



# VIBES



**NISER**  
Newsletter

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*Image by Himesh Behera, alumnus (Integ. M.Sc. 2016-21) via facebook*

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## MESSAGE FROM THE DIRECTOR



For the past couple of years, we all have been sailing through turbulent times. Despite the challenges posed by the pandemic, the entire NISER community has been uninterruptedly putting in their best efforts to excel in the academic and research fronts. I am extremely happy to put on record that entirely due to the relentless perseverance of the covid monitoring team and the support that it received from the NISER family, we managed to pass through the difficult times in terms of setting our priorities over the overall health of all the stakeholders and we are getting the academic activities back on track. I also wish to share that we are now on our path to be back to normalcy which I hope we will succeed very soon.

Notwithstanding the pandemic related curbs and restrictive guidelines, we have managed to make our presence felt in the arena of scientific productivity. That reflects in the awards and recognitions that our faculty and student members have brought along. The most notable and proudest one is the Infosys Prize in Physical Sciences for the year 2021 conferred upon Prof. Bedangadas Mohanty. The Infosys Science Foundation also organised a talk in NISER campus to commemorate the award winning work of Prof. Mohanty. I am also equally delighted about Dr. Najmul Haque having been awarded the INSA Young Scientist Award 2021 for his outstanding work on QCD thermodynamics, Dr. J.N. Behera being appreciated as one of the most cited authors in Royal Society of Chemistry Journals, 2020 and Dr. Subhankar Mishra for being selected for the prestigious Fulbright-Nehru Academic & Professional Excellence Award 2021-22. I also congratulate all the members of the teaching faculty and students for their contributions in scores of high impact scientific journals as well as their success in the teaching programme.

The Centre for Medical and Radiological Physics (CMRP) is now all set to roll out its academic programme. NISER has entered into an MOU with All India Institute for Medical Sciences (AIIMS) Bhubaneswar and Acharya Harihar Post Graduate Institute of Cancer (AHPGIC), Cuttack to help in the internship component and teaching of medical physics courses. We acknowledge the help and support of TMC, Mumbai to make this programme achievable. The new academic programme of Masters in Medical and Radiological Physics will commence from the upcoming academic year.

I am very happy to see the revival of the NISER Outreach Talk Series in the month of November 2021. Such activities are part of our commitment to the society around us. The talks by our in-house scientists were structured to be interactive with adequate rooms for responding to the curiosity of the young school going children. It gives me immense pleasure to announce that after a long wait our auditorium has been made ready to use. Next in the pipeline is the new animal house which is almost ready to use. After a few months, we would be able to open the facility for use and there are also many more facilities being commissioned.

I congratulate the 'Vibes' team for carrying the newsletter forward and hope it gets enriched with many new things in the days to come.

**Prof. Sudhakar Panda**  
Director, NISER Bhubaneswar



## NEW ACADEMIC PROGRAMME

### **Centre for Medical and Radiological Physics (CMRP)**

NISER recently entered into an MOU with the All India Institute for Medical Sciences (AIIMS), Bhubaneswar and Acharya Harihar Post Graduate Institute of Cancer (AHPGIC), Cuttack, Odisha to offer an innovative Post Graduate programme in Medical and Radiological Physics. The associated organizations not only promise to help in the teaching of medical physics course, but also give the students an opportunity to avail of the internship offered by them.

The Master's programme is the first of its kind in the State of Odisha as well as the first such conducted by an Institute of the Department of Atomic Energy, Government of India at the Master's level.

The Centre for Medical and Radiation Physics at NISER will be offering the following programmes:

- Master's in Science (M.Sc.) in Medical and Radiological Physics (two years + one year internship in collaborating hospitals)
- Research and Development on radiation devices for societal applications and research programmes.
- In the future, CMRP also looks forward to introducing a medical cyclotron facility at least in the eastern region of the country and take the load for standardization / calibration / validation of various medical physics devices.





