#### **Tvisha- Intercollege Fest of NISER**

that took place during the mid of march (15th to 19th) was an eagerly anticipated annual event that brings together college students from various institutions in a celebration of talent, creativity, and camaraderie. The fest, meticulously organized by a dedicated team of students and faculty, proved to be a vibrant and exhilarating extravaganza that left a lasting impact on all who participated.

The fest encompassed a wide array of activities and events that catered to diverse interests and showcased the multifaceted abilities of the participants. A total of 21+ cultural events and 14+ sports events were organized by the TVISHA organizing team comprising the students' affairs department and different clubs of the college. The events were aimed to target students having diverse interests. Film making and photography events like Short Film and Captivating Covers were organized to target students having interest in photography and direction. Gagan (Astrophotography) was organized in collaboration with the NAC (NISER Astronomy Club) to attract the astrophiles with good photography skills. College fests without any singing, dancing and drama events are considered to be incomplete. Hence, we organized events like Terpsichore (Dance), Battle of Bands, Solo/Duet Vocals, Drishti (Nukkad Naatak) and **Rangmanch** (Stage Play) to bring out the hidden talents inside the students on an intercollege level. Being a premium Basic Sciences Institute, we tried to incorporate science in our activities. Events like Antariksh (Astro Quiz), High-Pot Thesis, Lok Sabha (Youth Parliament) for political engagement, Blitz Byte (Coding) for coding enthusiasts, Pop goes the culture (Film Quiz) to test film knowledge, Khat (Letter writing competition) to showcase creative writing skills and Integration +C (Maths+Coding) were organized. Kalpa (Art event) was organized to encourage the young artists to showcase their creativity on paper. India has played the role of Yog-Guru and have always propagated the divine knowledge of yoga across the world. We organized Asanakusala (Yoga Event) to illuminate the youth about the importance of yoga.

Events like **Bungle in the jungle** and **Khojo toh Jaane** (Treasure Hunt) were organized to entertain the participants, encouraging them to brainstorm and decode the scientific clues in order to find the hidden treasure. Last but not the least, **Noor** (Fashion Show) was also organized to give a platform to the fashion enthusiasts around odisha to showcase their fashion skills.

The Starnight event during Tvisha proved to be an unforgettable night filled with mesmerizing performances by renowned artists. The audience was treated to an incredible musical experience as **Gamak band**, known for their captivating music, took the stage and enthralled the crowd with their energetic and soulful performance. The excitement reached new heights when the **DJ Zyphertone** took over, effortlessly blending tracks and creating an electrifying atmosphere that had everyone on their feet. Famous Italian **DJ Olly Esse** further amplified the energy with their pulsating beats, keeping the audience dancing throughout the night. The Starnight was a true highlight of Tvisha, leaving a lasting impression on all those who attended and showcasing the festival's commitment to delivering

exceptional entertainment. There were sports competitions that ignited the spirit of healthy competition and sportsmanship, the fest offered something for everyone.

The fest created an environment conducive to fostering intercollegiate bonding and encouraging healthy competition. Students from different institutions had the opportunity to interact, exchange ideas, and learn from one another. The fest also served as a platform for participants to network with industry professionals and experts who were invited as judges and guests, providing valuable insights and guidance to the aspiring talents.

The success of the fest was evident in the immense participation and the enthusiasm displayed by the students. The fest generated a palpable sense of energy and excitement that resonated throughout the campus, attracting attention from both participants and spectators. The atmosphere was filled with joy, laughter, and a shared passion for the arts and sports.

The fest symbolizes unity, talent, and celebration, encapsulating the essence of a vibrant and inclusive campus community. The memories and experiences created during the fest are cherished by all who attended, serving as a source of inspiration and motivation for future generations of students.

In conclusion, Tvisha stands as a testament to the creativity, talent, and unity of college students. Through its diverse range of activities and events, the fest provides a platform for students to showcase their abilities, fosters intercollegiate bonding, and creates an environment of celebration and camaraderie. Its success and impact make it a worthy inclusion in the annual book, preserving the memories and achievements of this memorable event for years to come.

