GUIDELINES FOR ESTABLISHMENT OF RESEARCH AND DEVELOPMENT CELL (RDC) FOR

UDAYANATH AUTONOMOUS COLLEGE OF SC. & TECH., ADASPUR, CUTTACK



Guidelines for Establishment of Research &

Development Cell in Higher Education Institutions

Introduction

The National Education Policy (NEP) 2020 envisages the promotion of quality research within the Higher Education system. Research and innovation are important aspects to enhance quality education by the Higher Education Institutions (HEIs). Societal challenges of our country can only be addressed by having a strong and vibrant higher education ecosystem with an emphasis on research, innovation, and technology development. The integration of Research, Innovation and Technology Development is the foundation of Atma-Nirbhar Bharat (Self-reliant India). The establishment of Research and Development Cell (RDC) in HEIs will enable attainment of targets of Atma-Nirbhar Bharat and is expected to play a pivotal role in catalyzing multidisciplinary/transdisciplinary and translational research culture mandated in NEP 2020.

Vision

To put in place a robust mechanism for developing and strengthening the research ecosystem within HEIs, aligned with the provisions of NEP-2020.

Mission

- To create a conducive environment for enhanced research productivity.
- To encourage collaboration across industry, government, community- based organizations, and agencies at the local, national, and international levels.
- To facilitate greater access to research through mobilization of resources and funding.

Objectives

- 1. To create an organizational structure with role-based functions of RDC, formulate Research Policy for the HEIs, identify thrust areas of research, and form related cluster groups/Frontline teams/consortia of researchers.
- 2. To create enabling provisions in Research Policies for recruitment of research personnel, procurement of equipment, and financial management with adequate autonomy to the Principal Investigator(s) and disseminate research outcomes to stakeholders and the public at large.
- 3. To establish a special purpose vehicle to promote researchers and innovators, identify potential collaborators from industry, research organizations, academic institutions & other stakeholders for cooperation and synergistic partnerships.

- 4. To act as a liaison between researchers & relevant research funding agencies, extend guidance in preparation & submission of project proposals and post-sanctioning of the grants to oversee adherence to timelines.
- 5. To have better coordination among other cells/centers dealing with University-Industry Inter Linkage, Incubation, Innovation and Entrepreneurship Development and Intellectual Property Rights (IPR).
- 6. To develop an Institutional Research Information System for sharing the status of ongoing/ completed research projects/Programmes expertise & resources, etc., making effective use of Information & Communication Technology (ICT) for preparing the database of in-house experts to provide industrial consultancy and services.
- 7. To engage & utilize the services of superannuated active faculty/scientists in research capacity building of talented young minds and promote mobility of researchers across institutions and R&D Labs.
- 8. To serve as nodal center for ideation and conceptualization of research topics/themes by organizing workshops and training programs and ensuring the integrity and ethical practices in research activities including clearance of bioethical committee wherever required.

Functions

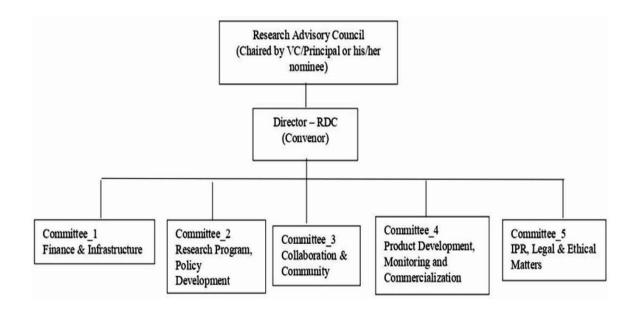
The UGC launched an initiative to establish a RDC in HEIs with the mandate for promoting quality research that contributes meaningfully towards the goal of a self-reliant India ("Atma-Nirbhar Bharat"), aligned with the provisions of NEP-2020. The RDC would help creating a research ecosystem for reliable, impactful, and sustained research output. The essential elements of such an ecosystem, viz., generation of knowledge and facilitation of research, innovation and technology development for industrial & societal benefits, are addressed by human resource (researcher & faculty), intellectual capital (knowledge& skills), governance (regulation & policies) and financial resources (funding & grants).

1. Governance

An efficient governance mechanism, which ensures functional autonomy, transparency, accountability, adaptability by strengthening inter-linkages to create a conducive research environment.