### **The skillset acquired by the end of the course will entail:**

- Awareness regarding the safe use of diagnostic and treatment radiation equipment
- Quality assurance for radiation machines
- Quality assurance for radiation treatment planning
- Quality assurance for radiation treatment delivery
- In-depth knowledge of the radiation machine structure and function
- Sound understanding of the principles & physical laws governing the biological effects of radiation
- Ability to solve radiation therapy technology related problems
- Opportunity to gain appropriate domain knowledge on areas that are clinically applicable
- Ability to teach junior technicians in radiation therapy
- Ability to teach trainee oncologist on the relevant aspects of medical physics.

The goal of this Centre is to start a Master's Degree Course in Medical and Radiological Physics at NISER with a one-year internship at partner hospitals. The center will also explore the possibility of incorporating Machine Learning and Artificial Techniques into medical physics. The long-term objective is to build up a facility for medical cyclotron, continue to have working links with AIIMS and AHPGIC as well as other centers of radiation and propose a Tata Memorial Centre at NISER.



## **REPORT ON COVID-19 MANAGEMENT**

The NISER COVID-Task Force was constituted in March 2020 comprising members of the senior management along with other health experts from across NISER. The Task Force meets regularly to assess the situation, and by taking the guidelines & recommendations of the government and expert external authorities into account, it takes appropriate measures for the welfare of the community of NISER. Meetings are held once or twice a week to have vibrant discussions on various issues related to academic, administrative, infrastructure, members' entry/exit etc., & accordingly, an information/advisory is sent out to all the members on a regular basis. The topmost priority is to ensure the well-being of our community while allowing NISER to continue working smoothly through this period of difficulty. All measures are decided with this overarching objective in mind.

## STUDENT INTAKE

**National Entrance Screening Test (NEST) 2021 for admission in the Integrated M.Sc programme:** NEST, the nationwide test that NISER conducts every year to select the most deserving candidates for admission into its flagship programme, was very effective last year. Despite the prevailing Covid-19 crisis, more than 36000 applications were received. The largest numbers of applications were from Odisha followed by Kerala and Uttar Pradesh. NEST 2021 was conducted on August 14, 2021 in over 120 venues across the country.

The results were declared on the NEST website (<https://www.nestexam.in/>) in the 1st week of September and admission took place in several rounds subsequently. The new batch of 200 students were admitted and the classes for the academic session 2021-22 started thereafter in accordance with the COVID-19 guidelines.

### 2021-July Session

| Admission Data        | Int. Ph.D | SBS | SCS | SPS | SHSS | SCoS | SEPS | Total |
|-----------------------|-----------|-----|-----|-----|------|------|------|-------|
| Applications Received | 277       | 717 | 333 | 532 | 137  | 49   | 96   | 1864  |
| Shortlisted           | 92        | 417 | 182 | 113 | 87   | 11   | 80   | 890   |
| Joined                | 15        | 4   | 13  | 13  | 6    | 4    | 5    | 45    |

**Admission status for Ph.D programme:** Admissions to Ph.D programmes were conducted through an even more rigorous process that included shortlisting of eligible applicants followed by a round of written tests and interviews:

## NEW FACILITIES

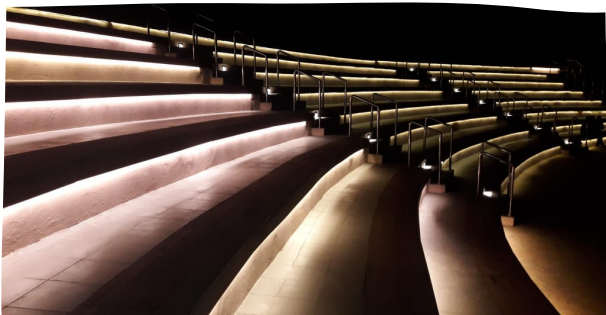
### Animal House Facility

The Animal House Facility under the School of Biological Sciences, NISER is a state-of-the-art central facility involved in the procurement, breeding, and experimentation of laboratory animals in order to meet the requirements of the scientific groups. It provides animal models, veterinary care, and research support to the students and faculties.



## Pathani Samanta Auditorium

NISER now has its own modernized auditorium with seating facilities for close to 730 students. It has been named as "PATHANI SAMANTA AUDITORIUM" after the renowned Odia astronomer, Mahamahopadhyaya Chandrasekhara Singha Harichandana Mahapatra Samanta (ମହାମହୋପାଧ୍ୟାୟ ଚନ୍ଦ୍ରଶେଖର ସିଂହ ହରିଚନ୍ଦନ ମହାପାତ୍ର ସାମନ୍ତ), better known as Pathāni Sāmanta. Well equipped with futuristic equipments, the auditorium further opens into a fully fledged Amphitheatre designed especially for hosting events in the open air.