### Pictures of TVISHA' 23:



<u>Khat</u>



**NOOR- The Fashion Show** 



Group Dance



Ouiz



<u>Nukkad Naatak</u>



**Battle of Bands** 



Youth Parliament

Integration+C



<u>Kalpa- The Art Event</u>







#### Pop goes the culture

#### Solo Dance

### Rangamanch-Stage Play



Kalpa- The Art Event

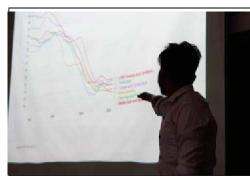
<u>Khojo Toh Jaane</u>



Nukkad Naatak

Youth Parliament





**High-Pot Thesis** 



**Blitz Byte** 



Bungle in the Jungle Integration +C

**High- Pot Thesis** 

### **INTER IISER-NISER SPORTS MEET – 2022**

An amalgamation of 10 of the most prestigious Pure sciences institutes of the country, with the aim to promote sports among the students. Inter- IISER-NISER Sports is an annual affair, organized in the month of December every year.

From NISER total 170 participants, have participated in the sports meet. The program was conducted over a period of six days from 21<sup>st</sup> December to 26<sup>th</sup> December, 2022 at IISER, Bhopal.

#### March Past:







### **Event Details**

The total of thirteen distinct events were featured in IISM-2022. Events were; Athletic, Badminton, Basketball, Carom, Chess, Cricket, Football, Kabaddi, Kho-Kho, Lawn Tennis, Table Tennis, Volleyball, and March Past.









#### Medal List

The total number of medals received by NISER students:

Gold -1, Silver - 7, Bronze -1

Gold Medal - 1: In Athletic (Shotput)

**Silver Medal - 7:** In Athletic - 2, Carom - 1, Basket Ball (Girls) - 1, Kho-Kho (Girls) - 1, Football (Boys) - 1, Kabaddi (Boys) - 1

Bronze Medal - 1: In Athletic - 1

**Fourth place - 7:** In Athletic 4x100m race (Men & Women both) - 2, 100 m (Girls) - 1, Putting the Shot - 1, Badminton (Men) - 1, Table Tennis (women singles) - 1, March Past - 1

Overall NISER got 7<sup>th</sup> position with a score of 4720 points.

### **Athletic**

Shehzade M.K (Girls) - 1 Gold in Putting the Shot. Avani KV (Girls) - Silver in 1500m and Bronze in 3000m. N Sneha (Girls) - Silver in 3000m.

### **Basketball Girls Won Silver Medal**

The women's Basketball team participated in four matches during the tournament. In the group stage, they played against Mohali and Berhampur, winning 24 - 5, and 17 - 2, respectively. In the semi-finals, they played against Pune and won 24 - 22. However, in the final against Bhopal, they lost 32 - 22, resulting in a second place in the tournament.



#### Kho-Kho (Girls) - Silver Medal

The Kho-Kho girls' team played four matches in total. In the first match against Pune, the Kho-Kho team won by dismissing all the defenders within the seven-minute time limit, resulting in a "one inning win" with a score of 6-2. Similarly, the team won the second match against Berhampur with a score of 10-3 in one inning. In the semi-final match against TVM, the Kho-Kho team won with a score of 7-4, while in the final match against Mohali, they lost with a score of 8-11, ultimately becoming the runners-up in the tournament.



### KABADDI (Boys) - Silver Medal

The men's kabaddi team played in the group stage against IISC, Kolkata, and Mohali. They lost against IISC with a score of 45-38 and won against Kolkata by 33-20. However, they won against Mohali with 38-24. In the semi-finals, they played against TVM and won with a score of 44-30. In the finals, they played against Bhopal and lost 36-42.





## Football (Boys) - Silver Medal

The team played five matches in total, starting with a draw against IISER Kolkata with a score of 0-0. The second match against IISER Bhopal also resulted in a draw, with both teams scoring 2 goals each. NISER won the third match against CEBS Mumbai with a score of 9-0. In the fourth match, NISER emerged victorious against IISER Mohali with a score of 2-1 in the semi-final. Despite their valiant efforts, NISER lost from IISER Bhopal in the final match with a score of 0-1, becoming the runners-up in the tournament.



## <u>Carom – Silver Medal</u>

The Carom team topped their 5-member pool in the group stage, having secured a total of 9 points. In the semi-final match against IISER Tirupati, the team emerged victorious with a score of 2-1. However, in the final match against IISER Berhampur, the team lost by a score of 2-1, resulting in a second-place finish in the tournament.