The HEIs can foster the human elements (faculty, staff, scholars, and students), logistics (land, buildings, and facilities), knowledge resources (research equipment, project utilities, and consumables), fund flow, etc. through a steady, proficient, effective governance (Rules, Norms, and Policies) and financial (Grants and Funds) management. Dedicated leadership and administrative structure for research, led by experienced researchers, are essential for establishing an effective and robust Research Governance in RDC at HEIs.

The Research Governance will have a Research Advisory Council (RAC) headed by the Vice-Chancellor/Principal or his/her nominee as the apex body of RDC. The Director, nominated by Vice-Chancellor among the distinguished researchers from the university, will head various committees to drive the governance. RDC may form multiple committees to smoothen its functioning with respective committee members nominated by the Director – RDC and approved by RAC. The organizational structure of RDC comprising of various committees of Udayanath Autonomous College of Science And Technology, Adaspur, Cuttack for specified functions may be as under:



2. Administration

Established organizational structure (Bodies, Authorities, and Committees) will facilitate planning, implementation, and monitoring of research activities in HEIs, formulate rules, regulations, and policy frameworks for utilization of facilities and resources at HEIs.

A strategy adopted to integrate multiple functional units can support institutional research under a single-window operational system for effective administration.

The activities of RDC will be mentored and monitored by various committees for devising research models, technology, appraisal, foresight & review functions, mediating sectoral R&D progress, and IPR protection.

RDC should keep a close contact with Ministry Innovation Cell to make use of various innovative plans for facilitating the researchers

3. Research Ecosystem/Collaboration

A vibrant research ecosystem in HEI aims to provide meaningful thrust for sustainable research and innovation and promote collaboration between Government, universities, research institutes and industries.

HEIs need to build a sustainable research ecosystem that leads to consistent quality research outcomes and enhanced productivity.

In order to make RDC functionality viable, the HEIs that are relatively new or not so well established should develop a connection with RDCs of already well-known/established HEIs for their research.

RDC in each HEI will act as a facilitator for networking and collaborative research with other national and international institutions working in inter- disciplinary, trans-disciplinary, and multidisciplinary research areas. Reformed administrative structure at HEIs can reach out to key industry players, research organizations, institutions, associations, NGOs, Government bodies to forge strategic partnerships.

HEIs need to establish collaborations, teams/consortia, partnerships, and combined ventures for joint research activities through clustering institutions and organizations to facilitate the exchange of students, scholars, and faculty.

There is a need to strengthen resource sharing in content and infrastructure both within the university and among universities, funding agencies, industries, corporate and Government.

4. Information Management System

HEIs play a key role in the advancement of research and innovation as two distinct entities through Research Information Management System (RIMS) for the benefit of faculty, students, industry and other stakeholders.

HEIs should put in place a RIMS to collect and manage research-oriented information, databases, publications, research projects, fellowships, collaborations, patents, thrust areas, innovations etc. aligned with the institution's research policies.

RIMS would also provide a platform for accessing resource-centric information pertaining to human capital (Expertise), physical capital (State- of-Art Research Laboratories and Sophisticated Instrumentation Facility), and knowledge capital (Digital Library & Information, Intellectual Property Facilitation, Quantitative Methods & Data Analysis, Analytical and Consultancy Services).

As per the requirements of various regulatory agencies, researchers can submit, modify, or update their research compliances such as protocol approval, training records, equipment lists, etc. RIMS can provide a centralized and integrated database to manage issues related to and radioactive-safety approval clearances for use and disposal of biological, chemical and radioactive hazardous materials, protective equipment measures, surveillance of staff, appropriate trainings/workshops, etc.

Each HEI needs to create a blog or portal for Institutional Research Information and Institutional Repository and sign an MoU with UGC- INFLIBNET to access and upload the research information through Shodh Ganga, Shodh Gangotri, Shodh Sindhu, Shodh Shuddhi, and Shodh Chakra.

The Innovation Management (ISO 56002:2019) can be implemented as a common framework to develop and deploy innovation capabilities, evaluate performance, and achieve intended outcomes of global standards.

5. Human Resources

The Director (RDC), the Conveners and members of various committees (nominated by the Director-RDC from/among the existing faculties with research credentials) and supporting administrative/technical staff would ensure smooth conduct of the research activities in HEI. Re-employing or designating superannuated faculty/scientists with exceptional research profiles and eminent faculty as Mentors/ Scientists/ Professor Emeritus on a selective basis will help to build a resilient research ecosystem. Distinguished faculties or research scientists grooming young talents can help replenish the void created as a result of superannuated faculty/researchers.