## Central Library

The first & second floors of the central library of NISER was opened recently to the NISER community. Spread over two floors with state-of-the-art infrastructure and ample learning-centred spaces, the library houses a seminar room, a central board room, and a laptop pod along with several group study areas and meeting spaces. Such a configuration not only creates ample space for studying and collaborating but also enhances student and faculty learning experiences.





## ACADEMIC EVENTS ORGANIZED

**NISER organized the following major events in 2021:**

### **Webinar Series on Spintronics**

Prof. Albert Fert (Nobel prize winner in Physics, 2007) delivered the 50th lecture of the Webinar Series on Spintronics (W2S) at NISER on June 3, 2021. The title of the lecture was "2D magnets: from fundamental to spintronic devices." About 550 participants attended the lecture online from all over the world.

### **International Conference on Main-group Molecules to Materials-II (MMM-II), December 13-15, 2021**

The School of Chemical Sciences had organized an International Conference on Main-group Molecules to Materials-II (MMM-II) in the virtual mode from December 13-15, 2021. It is only appropriate that this second meeting (MMM-2020) was held at the School of Chemical Sciences, NISER, where Organometallics, Catalysis, and Main group chemistry have had a synergistic influence on the growth of Chemistry in general and inorganic chemistry in particular. Some of the recent exciting developments and future challenges in the field were highlighted in the three-day symposium through several invited lectures by senior and young faculty drawn from across the world. In addition, there was a vibrant poster session involving young researchers.

### **International Virtual Conference on Emerging Porous Materials, July 29-30, 2021**

The School of Chemical Sciences, NISER collaborated with VIT and IIT Jammu to organize the 1st International Virtual Conference on Emerging Porous Materials during July 29-30, 2021.

### **The Symposium of Magnetism and Spintronics (SMS-2021), November 25-27, 2021**

The Symposium of Magnetism and Spintronics was organized in NISER during November 25-27, 2021. The objective of the conference was to arrange a platform for all the students and scientists who were pursuing their research in the area of magnetism and spintronics, to interact with eminent scientists, share their opinion and assess recent developments in these areas. NISER aims to organize SMS conferences in a periodic manner in different cities of India.

### **Health of Indian Economy during COVID-19 Pandemic, August 13, 2021**

A panel discussion was arranged focusing on the theme 'Health of Indian Economy during COVID-19 Pandemic' on August 13, 2021. The panellists were Dr. Sitakanta Panda, IIT Bhilai; Shri Om Mahapatra, Chartered Accountant; Shri Pravas Mishra, Oxfam, India and Dr. Amarendra Das, NISER.

### **Webinar for World Mental Health Day, October 23, 2021**

On the occasion of World Mental Health Day, NISER Student Counselling Cell organized a 'Webinar for World Mental Health Day' on October 23, 2021 by inviting Dr. Esha Patnaik, an eminent psychotherapist to deliver a talk. The talk that was based broadly on the theme for this year's World Mental Health Day was entitled "Mental Health in an Unequal World." There were discussions about mental health occurring along a continuum, environmental factors that affect people differently, leading to differences in emotional/cognitive reactions. After presenting an outline of the effect of stressors on biology, emotions, cognition and behaviour, there was a brief presentation that enlisted the common coping strategies.

### **NISER Outreach Talk Series**

As part of the 75th year of India's Independence celebration, the NISER Outreach Cell along with the Science Activity Club started a monthly popular talk series. The first online talk was held on November 26, 2021, by

**Dr. Guneshwar Thangjam**, School of Earth and Planetary Sciences. The title of the talk was "**Learning through Play with NASA-LEGO Apollo toys: One Small Step for Man, One Giant Leap for Mankind.**" The NASA Apollo programme, especially Apollo 11, is one of the most celebrated historic events in the humankind.

