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Dr. Gunanidhi Sahoo, Dept. of Zoology, UU

Convener: Dr. Badal Kumar Das, HOD, Dept. of Zoology, UN (A) College of Sc. & Tech.

Email: <u>unczoology@gmail.com</u>

Mobile – 7978528728, 9438913337(WP)

Co- Convener: Mrs. Sradhanjali Sarangi,

UN (A) College of Sc. & Tech.

Email: sradhanjali.sarangi@gmail.com

Mobile: 9583565881

Organizing Secretary: Mr. Gyana Ranjan

Swain, UN (A) College of Sc. & Tech. Email: gyanaranians14@amail.com

Mobile: 8339079715

Treasurer: Ms. Pratyasha Chaudhury, U.N. Autonomous College of Sc. & Tech. Email: chaudhurypratyasha@amail.com

Mobile: 8895858682

All Correspondence should be addressed to the Convener

Call for Papers and Registration

Research papers related to the thematic areas are invited for oral/poster presentations in the technical sessions of the seminar. Selected abstracts will be invited to submit a full paper for publication in **Pranikee - Journal of Zoological Society of Orissa, a UGC- CARE listed journal.** Registration and abstract submission should be done online on or before 10th March 2024 through following Google form link:

https://docs.google.com/forms/d/e/1FAlpQ LSfT9fJbR1vmofQFWeQiZzSUpGuwPJWCwfbil c41vdHsS1SatQ/viewform?vc=0&c=0&w=1&f lr=0

Payment details: Registration fees should be paid by online transaction. Bank details are as follows:

Bank Name: State Bank of India, Adaspur

Account Name: Badal Kumar Das

Account Number: 42654690281

IFSC: SBIN0013576

A copy of the online transaction should also be attached with the Google form.

Early Bird Registration(on or before 10.03.2024)

Faculty/Research Personnel: Rs. 1000/-Research Scholars: Rs. 700/-

U.G/P.G. Students: Rs. 500/-

Registration fees After 10.03.2024/Spot

Faculty/Research Personnel: Rs. 1200/-

Research Scholars: Rs. 800/-

U.G/P.G. Students: Rs. 600/-

Accommodation: Delegates are requested to make their own arrangement for stay during the Seminar. However, limited accommodation arrangements can be made for delegates on request.





National Seminar on

Recent Innovations in Animal Science Research

(22nd & 23rd March, 2024)

Venue: Auditorium, UN (Auto.) College Adaspur



Organized by:

Department of Zoology Udayanath Autonomous College of Sc. & Tech., Adaspur, Cuttack

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Zoological Society of Orissa Bhubaneswar

Animal Science Research for Sustainable Development

Innovation is an important stepping stone in scientific research that caters to the need of the society maintaining sustainable development of ecosystem. The research on animal science has gone through the morphological to anatomical study of living animals to the development of model organisms. With the advancement of technology to study animals starting from the use of microscope to cloning, use of gene editing tool like CRISPR-Cas9 to omics approaches, tremendous data on animal science have been generated. Besides, use of artificial intelligence, DNA sequencing technologies, single-cell sequencing, generation of induced pluripotent stem cells (iPSCs) from genetic disorder afflicted individuals, development of regenerative and restorative medicine (bioprinting) have manifold applications in animal welfare. The next level of scientific research involving animals shall probably include the use of innovative smart sensor technology that provides an alternative to invasive measurement methods and animal testing including development of sensor platform for realtime monitoring of animal health and welfare, the EnegyTag sensor system for continuous monitoring of the energy dynamics, development of Complex cell systems or organoids etc. Apart from the use of respiratory organoids of pet animals to study respiratory infections and test therapies, organoid models for muscles, neurons and intestines are being explored for developing innovative and non-invasive research methods to improve the well-being, health, and resilience of animals.

On the backdrop of this, the present Seminar aims to understand the technological advancements in animal science research, and their present and future possible applications to understand different human diseases and their role in transforming the society into a healthier one.

