

Annual Report

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Audited Statement of Accounts

2022-23



Institute of Physics

BHUBANESWAR



- Characterization”, organized by IITBhubaneswar (June, 2022).
- “International Conference on Advanced Materials and Applications (ICAMA-2022)”, organized by S’O’A University, Bhubaneswar (December, 2022).
 - “International Symposium on Semiconductor Materials and Devices (ISSMD-2022)”, organized by KIIT University, Bhubaneswar (December, 2022).
 - “National Conference on Advances in Low-dimensional Materials for Optoelectronics and Nano Devices (ALMOND2023)”, organized by Institute of Physics Bhubaneswar at Toshali Sands, Puri (March, 2023).
 - “7th International Conference on Nanoscience and Nanotechnology (ICONN 2023), organized by SRM Institute of Science and Technology, Chennai (March 27, 2023).
- Brussels, Belgium F.R.S.-FNRS invitation to review (2/2022)
- India-ALICE-STAR Collaboration online Meeting: 25th -28th April 2022
 - Popular talk 21st May 2022 at SCS (A) College, Puri.
 - Course taught and School conducted in ALICE-STAR School, 1st -12th November 2022.
 - Outreach events 13-14th November 2022 at Model Degree College Boudh and JNV Boudh
 - Outreach events 24-25th December, 2022 Berhampur University, and Mathura Village, Ganjam
 - Outreach events 28-29th January 2023, CUTM, Bolangir campus and Govt. Women’s College, Bolangir.
 - Outreach events 31st March 2023, JNV, Konark, Puri.

Prof. P. K. Sahu

- Funding: BI/IFCC, DST project for CBM at FAIR, GSI, Germany.
- Officiating Registrar at IOP since 1st August 2022.
- Evaluation of Ph.D. thesis in r/o Mr. Pritam Chakraborty, IIT, Bombay (12/2022)
- Evaluation of Ph. D thesis submitted by Mr Bidhan Khirali, NIT, Jamsedpur (8/2022)
- Evaluation of Ph.D. thesis in r/o Mr. Baidyanath Sahoo, IIT, Bombay (6/2022)
- Invitation to review for Physica Scripta (3/2022)
- The Fund for Scientific Research – FNRS;

Prof. D. Topwal

- Funding: DST project: CRG/2020/003108
- Funding: UGC-DAE CSR project: CSR/2021-22/01/362

Prof. Sanjib K Agarwalla

Externally funded Projects (India + Foreign sponsorships)

- **Funding:** DST-SERB Swarnajayanti Project (SB/SJF/2020-21/21)
- Project Title:** Landscape of Beyond the Standard Model Physics at Neutrino Experiments.
- Total cost of Project: Rs. 1,00,27,040/-**
- Awarded The Prestigious Fulbright-Nehru Academic and Professional Excellence Fellowship (FNAPE) to perform cutting-



edge research on the fundamental properties of massive neutrinos at the University of Wisconsin-Madison, Madison, USA.

- Appointed as an Honorary Fellow of the Physics Department, University of Wisconsin-Madison, Madison, USA.
- Full Membership of the world-class IceCube Neutrino Project through the University of Wisconsin-Madison, Madison, USA.
- Multi-messenger Tomography of Earth – (MMTE 2022) Workshop

I organized the above workshop during 30th to 31st July, 2022 at Salt Lake City, Utah, USA. The main aim of this workshop was to bring together leading experts from the neutrino and geoscience communities to discuss in depth the present status of the field and its future developments.

<https://indico.fnal.gov/event/53004/page/2944-multi-messenger-tomography-of-earth-mmte-2022-workshop>

- Organized Institute Online Colloquium by Prof. Livia Ludhova on “Geoneutrinos - A New Tool to Study the Earth”, 22nd November, 2022.

Prof. Saptarshi Mandal

- Funding: Continuing SERB funded project “Exploring Multiferrocity in Hollandite type Mn-based Oxide Materials through Experimental and Theoretical studies” FILE no CRG/2021/006934

Prof. Aruna Kumar Nayak

- Organized IMHEP 2023, 16 – 22 February, 2023, Institute of Physics, Bhubaneswar

Prof. Debasish Chaudhuri

- Funding: SERB MATRICS (Mathematical

Research Impact Centric Support) grant under project number MTR/2019/000750

- I have been nominated to continue as an Associate of ICTS-TIFR, Bangalore for three more years, from January 2023 to December 2025
- I have been invited with a Visiting Professorship of CY Cergy Paris University, Paris, France, from 26 September to 7 October 2022.
- Visited LPTM CY Cergy Paris University, Paris, France, with a Visiting Professorship from 26 September to 7 October 2022. This visit helped to start a collaboration with Professor Fernando Peruani of CY Cergy Paris University.
- Visited ICTS-TIFR Bangalore as an Associate of that institute from 23 May to 24 June 2022 to continue collaboration with Prof. Abhishek Dhar of ICTS-TIFR.
- Visited S N Bose National Centre for Basic Sciences from 4-6 July 2022 to present seminars and to start collaborative discussions with Prof. Urna Basu.
- Visited IISER-Mohali from 6-13 April 2022 to continue research collaboration with Prof. Abhishek Chaudhuri and Prof. Dipanjan Chakraborty.
- Invited lecture on “Pattern formation, localized and running pulsation on active spherical membranes” at the 8th Indian Statistical Physics community meeting (ISPCM) at ICTS- TIFR, Bangalore (01 February 2023)
- Invited lecture on “Motor Protein Drive: Filaments and Membranes” at the international conference on “Statistical Biological Physics: From single molecule