Recognizing its significant impact upon the people out there, especially the kids, NASA and LEGO Group is reaching out with creative toys and models for active learning in Science, Technology, Engineering, and Mathematics (STEM) education through play. In this regard, Dr. Thangjam talked about the planetary explorations from Apollo on Moon to New Horizons on Pluto and Arrokoth in Kuiper Belt and described the LEGO-NASA toy models.

The second talk in the NISER Outreach Talk series was an online talk by

**Dr. Amarjeet Nayak**, School of Humanities and Social Sciences, delivered on December 31, 2021. The title of the talk was "**SPECULATIVE FICTION: A Flight of Fancy or Holding a Mirror to society?**" Speculative Fiction, unlike the commonly perceived misconception of being escapist fiction, reflects on individual longings, fears, as well as larger socio-politico-cultural concerns. This introductory talk on Speculative Fiction introduced our audience to the genre of speculative fiction. An attempt was made to familiarize the students with some of the seminal works of Speculative Fiction allowing them to explore its rich diversity by looking at not just the Western tradition of Speculative Fiction, but also the Indian tradition of Speculative Fiction, from ancient times to the present.

## 10th GRADUATION CEREMONY

NISER hosted its 10th Graduation Ceremony via the hybrid mode on August 27, 2021. 5-Year Integrated M.Sc and Ph.D students who had successfully completed the academic requirements were awarded the degree certificates, mark sheets and medals. A detailed entry protocol and other procedures following the COVID-19 directives were worked out for those who wanted to receive their degrees on-site. A total of 91 Integrated M.Sc, 4 Integrated M.Sc-Ph.D (only M.Sc degree) and 20 Ph.D students graduated in 2021.



## FOUNDATION DAY

In keeping with NISER's tradition of celebrating its Foundation Day by inviting eminent scientists to deliver pertinent talks, a lecture was arranged in the hybrid mode on September 6, 2021, while simultaneously being live-streamed on NISER YouTube channel. The speaker, Prof. Ajay Parida, Director of the Institute of Life Sciences, Bhubaneswar graced the occasion by giving a talk on "Science and Technology for addressing Societal Needs".



Image by Piyush Gone, alumnus (Integ. M.Sc. 2016-21), via facebook



## AWARDS AND RECOGNITIONS

A large part of NISER's standing is reflected in the awards bagged by its faculty members. Some of the important awards received in 2021 are listed below.

### Faculty Achievements

#### Prof. Bedangadas Mohanty

The recipient of the 2021 INFOSYS Prize for his unparalleled contributions to the field of Physical Sciences. The Infosys Prize in Physical Sciences was awarded to Prof. Mohanty for investigations of the nuclear force. At the Brookhaven National Laboratory and the European Organization for Nuclear Research, he determined the transition temperature of the quark-gluon plasma to hadronic matter, observed heavy antimatter nuclei along with nuclear spin-orbital angular momentum interactions, as well as other effects in quark-gluon plasma.

He was elected as the Spokesperson of ALICE-India and was also chosen to lead the India delegation to CERN. Starting from January 1, 2021, the tenure of his station is 3 years.

He was enlisted in the global list of the top 2% of scientists in the category of Most Influential Scientist Career Impact (1960-2020). He excelled in research in the discipline of Physics & Astronomy among all the Universities of the world according to the data compiled & published by Stanford University this year.



**BEDANGADAS  
MOHANTY**  
**INFOSYS PRIZE 2021  
PHYSICAL SCIENCES**



**Dr. Aniruddha Datta Roy**

and his team discovered a new species of skink from the Nilgiri Hill region, the details of which were

published in the reputed journal, Zootaxa.

He has become an invited member of the International Union for Conservation of Natural resources (IUCN) Species Survival Commission (SSC) and a representative from India for the Skink-specialist group.



**Dr. Asima Bhattacharyya**

ranked in the top 0.17% researchers out of the 39,212 published authors worldwide on Gastric

Mucosa in November 2021. The evaluation was done by Expertscape, Maryland, USA, based on her publications during 2011-2021.



**Dr. Bishnu Prasad Biswal**

received DST-INSPIRE Faculty Award and as part of that, he will receive a research grant of Rupees

thirty-five lakh for five years.