6. Research Promotion & Guidance

Research promotion activities at the HEI should be aligned with the mandates of various National Missions, SDGs, Start-up India leading to a Self-Reliant India (Atma-Nirbhar Bharat). Research Guidance from RDC will aim to encourage faculties to conceive ideas through enhanced industry-academia interactions and prepare research proposals for funding from various agencies. Organizing events like capacity-building programs (Research

Methodology and Research Techniques) and specific research theme-based workshops and Research Internships will motivate the end-users (students, scholars, and faculties) to participate actively in the process of ideation and innovative research in emerging areas.

a. Research Thrust and Clustered Areas

Thrust areas for Research in an HEI should be identified, underpinning the societal needs and the availability of key resources, including in-house human resources, faculty research competencies, and support systems. This would enable HEI to consider establishing a Center of Excellence (CoE) in these identified contemporary areas of research.

Research Clusters and/or Regional Research Consortia prompted/formed by RDC to bring all researchers, faculty, students, scholars, and Post-Doctoral Fellows for joint high value (interdisciplinary and trans-disciplinary) research projects to avail national and international funding opportunities. Shared infrastructure and expertise will enable cross- fertilization of ideas and mobilization of resources. Further, forming Regional Research Consortia adds a synergistic advantage in finding solutions in inter-disciplinary, trans- disciplinary and multidisciplinary areas.

CoEs' can serve as Incubation Centers to transform innovative ideas into processes and products administered and monitored by the proposed RDC. RDC could also provide an avenue for community talent with prior learning/expertise to engage in research and innovation activities of HEI.

b. Research Incentives and Recognition

Incentives play a significant role in triggering and catalyzing research interest among scholars and faculties. Incentivizing quality publications and patents by students and faculty will have an enduring positive impact.

Institution of Excellence Awards for accomplishments/achievements in the form of impactful quality research and/ or research-based teaching will further stimulate and invigorate the research and innovation activities of the HEI.

RDC should also develop a policy focusing on identifying specific intensives for research faculty and develop a unique Research Career ladder for strengthening the mission "Research".

c. Technology Development and Business Centered Facility

The Technology Development and business-centered facility will be a hub for strategic partnerships/ collaborations, industry-institute interface, sponsored or contract research, new knowledge generation, IPR, and patent services, venture capital, trade/market portfolio, technology transfer, and commercialization of research to facilitate innovation, incubation, entrepreneurship and start-up ventures.

d. Finance

RDC can facilitate resource mobilization and create a Corpus for research and development from government, industry, and other funding agencies and channelize Corporate Social Responsibility (CSR) funds for sustenance and furtherance of research activities. Apart from creating a Corpus fund exclusively for R&D, RDC can explore venture capitalists and angel investors for funding in research and innovation. It needs to liaise with funding agencies, and track funding opportunities from industrial consortia.

7. Integrity and Ethics

Regular initiatives by RDC will ensure that researchers understand the importance of integrity and ethics and comply with ethical codes of research and publishing practices at institutional, national, and global levels. A standard plagiarism check should be mandatorily implemented and the requisite software in this regard made accessible to all researchers. In addition, the RDC will sensitize the research community about dubious research and publishing practices and predatory journals. The college, Udayanath Autonomous College of Science And Technology, Adaspur, Cuttack has a Research and Ethics Committee to monitor the works as per the UGC Guidelines.

8. Capacity Building

RDC would play a crucial role in building the capacity of faculty and students to undertake research problems in line with the latest advances in diverse disciplines to push the boundaries of knowledge through publications and contribute to technological developments relevant to societal needs. It would also pave the way for HEI to attract more research grants under norm-based funding, improve its accreditation ranking and enhance its brand image. Regular events such as refresher courses, workshops, trainings/internships, group discussions and seminars/conferences may be organized for capacity building. RDC would play a pivotal role in creating central R&D facilities with the provisioning of associated training/internship thereon.

9. Research Monitoring

The current policy environment in India encourages HEIs to be responsible and accountable for research development and innovation activities through the creation of infrastructure, generation of resources, promotion of business, and facilitation of policy framework to nurture the culture of quality research by adhering to ethical practices. Among the standard functions, the RDC in an HEI needs to monitor and oversee research progress, coordinate program, manage and facilitate optimizing resources, timely review of research activities for completion of the projects as per schedule.