# Various Club Events (April 2022 - March 2023)

## - Tree Trail: Seasonwatch August tree festival

Oorna and Seasonwatch organized **Tree Trail: a tree walk during the August Tree Festival**. The August Tree Festival is a nationwide monsoon fest which has multiple interesting challenges for everyone to compete for. This was a 2 day long event, held on **20th and 21st August, 2022.** The tree walk was led by **Dr. Geetha Ramaswami** (Project Head, Seasonwatch). During this walk, students learned about plants, seasons and how the two are linked.

No. of participants = 90 (aprox.)



## - Birdwatching Session

This will be a great opportunity for everyone to explore and know the winged neighbors of our campus. With around 100 species of birds identified on campus, It is a really enjoyable experience to go around the campus looking for birds. Apps like ebird and merlin were used to observe and identify the birds respectively. This event was held for 2 days, evening of **2nd September, 2022** and early morning of **3rd September, 2022**.

No. of participants= 75



## -World Wildlife Week 2022: October 21st-24th

Oorna organized the World Wildlife Week 2022 celebration in the NISER campus for the very first time! Every year, World Wildlife Week is celebrated globally to celebrate the many beautiful and varied forms of wild fauna and flora and to raise awareness of the multitude of benefits that their conservation provides to people. At the same time, the celebration reminds us of the urgent need to step up the fight against wildlife crime and human-induced reduction of species, which have wide-ranging economic, environmental and social impact.



#### Timeline of the weeklong events

**21st October**: Tree Crickets use Tools to Amplify their Mating Calls -HOW and WHY?: **Talk by Dr. Rittik Deb,** SBS, NISER **&** Let's Go Herping!: **Herping Session for Beginners** 

**22nd October**: Commencement of "Nature on Canvas": Art event organized in collaboration with Arts Club

23rd October: Pitch Perfect: Talk by Ashlesh Pattnaik, Dr. Aniruddha Datta Roy's Lab, SBS, NISER & Katydid or Katy-did'nt: Bioacoustic session

24th October: Hike with Nature: Morning Hike to Barunei Hills





- World Wildlife Week: Talk By Dr. Rittik Deb

Talk by Dr. Deb was on the evolutionary aspect of sounds produced by insects and how the baffling helped in sexual selection of males.

## - Student talk by Ashlesh Pattnaik

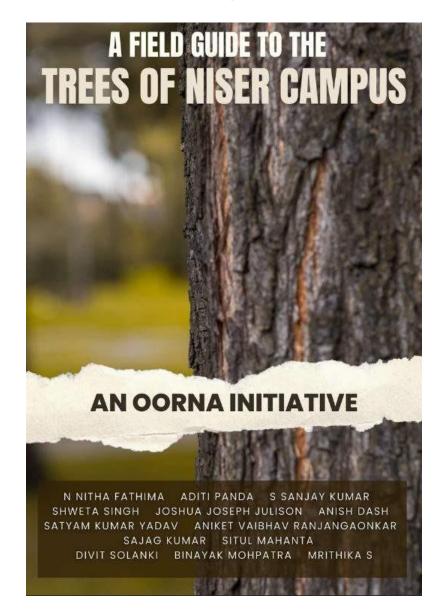
This talk aimed at giving an introduction to the basics of bioacoustics, with an emphasis on Orthopterans. There were some interactive activities via which the participants were able to familiarize themselves with the amazing vocal repertoire of the NISER Campus.

## - World Wild Week: Nature on Canvas Art Event

Participants were free to express anything that instills the beauty of nature or anything that might portray global concerns like environmental pollution, climate change, ecosystem disturbance, etc, through the artwork of your choice using any medium you are comfortable with. The event **Theme:** Art inspired by Nature.

## - Field Guides for NISER Flora and Fauna

The soft copies of bird, spider and tree field guides were released on 25th october 2022. Around 50 people worked together for 10 months to give rise to these beautiful field guides.



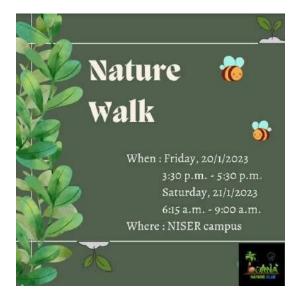
## -Prerana 2022 - World Children's day

On 19th November, Oorna in collaboration with Zaariya, TFR (The Free Radicals), NAC (NISER Astronomy Club), RoboTech Club, MathematiX (Maths Club) and Vikiran (Physics club) is organizing 6໘ລ໒II 9099 (Prerana 2022) which aims at introducing the children of NISER's general workforce to the vibrant world of science that we inculcate here at NISER. All the aforementioned Clubs showcased their respective fields through interactive activities and sessions.