**Dr. C. Gunanathan**

was appointed as Co-Opted member of the SERB (Science and Engineering Research Board). The

focus of his research is centered on developing new pincer complexes and their applications as catalysts for synthesis, bond activations, and activation of small molecules.



**Dr. Himansu S. Biswal**

published a paper in the journal Nature Materials (Impact Factor: 43.8) in collaboration with

researchers from TIFR, Hyderabad, IMMT, Bhubaneswar, University of Oxford, & Princeton University. The work is to find low-cost semiconductors that can be an alternative for silicon semiconductors used in solar cells. The proposed plastic-based organic semiconductors are cost-effective & flexible.



**Dr. Liton Majumdar**

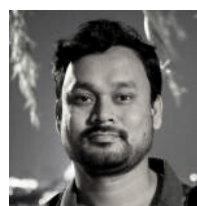
has been elected as the Fellow of Royal Astronomical Society (FRAS)



**Dr. Mohammed Saleem**

was honored with the Wellcome trust DBT India Alliance Intermediate Fellowship. This is given to

researchers who wish to establish an independent laboratory with a high-quality research programme in India.



**Dr. Najmul Haque**

was awarded the INSA Young Scientist Award 2021 for his outstanding work on QCD thermodynamics. He is the

first to calculate QCD thermodynamics at finite chemical potential within resummed perturbation theory(pt) up to the maximum possible loop-order. Three-loop HTLpt thermodynamics set a new milestone in the resummed perturbative framework in the field of theoretical nuclear physics & specifically heavy-ion physics.



**Dr. Prasenjit Mal** received CRS Bronze Medal 2021 (Chirantan Rasayan Sanstha, Vidyasagar University, West Bengal).



**Dr. Sutanu Roy** has been selected for INSA Medal for Young Scientists. It is a recognition of promise, creativity and excellence in a young scientist.



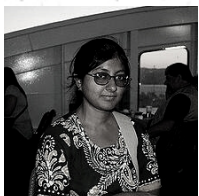
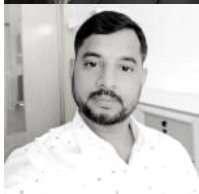
**Dr. Satyaprasad Senanayak** from the School of Physical Sciences has been inducted as an Associate of the Indian Academy of Sciences, Bangalore.



**Dr. U. Lourderaj** was chosen to receive the CRSI (Chemical Research Society of India) Bronze Medal.



**Dr. C. Gunanathan** from the School of Chemical Sciences, **Dr. Ajaya Kumar Nayak**, **Dr. Sayantani Bhattacharyya** and **Dr. Amaresh K. Jaiswal** from the School of Physical Sciences were enlisted in the global list of the top 2% of scientists in the category of Most Influential Scientist Single Year Impact (2020) as per the data compiled & published by Stanford University this year. The list data were originated from Scopus, & six key metrics were used for scoring.



## Student Achievements



**Mr. Pavan** was selected for Shyama Prasad Mukherjee Fellowship (SPMF) based on the performance in CSIR

UGC-NET, followed by an interview. The objective of Dr. Shyama Prasad Mukherjee fellowship is to nurture the budding scientific talent and nourish the objective of pursuit of scientific research. This fellowship is open to toppers of CSIR UGC-NET/JRF and the fellowship is awarded through an interview method. The scope of this fellowship is to seek Ph.D programmes with a unique fellowship in CSIR Labs and other specialized R & D Institutions/Universities.



**Dr. S. Thiagarajan** who was pursuing his PhD under the supervision of Dr C. Gunanathan from the School of Chemical

Sciences, NISER has been chosen as the Outstanding Doctoral Student of the year 2020 in Chemistry by HBNI. The award was presented to him during the celebration of HBNI Foundation Day held on 03 June, 2021.



## RESEARCH AND DEVELOPMENT

### Publications

Despite being relatively young, NISER has made a mark among its peers by dint of its scientific publications. As per the recent Nature Index, HBNI (the degree awarding University for NISER and 10 other aided Institutes of the Dept. of Atomic Energy) stands 1st in India, 30th in Asia Pacific and 97th globally in the field of Physics. NISER has close to 50% of the total papers published by HBNI which were used for this ranking. In all the other subjects, HBNI is ranked no. 2 in India & 71st in Asia Pacific region. NISER has close to 45% of the total papers published which were used for this ranking.