HEIs need to formulate and adhere to specific quality benchmarks for research to meet the global/ international standards. The proposed RDC should conduct a quality review (SWOC Analysis) or internal evaluations of the research papers and suggest Scopus Indexed, Web of Science (WoS), or UGC-CARE recognized journals for appropriate publications.

R & D Cell of Udayanath Autonomous College of Science And Technology, Adaspur, Cuttack ensures that all the Research Labs in the institution fulfill the norms of Good Laboratory Practices (GLP) and Safety (Bio and Chemical) measures.



Research Advisory Council (RAC)

Sl.		
No.	Name with Designation	Status
1.	Lt. Chirashree Indrasingh, Principal (Ex-Officio)	Chair Person
2.	Dr. Nanda Kishore Sahoo, Reader in Chemistry	Convener
3.	Dr. Lambodar Prasad Singh,	Member
	Formerly, Professor of Physics, Utkal University, BBSR	
4.	Dr. Naresh Chandra Mishra,	Member
	Formerly, Professor of Physics, Utkal University, BBSR	
5.	Dr. Shantilata Sahoo,	Member
	Formerly, Professor of Botany, Utkal University, BBSR	
6.	Dr. Krupasindhu Pradhan, H.O.D. ,Economics	Member
7.	Dr. Hiranmayee Mishra, Reader in Political Science	Member
8.	Dr. Shiba Shankar Nath, Lecturer in English	Member
9.	Dr. Mrs. Himani Pani, Lecturer in Education	Member
10.	Dr. Biranchi Kumar Sahoo, Lecturer in Odia	Member
11.	Dr. Anil Kumar Biswal, Lecturer in Computer Science	Member
12.	Dr. Rajendra Narayan Dakhinkabat , Lecturer in Botany	Member

RAC approves of the following committees to ensure Research and Development in UDAYANATH Autonomous College Of Science And Technology, Adaspur, Cuttack:

1. Finance Committee for Research and Development:

- 1. Lt. Chirashree Indrasingh, Principal (Ex-officio)
- 2. Prof. Lambodar Prasad Singh, Professor Emeritus, Physics
- 3. Dr. Lulumina Dash, HOD Psychology (Administrative Bursar)
- 4. Dr. Krupasindhu Pradhan, IQAC Coordinator
- 5. Mr. Prasad Kanungo, Lecturer in Commerce (Accounts Bursar/Principal's Nominee)
- 6. Mrs. Sujata Mishra, Lecturer in Commerce (GB Nominee)

2. Research Programme and Policy Development

- 1. Lt. Chirashree Indrasingh, Principal (Ex-officio)
- 2. Prof. Mohin Mohammad, Professor Emeritus, Philosophy
- 3. Dr. Hiranmayee Mishra, Reader in Political Science
- 4. Dr. Shiv Kumari Panda, Lecturer in Chemistry
- 5. Dr. Anil Kumar Biswal, Lecturer in Computer Science
- 6. Dr. Devlina Biswas, Lecturer in Sociology

3. Collaboration and Community

- 1. Dr. Nanda Kishore Sahoo, Reader in Chemistry (Convener)
- 2. Dr. Padmini Panda, HoD, Odia
- 3. Dr. Prasanta Kumar Panda, HoD, Sanskrit
- 4. Dr. Arati Pradhan, Lecturer in Computer Science
- 5. Mr. Swarna Kumar Dash, Lecturer in Botany
- 6. Miss Biswakalpita Mohanty, Lecturer in Social Work
- 7. Dr. Manav Raj Kar, Lecturer in Physics

4. Product Development Monitoring & Commercializing

- 1. Dr. Hiranmayee Mishra, Reader in Political Science
- 2. Dr. Kabita Mishra, Lecturer in Odia
- 3. Mrs. Sujata Mishra, Lecturer in Commerce
- 4. Dr. Priyabrata Mohanty, Lecturer in English
- 5. Dr.Shiv Kumari Panda, Lecturer in Chemistry
- 6. Dr. Priyanka Manjari Behera, HoD, Library Science

5. IPR, Legal and Ethical Matters

- 1. Lt. Chirashree Indrasingh, Principal (Ex-officio)
- 2. Prof. Naresh Chandra Mishra, Professor Emeritus, Physics
- 3. Prof. Shantilata Sahoo, Professor Emeritus, Botany
- 4. Dr. Biranchi Kumar Sahoo, Lecturer in Odia
- 5. Dr. Shiv Kumari Panda, Lecturer in Chemistry
- 6. Dr. Anil Kumar Biswal, Lecturer in Computer Science
- 7. Dr. Subhasmita Parida, HoD, Geography

PRINCIPAL
U. N. (Auto) College of Sc. & Tech.
Adaspur, Cuttack



MEMORANDUM OF UNDERSTANDINGS (MOUs)

Udayanath Autonomous College of Science and Technology, Adaspur, Cuttack Collaborates with the following Universities, Research Institutes, Autonomous Colleges and NGOs for organizing Seminars, Workshops, Outreach activities, exchange of Teachers and Students programme for a qualitative educational ambiance.