## -Nature Walk

Oorna's events in 2023 started off with the nature walks which were held **20th January and 21st January, 2023**. We were glad to see the enthusiastic crowd. We spotted interesting creatures like the Black crowned Night heron and the Eurasian Hoopoe.





## -Campus Bird Count

Oorna organized a Campus Bird Count from February 11-12, 2023. Held as part of the Great Backyard Bird Count, it is a bird watching event held every year in February. During the event, we spotted many species like common myna, alexandrine parakeet, yellow wattled lapwing, and red whiskered bulbul.

No of participants - 20



## -Treasure Hunt

As a part of Tvisha '23, NISER's cultural cum sports fest, Oorna conducted a Treasure Hunt which involved the participants being tested on their knowledge of the marine creatures, trees and birds in three different rounds. This was held on 19 March, 2023. **No. of participants -** 160







## -Campus Phenology Network

Oorna is a part of the Campus Phenology Network, a nationwide network of campuses who monitor trees. Oorna has been monitoring 60 trees in campus since April 2022.

No. of participants - 12

## -NISER Open Day 2023

On April 7,Oorna conducted a series of events which included a documentary screening, a tree walk and an insect exhibit. **No. of participants** - 40





## Drama and Music Club

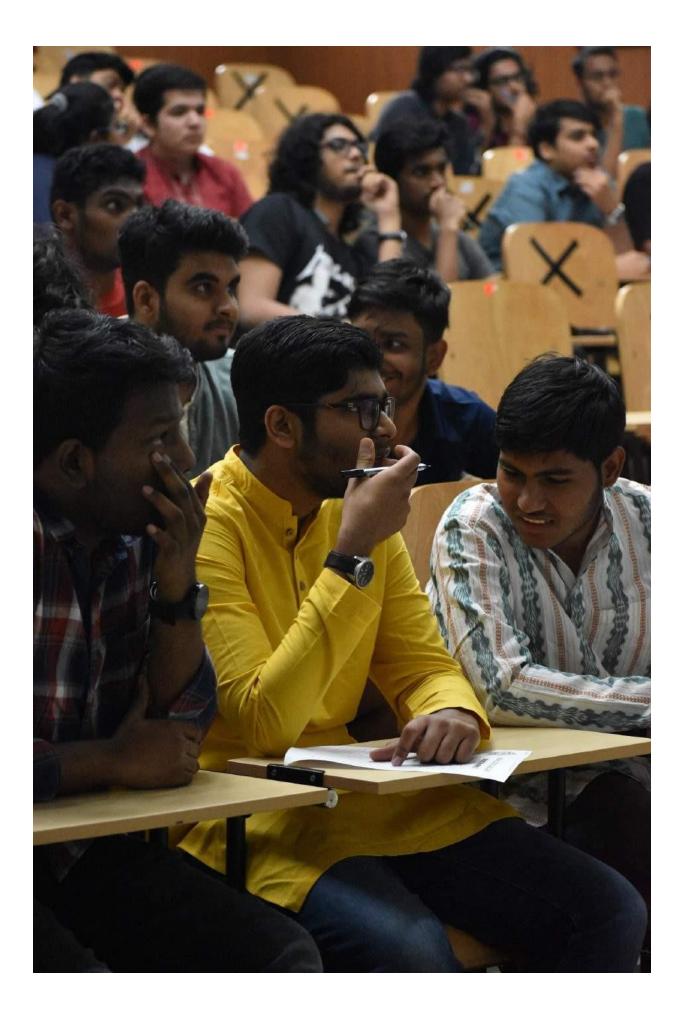
- 1. Independence day celebration: DMC organized the annual National anthem choir and cultural program on the eve of India's 76th Independence day in the presence of respected dignitaries, and members of NISER.
- 2. A weekly musical session with students: DMC initiated a "weekend jamming session" series on 20th September 2022, where every Saturday, students gathered in the music room for a stipulated time (usually for an hour) as per convenience and one of the members talked about any topic related to music followed by a discussions and jamming session. These sessions were mainly initiated to encourage the keen enthusiasts of Music in NISER, who are eager to learn the basic technical parts of the music and develop their taste in this art.
- 3. Koffee with Kishore: DMC organized the annual much-awaited koffee with Kishore on 3rd September 2022, to commemorate the contributions of the legendary-star, all-rounder artist, Kishore Kumar Ji.
- 4. Inter-IISER Cultural Meet: Members of DMC represented NISER in the annual IICM that was hosted by IISER Pune, from 27th to 29th of December. NISER showed its brilliance in the various music and drama related events. Our drama performed an award-winning piece named "FALAK" which won critical acclaim for its powerful storytelling and compelling performance. The students also showed much appreciation for their performance in the music events namely, Battle of bands (A competition among bands from all IISERs, IISc, NISER and CEBS), Mehfil (A classical battle among the institutions showing their prowess in all forms of Indian classical music), Solo/Duet singing (Teams with maximum of 2 members each, performed their musical collabs in varied genres).
- 5. DMC also organized music and drama events in NISER's first inter-college fest "TVISHA". The club organized Rangamanch (the stage play competition), Dristi (The nukkad-natak event), Battle of bands and Solo/ Duet singing competitions where students from nearby institutes namely, IIT BBSR, Silicon Institute of Technology, IIIT, CV Raman Global University, ITER participated along with our students.
- Meanwhile, NISER's home team (both in music and drama) participated in fests conducted by other colleges, notably Alma fiesta by IIT Bhubaneswar, KAIRAAN by NLU Odisha.