### Indexed Publication data - 2021

| Citation Databases | Pub. Indexed | Citation Received | H-Index |
|--------------------|--------------|-------------------|---------|
| Scopus             | 465          | 16665             | 128     |
| Web of Science     | 407          | 15143             | 122     |

In the year 2021, faculty members and students of different schools had published several academic papers in high impact journals underlining their commitment to creating a niche in the global scientific community. Also, these publications are indexed in the major citation database like Scopus & Web of Science.

### R&D Activities

We place on record our gratitude to the Department of Atomic Energy for the continuous financial support in driving NISER to the forefront of research and development. In addition to that, extramural funding has also been pouring in from various other sources, thereby encouraging our pursuit of research. Research work carried out here in our laboratories are being done with the purpose of converting them into tangible results that humankind can avail of, hence justifying the public funding that we are receiving and reinforcing our commitment to pay back to the society at large.



Extramural funding bagged by the faculty members of NISER is shown in the following table. Some of the major non-DAE sources include Dept. of Science and Technology, Dept. of Bio-Technology, Science and Engineering Research Board (SERB) and Royal Society of Chemistry, London.

**Extramural funding bagged by the faculty members of NISER**

| Name of PI  | Sponsor                        | Title of the Project  | Project Cost (Rs.) | Period                   |
|---|--------------------------------|---|--------------------|--------------------------|
| Dr. Satyaprasad Premswarup Senanayak                    | The Peridot Technologies       | Instrument automation for Optoelectronic Characterization of Tektronix Instruments  | ₹1,44,000          | 15.07.2021<br>14.07.2022 |
| Dr. Ashima Bhattacharyya                                | SERB                           | Identification of extracellular vesicle (EV) protein biomarkers released by gastric epithelia cancer cells & decoding the functional significance of EV proteins in macrophage polarization | ₹45,87,000         | 20.07.2021<br>19.07.2024 |
| Dr. Mohammed Saleem<br>Collaborator:- Dr. P.C Ravikumar | India Alliance<br>DBT Wellcome | Role of host membrane modulation by mycobacterial membrane vesicles in evading phagosome maturation   | ₹3,27,47,000       | 01.09.2021<br>31.08.2026 |
| Dr. P.C Ravikumar                                       | Royal Society of Chemistry     | Application of Carbon-Carbon (C-C) bond activation of strained 3-membered ring system diphenylcyclopropenone for the synthesis of biologically relevant mitomycin analogs                   | £ 4,000            | 14.09.2021<br>13.09.2022 |
| Dr. Chitrabhanu Chaudhuri                               | DST                            | DST INSPIRE Faculty Award   | ₹ 86,27,422        | 31.05.2017<br>30.05.2022 |
| Dr. Chidambaram Gunanathan                              | SERB                           | Cobalt Pincer Catalyzed New and Sustainable Catalytic Transformations   | ₹ 41,91,000        | 01.12.2021<br>30.11.2024 |
| Dr. Ramesh Manna  | DST                            | DST INSPIRE Faculty Award   | ₹ 35,00,000        | 01.01.2021<br>31.12.2026 |
| Dr. Liton Majumdar                                      | SERB                           | The formation and evolution of complex organic molecules in extraterrestrial environments: Exploring the role of molecular astrophysics in the origin of life.                              | ₹ 21,70,344        | 13.12.2021<br>12.12.2023 |
| Dr. P.C Ravikumar                                       | SERB                           | Three membered strained organic molecules as linchpin 3C synthons for the synthesis of carbocycles/N-heterocycles and their asymmetric synthesis  | ₹ 52,49,992        | 20.12.2021<br>19.12.2024 |
| Dr. Sharanappa Nembenna                                 | SERB                           | Bulky Biguanide Supported Achiral and Chiral Zinc Monohydride Cations: Synthesis, Reactivity Studies, and Catalytic Applications  | ₹ 57,55,992        | 20.12.2021<br>19.12.2024 |
| Dr. Dipak Samanta                                       | SERB                           | Emergent motility of droplets using in situ conversion of stored chemical energy  | ₹ 32,94,000        | 20.12.2021<br>19.12.2023 |



## OTHER EVENTS

### Independence Day Celebration

Independence Day was celebrated this year with great fervour and excitement. Prof. Sudhakar Panda, the Director of NISER hoisted the National Flag in accordance with COVID-19 protocols. The hallmark of the event was large scale participation by the campus community in planting saplings around campus.