Sl.		National/
No.	Signed Between 2nd Party	International
1	Government Autonomous College, Rourkela, Odisha	National
2	Juvenilia Technology Pvt. Ltd., Cuttack, Odisha	National
3	National Rice Research Institute, Cuttack, Odisha	National
4	PG Department of Chemistry, Ravenshaw University, Cuttack, Odisha	National
5	Prananath Auto. College, BBSR,Khurda	National
6	Research Forum India, New Delhi	National
7	Sailabala Women's Autonomous College, Cuttack, Odisha	National
8	Salipur Autonomous College, Cuttack, Odisha	National
9	Srusti Academy of Management(Autonomous),BBSR,Odisha	National
10	Ganeswar Club, Dhenkanal, Odisha	National
11	SPARSHA, Balasore, Odisha	National
12	BHAVAN's centre for communication and Management (BCCM), BBSR,Odisha	National
13	Jewels International Chetana College for Special Education, Odisha	National

SEED MONEY PROVIDED

FOR

DEVELOPING RESEARCH FACILITIES, PUBLICATIONS AND PATENTING

Udayanath Autonomous College of Sc. & Tech., Adaspur, Cuttack makes provision for research in the annual budget subject to the availability of funds.







UDAYANATH AUTONOMOUS COLLEGE OF SC. AND TECH., ADASPUR, CUTTACK VCH-2/4-(2/7) BENEFICIARIES FOR THE SESSION 2024-25 Financial Assistance for Presentation of Paper / Poster, Registration fees for Life Membership in professional Bodies ession Duration Department Purpose Receipt No International Conference on Human T25010516 63003470 98894 Ravenshaw University, Animal and Natural History: An Eco Biranchi Kumar Sahoo Odia 29-31, Jan. 2025 Rs. 2000/-05.01.2025 Cuttack Critical Approach to World Literature International Seminar on Artificial T24110915 Intelligence, Educational English 28-30, Nov. 2024 09.11.2024 EFL University, Hydraba Rakesh Kumar Dash 551998511 0326 Communication, and Media Yogoda Satsanga Palpara Sanskrit National Seminar 05-06, Dec, 2024 Rs. 1500/-Prasant Kumar Panda Mahavidyalaya, Midnaps Hype/Perov International Conference on Metal 18 12 2024 Bhubaneswar 19-22, Dec, 2024 Rs. 2006/-Manay Raj Kar Physics HalidePerovskites 2024 Kamala Nehru Women's Annual Conference of All Orissa 23 01 2024 23-24, Jan. 2025 Rs. 500/-College, Bhubaneswar Bijaya Kumar Nayak Philosophy Philosophy Association(AOPA) onference of 17th International Andhra University Congress of Social 241220234620 Visakhapatanam, Philosophy and 11th International 20.12.2024 24-26 JAN 2025 Rs. 2000/ 503307136 India Bijaya Kumar Nayak Philosophy Congress 24-26, Jan, Philosophy of Yoga 6 and Spiritual Kamala Nehru Women's College, 24.012025 Annual Conference of All Orissa Rs. 600/-170 23-24 JAN 2025 Bhubaneswar Philosophy Philosophy Association(AOPA) Somanath Moharana Kanyala Nehru Women's Chanulaty College, Annual Conference of All Orissa 23.01.2025 Kly Rs 500 -23-24 JAN,2025 Philosophy Philosophy Association(AOPA) Charulata Das Kamala Nehru Women's College, 23.01.2024 33 Annual Conference of All Orissa Rs. 500/-Bhubaneswar 23-24 JAN 2025 Philosophy Philosophy Association(AOPA) Jyotirmayee Routray 10.72024 D-0000083442 Rs. 500/-Patent Dept. of Chemistry Anil Kumar Biswal Computer Science Ravenshaw Univ 20-10-2024 373495712660 National conference on recent adv. In Rs. 500/-20-21 Nov.2024 ersity, Cuttack Guru Prasad Dash Chemistry Hectero Cyclic Chemistry OFFICER 1 COGC 03 3 2025