## <u>Quizone</u>

In August 2022, Quizone, the quiz club of NISER, in collaboration with the quiz club of IIT Bhubaneswar, hosted a General quiz in NISER, which saw enthusiastic participation from over a hundred students from both institutions in teams of two students. After an enthralling written round of prelims, a total of eight teams were selected to play in the finals. The Finals were very competitive, with multiple rounds of stimulating quizzing and included some beautifully crafted questions with embedded clues. In the month of October, Quizone also conducted an insta quiz on the official Instagram page of the club, which was a time-limited quiz conducted every day for a fifteen-day period in which the top three fastest correct answers were announced each day. It featured questions from a plethora of topics, from entertainment to history and saw zealous engagement among students and quizzing enthusiasts throughout the event cycle.

During the month of March, as a part of Tvisha, the club conducted two quizzes, Cognizzia, the general quiz and Pop goes the culture, the MELA quiz. For Cognizzia, Mr Somnath Chanda was invited to host the quiz. Both the events saw a large number of participants both intra and inter college.





## The Free Radicals (TFR) Club

The Free Radicals (TFR), the chemistry club of NISER was formally inaugurated by the Director, Prof. Sudhakar Panda at the School of Chemical Sciences (SCS) Meet, 19th April, 2022. After its inception, the club has held a series of alumni talks, student talks, and chemistry-themed activities to invigorate the passion for the subject beyond the classroom. Along with that, outreach activities were held to popularize science among school students and the general public.

### Student Talks:

1. Kinetic Investigations of the Catalytic Hydration of Nitriles to Amides by Mr. Shivam Mahapatra, 5th Year Integrated M.Sc., SCS. (29th April, 2022)

### Alumni Talks:

- Local Excitations in Crystalline Point Defects with Multireference Density Matrix Embedding Theory by Mr. Abhishek Mitra (Batch of 2014), University of Chicago, USA (10th June, 2022)
- 2. Competing reaction dynamics with second-order saddles by Ms. Richa Rashmi (Batch of 2016), University of California, San Diego, USA (29th August, 2022)
- 3. Tackling Multireference Quantum Chemistry by Incorporating Selected Configuration Interaction in Moment Energy Expansions by Ms. Swati Snigdha Priyadarsini (Batch of 2016), Michigan State University, USA (4th January, 2023)
- 4. Hybrid QM: QM methods for adsorption of ethanol in H-MFI by Mr. Dipansu Kumar (Batch of 2016), Radboud University, Netherlands (6th January, 2023)
- Structure, Assembly, and Properties of Cephalopod Protein-Based Materials by Dr. Preeta Pratakshya (Batch of 2012), University of California, Berkeley (6 February, 2023)

### **Outreach Activities:**

1. Prerana 2022 (19th November, 2022)

Prerana 2022 was an expository outreach program for the children of NISER's general workforce. TFR participated in the event with an exhibitional chemistry session. Several fun chemistry experiments like elephant toothpaste, baking soda rocket, liquid nitrogen freezing, fluorescence demonstrations, and flame tests, were performed in front of the children. After each experiment, the science was explained to the children in a lucid manner. The exhilarating event was enjoyed and well appreciated by the children of different age-groups in the audience.

