerland), BNL (USA), ANL (USA), GSI (Germany), and other laboratories abroad. The Institute is also participating in various research activities related to India-based Neutrino observatory.

During the year 2015-16 seven new faculty members have joined the Institute in various streams. These new faculty members have brought in activities on new research frontiers. Institute has provided them the necessary infrastructure required for their work. Many of these members work in collaboration with the various international groups as well as in-house.

A new laboratory housing many of the state-of-art facilities has been set up during the year. This laboratory has facilities for development and fabrication of advanced functional materials along with various characterization tools for magnetic, electrical and structural properties of materials. An ECR based ion being developed in this laboratory.

Institute has also selected 26 scholars through JEST/NET/GATE/INSPIRE and interview for the pre-doctoral program for the academic session 2016-17 who will be

pursuing their Ph.D after completion of the course work. Six scholar have received their Ph.D and 14 nos. Post-doctoral fellows have joined the institute during the year.

About 85 high quality research papers were published by academic members of IOP in various refereed journals of international repute. On top of this, around 40 research papers have been communicated in various international refereed journals including some conference proceedings as well. The academic members of IOP are also very active in delivering talks/seminars, Colloquia in various national and international conferences, workshops/meetings. During the year under report about 85 talks were given by the academic member. IOP also organized 18 institute colloquia and 64 seminars in various research areas in the campus. As a recognition to their high quality research and hard work, the academic members of IOP also received several awards/fellowships/medals from various academic bodies.

It is worthwhile to mention that this year IOP is celebrating its 40th year of academic activities by organizing various academic events like colloquium fest, conferences, workshops in the campus. As a part of this celebration, IOP has already organized 11 conferences in the campus where eminent scientists from various parts of the country and also from abroad took part.

IOP is also actively involved in spreading the awareness about the basic science among common people. As a part of this programe, various activities were carried out like Annual Science Quiz Competition on 3rd August, 2015 and Annual Science Modelling Competition on 17th August, 2015 by Alumni Association of the Institute. Students from different schools/colleges across Odisha visited our Institute frequently this year. In addition, Summer Student's Visiting Programme (SSVP – 2015) for 1st year of M.Sc/B.Tech students was organized during May 18 – July 03, 2015 in which six students participated.

As a part of *Rajbhasa Prachar Prashar Yojna*, hindi Pakhwada was organized by the Institute, Various activities on Hindi among the staff members were conducted during this period. Collective cleaning programme was organized on 2nd October, 2015 on the eve of 151st Birth Anniversary of Father of the Nation, Mahatma Gandhi under the *Swachh Bharat Mission* along with Swachhata Spath called by the Prime Minister's Office.

Following provide a brief financial position of the Institute as on 31.13.2016.

FINANCIAL POSITION OF THE INSTITUTE AS ON 31.16.2016

(Rupees in Lakh)

Particulars	Non-Plan	Plan	Housing	Total
Opening Balance as on 01.04.2015	294.77	366.80	40.00	701.57
Grant-in-aid received from DAE	2,484.00	1,000.00	100.00	3,584.00
Grant-in-aid received. From the Government of Odisha	-	-	-	-
Recovery of Advance	4.13	-	-	4.13
Miscellaneous Receipt	43.51	-	-	43.51
Total	2,826.41	1,366.80	140.00	4,333.21
Expenditure	2,472.98	871.23	107.55	3,451.76
Balance	353.43	495.57	32.45	881.45