Sub-Themes of the National Seminar

- Advanced techniques in animal science research
- Climate change models and their effects on animals
- Developments in nutraceuticals and therapeutics
- Role of artificial intelligence in animal science research









Future Outcomes of the seminar

The seminar wishes to deliberate on the applications of various technologies to augment both the basic and applied research at the grassroots level. Developing start-ups in biological sciences through the interface of technology, model organisms/organs and it has tremendous future scope. The young biologists need to be informed and trained for future societal applications of such interface.

About Zoological Society of Orissa (ZSO)

Zoological Society of Orissa, established in 1958 (registered under Societies Registration Act of Odisha, 1860: Regd. No. 2174/1180 of 1963-64), is the society for the Zoologists of the state. The Society has its office at the Department of Zoology, Utkal University, Bhubaneswar. The Society publishes a journal named "Pranikee", a UGC-CARE listed journal. It has also decided to organize National Seminars/Conferences/Workshops etc. in collaboration with interested colleges/ Universities/ Institutions, at least annually, along with its Annual General Body Meeting. The Zoologists of the state are encouraged to visit the website of the Society www.pranikee.org and become Life Members by paying the required fee of Rs 1000.00 only (Contact: Secretary, ZSO, Mobile no: 9438328039)

Resource persons:

| SI. No. | Name & Designation | Affiliated Institute |
|------------|--------------------------------|------------------------------------|
| 1 | Prof. Mukund Dev Behera | IIT, Kharagpur |
| 2 | Prof. Aniruddha Giri | Assam University, Silcher |
| 3 | Dr. Anil Kumar Mohapatra | ZSI, Berhampur, Odisha |
| 4 | Dr. Soma Chattopadhyay | Scientist, ILS, Bhubanneswar |
| 5 | Prof. Kakoli Bhadra | Kalyani University, Kalyani, WB |
| 6 | Prof. G. B. Jena | NIPER, Chandigarh |
| 7 | Prof. Goutam Aditya | Calcutta University, Kolkata |
| 8 | Prof. Bhagyalaxmi Mahapatra | BHU, Varanasi |





About Udayanath Autonomous College of Science & Technology Website: https://udayanathcollege.ac.in/

Nestled in the lap of Eastern Odisha, the Udayanath Autonomous College of Science & Technology (Estd. 1987), At- Prachi Jnanapitha, PO - Adaspur, Dist - Cuttack, Odisha is seated on a stretch of 30 acres of land on the holy river Prachi and close to Kenduli, the birth place of the renowned classical poet JAYADEV. Under the dynamic leadership of late Sj. Trilochan Kanungo, Former Member of Parliament (LS), educationist and social thinker of our times, and the generous and noble financial contribution made by the late Udayanath Sahoo of the locality, the college has become a trend-setter in the higher education sector of the state. The college offers honours in 26 subjects and Masters in 20 subjects with more than 5000 students. It has separate academic blocks, NCC, NSS, YRC, Ranger & Rover units, swimming pool, Gymkhana & Stadium, six hostels, canteen, uninterrupted power supply, temples, lush delicate gardens and orchards. The college, over the years, has established a distinctive culture of its own with smart, diligent and creative students enjoying the splendour of a healthy, homely and disciplined study atmosphere. Having the cherished hope of metamorphosing itself into a Rural University, the college has been set on a proven sustainable growth trajectory, heavily drawing students from every nook and cranny of the state.

Organizing Committee:

Mr.Golak Ch. Mohanty, Ex - HOD, Dept. of Zoology, UNAC
Dr Siba Prasad Mohanty, Emeritus Professor, Dept. of Zoology,
UNAC

Dr. Manoj Kumar Mohanty, Emeritus Professor, Dept. of Zoology,

Mr. Debendra Kumar Rout. Controller of Examinations, UNAC

Mr. Susanta Kumar Mohanty, Vice-Principal, UNAC

Dr. Krupasindhu Padhan, Co-ordinator, İQAC, UNAC

Ms. Anjali Yadav, Dept. of Zoology, UNAC

Ms. Prapti Kanungo, Dept. of Zoology, UNAC

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Mr. Surendranath Swain, Dept. of Zoology, UNAC