2. Science Camp 2023 (6th - 7th April, 2023)

TFR was involved in teaching high-school students about real-life applications of chemistry. Forensic chemistry was chosen to be the matter of exposition and students were given a case study of a murder case. The theory behind the chemical tests they would perform to solve the case was explained. The students were grouped to attempt the problem, after performing the analytical tests, they explained the cause and culprit of murder.

3. Open Day 2023 (8th April, 2023)

TFR was involved in coordinating the exhibitional chemistry session for the School of Chemical Sciences. Many eye-catching experiments were performed for high school students. The science behind the experiments was explained following which the students expressed their satisfaction in learning new concepts in chemistry.

Departmental Events:

1. SCS Meet 2022 (19th April, 2022)

The club was formally inaugurated at this event. Prof. K.V.R. Chary (Director, IISER Berhampur) and Prof. Swapan K. Ghosh (Distinguished Professor, HBNI) was the Chief Guest and Guest of Honour, respectively. Cultural events were also a part of the proceedings, which were arranged and coordinated by TFR.

2. Aromatte 2022 (22nd October, 2022)

Aromatte 2022 was a Mini-Symposium cum Fresher's Program for M.Sc. Batch '21, Int. Ph.D. '22, and Ph.D. '22 of the School of Chemical Sciences. The morning was devoted to research talks showcasing the work being pursued by the various groups at SCS. The evening was filled with cultural activities, games, and ice-breaking sessions, organized by TFR, for the newly-admitted members of the department.

Other:

1. Khojo to Jaane!!! (18th March, 2023)

*Khojo to Jaane!!!* was a chemistry-themed treasure hunt organized by TFR during NISER's intercollege fest Tvisha. The event involved locating various interconnected clues littered around the campus by application of the knowledge of chemistry. Only by solving the previous clue, one can proceed to the next and ultimately to the final prize, which made the event a race-against-time of sorts. The event received participation from student groups of science and engineering colleges across Odisha and was received well for its ingenuity and engaging format.

## **NISER Astronomy Club**

- The NISER Astronomy Club (NAC) is devoted to fostering enthusiasm towards astronomy. NAC conducted telescope training sessions for the new joinees of the club in September-October 2022. Students were oriented about the 6-inch equatorial mount telescope and directed to set it up by themselves.
- Mr. Chandan Kumar Sahu and Ms. Dibya Bharati Pradhan were elected as the club representatives of the NISER Astronomy Club for the session 2022-23. They functioned as the contact point of NAC for the club activities and events. Dr. Tuhin Ghosh (SPS), Dr. Luke Chamandy (SPS), Dr. <u>Liton Majumdar</u>(SEPS), and Dr. Jayesh Goyal (SEPS) took the responsibility of being the faculties-in-charge of NAC. They provided support and guidance for the functioning of the club.
- 3. An observation session for the partial solar eclipse on October 25, 2022, and lunar eclipse on November 8 was organized for all members of NISER by NAC, where students, faculties and their family members witnessed the events with binoculars and telescopes while breaking the myths associated with eclipses.
- 4. NAC trained junior members to handle the 8-inch equatorial mount telescope and take photographs of Jupiter and its moons using a CMOS camera. This was a three-week observation run conducted in November 2022, led by Vasanth Kashyap (4th year Int. MSc.) to study the revolution period of Jupiter and its moons, calculate the mass of Jupiter and their orbital synchronization using Kepler's laws of planetary motion.
- On the occasion of Children's Day, NAC conducted an interactive session with school children followed by a demonstration of telescopes, led by Srusti Sampanna (2nd year Int. MSc.).
- 6. In association with the NISER Outreach Committee, NAC hosted a session for visiting teachers and professors from various institutes in November 2022.
- NAC launched the 4th edition of its in-house magazine 'Kshitij' in December 2022, which is the first and longest student-led magazine of NISER. In this edition, content calls were also made to students of other national science institutes, and entries from IISER Pune and IISER Thiruvananthapuram were published.
- 8. NAC organized two events in the inter-college fest TVISHA organized in March 2023, namely ANTARIKSH Astronomy Quiz and GAGAN Astrophotography Contest supervised by Abhinav Roy (3rd year Int. MSc.) and Aheesh Hegde (4th year Int. MSc.). Members from different institutes participated in the events. Trophies and cash prizes worth 12K ere awarded to the winners of the events.
- NAC organized interaction sessions with students of various schools and motivated them towards astronomy, astrophysics and space science on the occasion of Open day in April 2022. NAC demonstrated the appearance of a black hole in space and explained the physics behind the phenomena.
- 10. The club frequently conducts observation sessions and talks on astrophysics and cosmology for all residents of NISER, expanding their knowledge and motivating people towards astronomy and astrophysics. NAC has organized a total of 12 weekend talks between August 2022 and April 2023.