### Vigilance Awareness Week

Observed over the course of a week, that is, from October 26 to November 1, 2021, the vigilance awareness week came to an end with a pledge-taking ceremony that was organized on 1st November at 4.30 PM in the Pathani Samanta Auditorium. Our Director administered the pledge on this occasion.



### Book Release Ceremony

Ms. Swayamsiddha Mishra, a PhD Scholar from the School of Physical Sciences left for her heavenly abode on 8th October 2020. In her memory, her mother Smt. Gouri Rani Mishra had compiled a book entitled "Anirvana Swayamsiddha" which was released on November 24, 2021, by the Director of NISER.





## RAJBHASHA HINDI DIWAS CELEBRATION IN THE INSTITUTE/ संस्थान में राजभाषा हिन्दी दिवस समारोह

Hindi Diwas was celebrated in the Institute on September 14, 2021. The first half of the occasion was dedicated to a competitive event in Hindi called “टिप्पण आलेखन/TIPPAN AALEKHAN” which was conducted amongst the staff members of the Institute. In the afternoon session, a programme was organized in which the Honorable Director of NISER took upon his role as the Chief Guest. The following prize winners of the “टिप्पण आलेखन/TIPPAN AALEKHAN” competition were rewarded by the Director with a certificate along with a cash prize.

## OBSERVANCE OF RAJBHASHA HINDI FORTNIGHT / संस्थान में राजभाषा हिन्दी पखवाड़े का आयोजन

Hindi Fortnight was observed in the Institute from September 14-28, 2021. On this occasion, many events/activities were conducted, a few of which are detailed below:

**a. Hindi Essay writing competition:** This event was conducted in two categories viz. Students and Employees in online/offline modes on September 17, 2021 on the topic of “Role of Ethics in our daily life”.

**b. Hindi Film Quiz Competition:** This event was conducted and coordinated by Dr. Pranay Swain on September 24, 2021. It started with a screening/elimination round followed by four rounds of oral quizzing.

**Hindi Fortnight Closing Function:** The closing function was organized via the hybrid mode on September 28, 2021. Prof. Smarapriya Mishra, HOD of the Department of Hindi from Ravenshaw University, Cuttack, who was the Guest of Honor of the occasion delivered the valedictory talk. Most of the participants along with the prize winners participated through the online mode. At the end of the function, the Honorable Director of NISER, also the Chief Guest of the function distributed the cash prizes & certificates to the winners of different competitions.



## CLUB ACTIVITIES

### Vaktavya Debate Club

Debates were conducted on the following topics:

- "Open access and intellectual property: Are Intellectual property derailing scientific progress?" on August 7, 2021
- "Harnessing Big Data at the cost of privacy is worth it" on August 21, 2021
- "College application resumes are a better way to gauge merit than entrance exams" on October 29, 2021
- "Healthy masculinity in the 21st Century" on November 19, 2021

### Drama and Music Club

- Spicmacay (Anubhav 3.0) DMC represented NISER in a weeklong online series of workshops organized by SPICMACAY (Society for the Promotion of Indian Classical Music and Culture amongst Youth)
- Represented NISER in VIRASATs (cultural festivals conceptualized by SPICMACAY, which feature renowned artists from diverse fields exhibiting some of their most exquisite performances).

### Oorna Nature Club

- "Know Your Snakes"- Talk by Avvrajal Ghosh, PhD Research Scholar, SBS
- iNAT Project Documentation
- Titli Utsava (collaboration with Photography club): Species identification & Photography
- "Monitoring Long-lived Species"- Oorna Talk by Muralidharan M., Field Director in the Biodiversity and Monitoring Programme, Dakshin Foundation.