INFORMATION MANAGEMENT SYSTEM



National Library and Information Services Infrastructure for Scholarly Content extending access to e-Resources to colleges in India



Udayanath Autonomous College of Science and Technology

- Address: Udayanath Autonomous College of Science and Technology, Cuttack, Odisha - 754011
- Website: www.udayanathcollege.org
- 6 AISHE Code: C-39713
- GST No: Not Found Add GST No

FACULTY DEVELOPMENT PROGRAMME (FDP)

ON

RESEARCH METHEDOLOGY Dt- 16.01.2024 to 22.01.2024

As research is of paramount importance in an institution of higher learning, U.N. (Auto) college of Sc. & Tech. Adaspur has a dedicated cell to promote research activities among the faculty members. The cell has organized a Faculty Development Programme under the chairmanship of Principal Prof. Arun Kumar Swain from 16.01.2024 to 22.01.2024 in collaboration with IQAC of the college. There were 47 participants with 9 eminent resource persons of national repute in this programme.



The inaugural ceremony was held on 16.01.2024 at 2PM in IT conference hall of the college with Dr. Krushna Chandra Rath, Director DDCE, Ukal University, Bhubaneswar, Odisha as the resource person. He was a store house of knowledge regarding research and explained detail about the relevance and essentials of doing research and documentation in the sphere of higher learning. It was followed by interaction and discussion by participants.

On 17th of January 2024, Prof. Sujit Ku. Bhutia, from Dept. of Life science, National Institute of Technology, Rourkela made deliberation on design, method and technology of research.



Dr. Biswaranjan Paital, Asst. Prof. OUAT, Bhubaneswar gave a talk on "Documentations of research, thesis writing, article writing, book review, citing references and bibliography, on 18.01.2024.



On 4th day of Faculty Development Programme Dt- 19.01.2024, there were two resource persons Dr. Pratima Sarangi, Associate Prof. and Head Dept. of Public Administration, Vani Vihar, Bhubaneswar spoke on various aspects of research such as selecting the problem for research, necessity and defining the problem and problems involved in it. On the same day Dr. Nandini Mishra, Associate Prof. Dept. of Philosophy, Utkal University made a discussion on significance of research and development of research proposals. Retd. Prof. Prof. Udaya Nath Dash, Dept. of Psychology of Utkal University, Bhubaneswar, spoke in detail on perspectives of 'Why' and 'How' of research on 20.01.2024.



The last day of FDP was addressed by Prof. Fakir Mohan Sahoo, Research Prof. in Xavier University and Dr. Kalpana Sahoo, Associate Prof. (OB) School of Human Resource Management XIM University, India gave a detail idea about how to conduct a research and publish it.

The valedictory session was chaired by Principal Prof. Arun Ku. Swain. The objective of the programme presented by Dr. Lulumina Dash which was followed by a welcome address by Dr. Krupasindhu Pradhan, Coordinator, IQAC. The resource person Dr. Mitali Chinara, Head ,Dept. of Applied and Analytical Economics, Utkal University, Bhubaneswar discussed 'Hypothesis Testing' in detail.





After the discussion was over, certificates were distributed by Dr. Chinara to the participants. The programme ended with a vote of thanks by Prof. Bijay Ku. Nayak.

The programme ended with a hope to create a pro-research environment inside the campus.

Seminars and Extension Activities Organized

















































DEPARTMENT PHYSICS				
Name of the Programme	Resource person with	Date		
	Designation			
Outreach Programme for	Prof. K. K. Nanda, Director,	16.09.2023		
Science Students	IOP, Bhubaneswar Dr.			
	Sachindra Nath Sarangi, Dr.			
	Biswajit Mallick			
A seminar on Electron	Prof. Debakanta Samal, IOP,	23.11.2023		
Correlation, Magnetism and	Bhubaneswar			
Band Topology in Solids				
A seminar on Quantum Spin	Prof. Niharika Mohapatra	09.12.2023		
Hall Effect, Berry Curvature,	IIT, Bhubaneswar			
and New Electronic Phases of				
Matter				
CENTENARY CELEBRATION	Prof. P.K. Panigrahi, Former	05.10.2024		
OF BOSE STATISTICS One	Dirctor, IISER, Kolkata Prof.			
day seminar on 1. Quantum	A.K. Nayak, IOP,			
Computing I &II 2. Machine	Bhubaneswar			
Learning I & II				