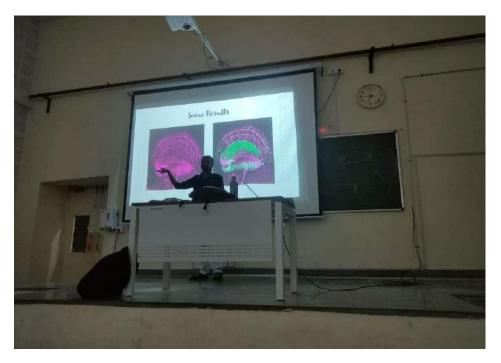
## **Brain Matters Club**

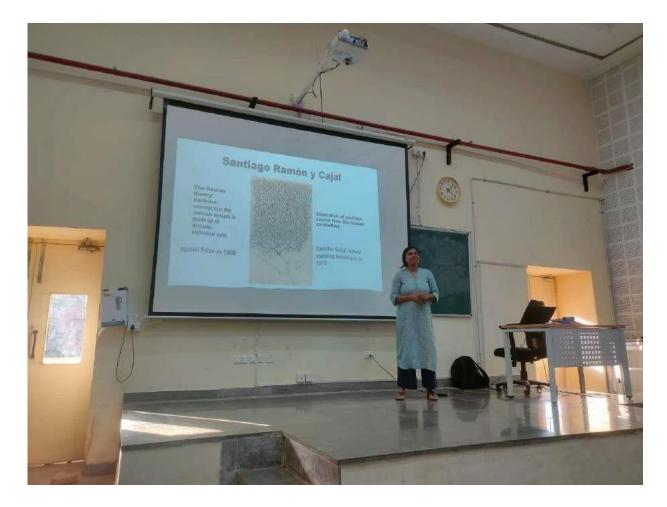
The BRAIN MATTERS club hosted 2 talks during the 2022-2023 academic year. These are:

1. Student talk on "Flies, Stains and Individuality Neurons: My experience as an intern at Paris Brain Institute" by Shubham Kumar (B18, Int. MSc, SBS) on September 16, 2022. Around 100-120 students attended.

2. Faculty talk on "Excitatory/Inhibitory (E/I) Imbalance in Neurological Disorders" by Dr. Swagata Ghatak (Assistant Professor, SBS) on February 3, 2022. Around 100-120 students attended.









## FILM CLUB

This report intends to share the details regarding events conducted by Film Club from 1 st April 2022 to 31 st March 2023. The film club has been screening movies of diverse genres consistently every Friday. As a part of Halloween, we screened a horror movie marathon. The club has been organising Oscar movie marathons for the past few years to introduce students to different Oscar-winning movies. On 02 September 2022, a student talk was conducted by Ankur Abhijeet on the topic of "Colours in Film as a Storytelling Device ". Furthermore, on 31 October 2022, another student talk was conducted by N Devanand on "Maternity and Monstrosity: The Mother and Maternal in Horror Cinema". The film club members made two short films and participated actively in the short film competition for this year's IICM.

As a part of Tvisha 2023, the club organised a short film competition. Along with this, in collaboration with Quizone, a pop culture quiz was also organised. The Film Club is making a documentary on "Life in a Day- NISER ", depicting the average day-to-day life of all NISERites. For this, students, faculties and all other niserites were requested to send a clip from their daily life from 02/02/23 to 06/02/23. The event was led by Palla Shubhang Sharma, one of our active club members. We also interviewed Dr Ritwick Das of SPS regarding his experiences during his tenure as he was leaving NISER. Overall it was a productive year for the club as we were able to conduct events regularly and consistently, just like every other year.