### Mathematics Club

- "An Introduction to Knots" was a talk delivered by Ashwin Ayilliath Kutteri on September 4, 2021 (Student Research Seminar)
- Another talk entitled "A Journey with Numbers" was given by Aarjav Jogani on October 30, 2021 (Short undergraduate mathematics seminar)

### Arena eSports Club

- Intra NISER BGMI tournament: Several teams participated in the BGMI tournament conducted by Arena. It was live-streamed via Arena Discord server
- JOTO KANDO VALORANTE was conducted by IISER Berhampur, where two teams of NISER participated.

### Photography Club

- Monthly photography challenge series: Students were given themes on a monthly basis to showcase their photography skills by exploring the theme.
- Titli utsav, a collaborative event with the Oorna Nature club: It was a photography competition encouraging students to capture beautiful and rare species of butterflies in a given time frame.





## Astronomy Club

- NAC hosted COSNOVA (supported by NISER Outreach committee for cash prizes), an inter-college online Astronomy meet from October 29-31, 2021. The students from several colleges across India were invited to participate in unique astronomy events like Astro-treasure hunt, Logo-making, Short-video making, and Astro Quiz. Several professors from SPS and SEPS were judges of some of the events.
- Astro club hosted a NISER Astro Club talk series, which is currently covering the theme of the solar system. Swosti Prakash Sarangi of 2nd year, Integrated M.Sc., SPS, delivered a talk titled "Sun: The Literal Star of our Solar System" on October 23, 2021.
- The Editorial Board of the Club's Astronomy magazine "Kshitij" features an interview of Dr. Guneswar Thangjam.

## Science Activities Club

- Chemistry Student Talk- "Graphene- A Serendipitous Discovery" by Suritra Bandyopadhyay, SCS, B17 on September 18, 2021
- Physics Student Talk- "Black Holes and Photons around them" by Arshia Anjum, SPS, B19 on October 31, 2021
- Chemistry Alumni Talk- "Exploring Hydroxyl disproportionation reaction on Pt(111)" by Suman Bhaumik, B14, SCS on November 5, 2021.

## Institute Cultural Day : Roshni

A cultural night was organized by Students Gymkhana, where a lot of games like musical chairs, rangoli competition and diya decoration competitions were organized. DJ night was also organized.





## SUPERANNUATION



**Prof. V. Muruganandam**  
from the School of  
Mathematical Sciences  
retired on April 30, 2021.

We express our sincere  
gratitude for his contributions to  
NISER and wish him a wonderful  
retirement!



## NEW STAFF



**Mr. Prasanna K. Muduli**  
Scientific Officer-C  
(Library & Information)  
joined on Aug. 02, 2021.



**Shri. Lalatendu Mishra**  
Scientific Officer-C  
(Medical Physics /  
Radiation Biology) at  
CMRP, joined on Sept.  
09, 2021.

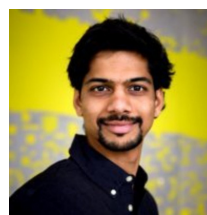


**Dr. S. S. Dasgupta**  
Scientific Officer-D  
(Physics), CMRP, joined  
on Nov. 11, 2021.



**Dr. Sibananda Jena**  
Scientific Officer-D  
(Medical Practitioner) at  
Health Centre, joined on  
Nov. 16, 2021.

## NEW FACULTY



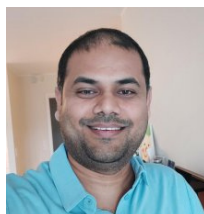
**Dr. Atul Varshney**  
Asst. Professor at School  
of Physical Sciences,  
joined on Oct. 25, 2021.



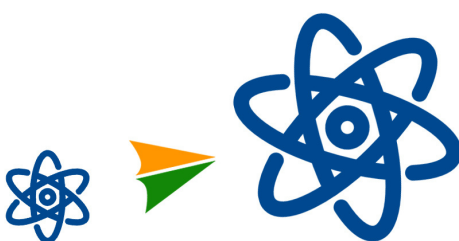
**Shri. Pradeep K. Panda**  
Finance Officer at  
Finance and Accounts  
Division, joined on Nov.  
26, 2021.



**Dr. Sudhir Kumar Pujahari**  
Asst. Professor at School  
of Mathematical  
Sciences, joined on Dec.  
21, 2021.



**Dr. Ganesh J. Tambave**  
Scientific Officer-D  
(Physics) at CMRP, joined  
on Dec. 17, 2021.



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