

National Institute of Science Education & Research Bhubaneswar

Annual Report

and

Audited Statement of Accounts



भारत 2023 INDIA



2022-2023

Dr. Shovon Pal

- Talk at SPS day 2022 (Title: Dynamics at ultrashort and ultrafast timescales).

Dr. G. Santosh Babu

- Acted as resource person for Vigyan Pratibha event (4th Teachers Training Workshop from 30th August 2022 to 3rd September 2022). Helped in outreach activity of NISER for school students visiting NISER.

Dr. Sudakshina Prusty

- Coordinated physics laboratory activities for Science Camp during 6-8th April 2023.
- Coordinated exposure visit of Physics teachers of Odisha Adarsha Vidyalaya Sangathan.

- Coordinated numerous physics laboratory visits for school and college students of Odisha.

Centre for Interdisciplinary Sciences

- Coordinated visit of about 50 students from Carmel English Medium School, Jatni.
- Coordinated visit of about 45 students from Freedom International School, Bahugram, Cuttack.
- Coordinated visit of about 45 students from Rajdhani College, Bhubaneswar.
- Coordinated visit of teachers from different schools under Vigyan Pratibha Workshop – Kendriya Vidyalaya, Jawahar Navodaya Vidyalaya.

- 20th International Conference on Strangeness in Quark Matter (SQM 2022), June 13 - 17, 2022, Busan, Republic of Korea.
- XLI International Conference on High Energy Physics (ICHEP 2022), July 06-13, 2022, Bologna, Italy.
- International Conference on Identification of Dark Matter 2022, July 18-22, 2022, Austria, Vienna.
- XI International Conference on New Frontiers in Physics (ICNFP 2022), Aug. 30 - Sep. 11, 2022, Kolymbari, Crete, Greece.
- INPC2022 - 28th International Nuclear Physics Conference 2022, Sep. 11-16, 2022, Cape Town, South Africa.
- International conference on Critical Point and Onset of Deconfinement (CPOD 2022), Nov. 28 – Dec. 2, 2022.
- 66th DAE Symposium on Nuclear Physics, Dec. 01-05, 2022, Cotton University, Guwahati, Assam, India. XXV DAE-BRNS High Energy Physics Symposium, Dec. 12-16, 2022, IISER Mohali, India.
- International Conference on Physics and AstroPhysics of Quark Gluon Plasma (ICPAQGP), Feb. 07-10, 2023, Puri, Odisha, India.
- National Conference on Science in Everyday Life, Mar 24-25, 2023, NISER, India
- Horizons in Accelerators, Particle/Nuclear Physics and Laboratory based Quantum Sensors for HEP/NP, November 14-17, 2022, ICTS, Bangalore.
- Odisha research Conclave, Nov 14-16, 2022, Ravenshaw University, Cuttack.
- Organizing Committee member of QCD with Electron Ion Collider (QEIC) II, IIT Delhi, 18-20 December 2022
- International Nuclear Physics Conference 2022, Cape Town, South Africa, September 2022.

Dr. Anamitra Mukherjee

- Attended Q-MAT2022, IIT Kanpur 18-22 Sep 2022.
- Attended PSCES, IISER Pune, 15-17 March 2023.

Dr. Colin Benjamin

- Attended online summer School on Quantum Information and Quantum Technology in June 2022 organized by IISER Kolkata.

Dr. Nishikanta Khandai

- 28-30th November 2022, Indian Academy of Science and NCRA Meeting on Gas in Galaxies, Orange County, Coorg, Karnataka.
- 2-5 February 2023, IUCAA Workshop GALFLOWS 2023, Pune, Maharashtra.

Dr. Amaresh K Jaiswal

- Conference on Hot QCD Matter 2022, Goa, May 12-14, 2022
- ALICE-India collaboration meeting, VECC Kolkata, September 5-8, 2022
- Excited QCD 2022, Sicily, Italy, October 24-28, 2022
- CETHENP 2022, VECC Kolkata, November 15-17, 2022
- 66th DAE Symposium on Nuclear Physics, Guwahati, December 1-5, 2022
- ICPAQGP Puri, February 7-10, 2023
- HHHPS 2023, IIT Gandhinagar, March 24-25, 2023
- MAGIC 2023, Kovalam Kerala, March 28-April 1, 2023

Dr. Ashis Kumar Nandy

- "DD Transition" Meeting in Goa August 5 – 7, 2022, India.
- QMAT-2022, IIT Kanpur, September 18 - 22, 2022, Kanpur, India.
- National Conference on Electronic Structure 2022 (NCES2022) November 14 - 16, 2022, Goa University, Goa, India.
- Evolution of Electronic Structure Theory and Experimental Realization (EESTER) 2023, 3rd Edition January 4 -12, 2023, IIT Chennai, India.
- "Focused meet on Quantum Matter" January 24, 2023 S.N.Bose National Centre for Basic Sciences, Kolkata, India.

Dr. Kush Saha

- APS March Meeting 2023, Las Vegas, Nevada, 5th -10th March, 2023.
- Quantum Condensed Matter (QMAT 2022) 2022, IIT Kanpur, 18th -22nd September, 2022.

Dr. Tapan Mishra

- QMAT, IIT Kanpur, 18-22 September 2022.

Dr. Victor Roy

- Attended ICPAQGP 2023, Puri.

Vigyan Pratibha Brief Report 2022-23

About the Vigyan Pratibha Project at NISER:

Vigyan Pratibha, a pioneering initiative of the central government, is dedicated to crafting a distinctive learning ecosystem. Our primary objective is to integrate various pedagogical tools grounded in constructivism and collaborative learning methodologies. Presently, our dedicated team at the National Institute of Science Education and Research (NISER) in collaboration with Institute of Physics (IOP) are working closely with students and educators from the 8th, 9th, and 10th grades of Kendriya Vidyalaya (KV), Jawahar Navodaya Vidyalaya (JNV), and Atomic Energy Central Schools throughout the states of Odisha and Chhattisgarh. This is achieved by bringing scientists, teachers, and educators together to develop activity modules by Homi Bhabha Centre for Science Education (HBCSE), named 'learning units'. These meticulously designed units seamlessly align with the curriculum of the National Council of Educational Research and Training (NCERT). They are strategically structured to empower students with a profound and critical comprehension of specific scientific concepts.

Vigyan Pratibha is not just an initiative; it's a transformative journey toward enhancing science education that actively engages young minds and equips them with the knowledge and skills necessary for a promising future.

The Vigyan Pratibha team at NISER remains actively engaged in a myriad of events throughout the year. This dedicated team comprises of faculty members and associated project staff,

The following activities have been conducted in the year 2022-23 under the VP project:

Sl. No.	Date of the Event	Title of the Activities	Participating Educational Institutes	Number of participants
1	30.08.2022 - 03.09.2022	First Vigyan Pratibha Teachers' Training Workshop	KVs and JNVs, Odisha, and Chhattisgarh	43 teachers

- Dr. Debasmita P. Alone, Associate Professor, SBS
- Dr. Pankaj V. Alone, Associate Professor, SBS
- Dr. Upakarasamy Lourderaj, Associate Professor, SCS
- Dr. Subhankar Mishra, Reader-F, SCPS



The Vigyan Pratibha project extends its influential reach across the Odisha and Chhattisgarh region, under the able leadership Dr. Debasmita P. Alone at NISER. Her visionary guidance has been instrumental in advancing the project's objectives and impact.

