







# INTERNATIONAL CONFERENCE

RECENT ADVANCES IN ZOOLOGY - INNOVATIONS
CHALLENGES AND OPPORTUNITIES















December 20-22, 2023

Organised by

## **DEPARTMENT OF ZOOLOGY**

Osmania University, Hyderabad-500 007, Telangana State, India

Link for Registration: https://forms.ele/eh2cCNHi2KeDC7/S6

## CORDIAL INVITATION

## Dear Colleagues,

Zoology, a captivating scientific discipline, holds profound significance in illuminating the intricacies of animal life and its connection to the natural world. Our understanding advances as we explore diverse branches. Cutting-edge imaging and analysis enhance our grasp of animal adaptations, offering insights into biodiversity's origins and survival strategies in changing environments. Genetic breakthroughs through high-throughput sequencing unveil the mysteries of animal diversity. Advanced imaging and computational modeling reveal molecular intricacies, paralleled by genomic insights into species evolution and genetic adaptations, drug design, genetic disease comprehension, and evolutionary insights. Balancing wildlife conservation with economic viability, economic zoology aligns with sustainability goals. Environmental biology utilizes ecology modeling and remote sensing to address climate change effects, emphasizing the need to preserve ecological equilibrium.

Genetic exploration extends to CRISPR-Cas9 editing, transforming our grasp of heredity. Entomology enriches understanding of insects' ecological roles and public health implications. Neuroimaging unveils neural circuits, deepening cognitive understanding. Biomedical innovation leverages animal models for regenerative therapies, yet ethical considerations and translational challenges persist. Bioinformatics deciphers biological data via computational tools, propelling drug discovery and predictive modeling. Advanced microscopy spotlights cellular intricacies, uncovering developmental and disease insights. The challenge lies in unraveling intricate cellular interactions and regulatory networks.

We are thrilled to extend our warmest invitation to you for the upcoming International Conference on Recent Advances in Zoology: Innovations, Challenges, and Opportunities. This exceptional event is proposed to organize as a part of the centenary celebrations of the Department of Zoology, Osmania University, Hyderabad. The conference becomes the nexus for collaborative problem-solving, where experts converge to address these challenges and harness opportunities. As the conference binds minds to bridge gaps and push zoological boundaries, the canvas of knowledge expands, enriching our comprehension of life's complexities.

With warm regards,

#### **OSMANIA UNIVERSITY**

Founded in 1917, Osmania University (OU) stands as the seventh-oldest educational institution in India and the third-oldest in South India. Commemorating its centenary in 2017-18, OU boasts a rich and significant history during both the pre-and post-independence eras. Mir Osman Ali Khan, the 7th Nizam of Hyderabad and the university's founder envisioned OU to align with the



national pursuit of higher education and its associated aspirations.

OU serves as a multi-faculty and multidisciplinary university, offering a wide range of courses encompassing Humanities, Arts, Sciences, Social sciences, Law, Engineering, Technology, Commerce and Business Management, Information Technology, and Oriental languages. The university achieved the esteemed "A+" rating by NAAC in 2017, a testament to its consistent and noteworthy academic accomplishments.

Recognizing OU's sustained academic excellence, the University Grants Commission of India bestowed upon it the esteemed status of "University with Potential for Excellence" (UPE). Notably, OU takes pride in its extensive alumni network, which exceeds a remarkable count of one crore individuals. These alumni have made significant contributions nationally and internationally across various domains.

OU has played a pivotal role in the academic, research, social, and economic development of its region and the entire country. As the institution prepares for the challenges of the 21st century, it remains committed to meeting the evolving aspirations in the higher education system. Recently, OU received support under RUSA 2.0 from the Ministry of Human Resource Development, Government of India, further emphasizing its dedication to growth and progress.

## **DEPARTMENT OF ZOOLOGY**

The Department of Zoology at Osmania
University was established in 1924,
initially offering zoology courses at the
intermediate level within the Biology
Department. Over the past nine decades,
the department has undergone
remarkable growth and expansion,
adapting its teaching and research



endeavors to encompass the latest advancements and cater to the needs of the local community.

In recent decades, the department has witnessed the emergence of robust research

divisions alongside its established teaching programs. This growth has been facilitated through funding from various prestigious organizations such as UGC, DBT, DST, MoEF & CC, CSIR, ICMR, ICAR, DoAE, SERB, and DRDO. These funding sources have empowered the department to diversify its research focus and contribute significantly to several areas of study.

Presently, the department excels in research domains such as biochemistry, physiology of parasites, cell and molecular biology, immunology, neurobiology, fisheries, animal models, biodiversity, classical and molecular taxonomy, DNA barcoding in agriculture, entomology, medical entomology, and vector biology. Through its active research contributions, the department is making valuable strides in understanding and exploring various fields related to zoology and its interdisciplinary applications.

## **MILESTONES ACHIEVED**

- 1924: Initiation of Zoology teaching at the intermediate level.
- 1929: Introduction of Zoology as a graduation-level course.
- 1934: Establishment of the Natural History Museum.
- 1935: Introduction of M.Sc. course in Zoology, specializing in fisheries.
- 1949 : Commencement of research in Helminthology.
- 1952: Initiation of research in Protozoology.
- 1957: Commencement of research in Entomology.
- 1960: Initiation of research in Phyto Nematology.
- 1967: Commencement of research in Animal Physiology.
- 1976: Initiation of research in cell and Molecular Biology.
- 1976: Commencement of research in Wildlife Biology.
- 1980: Initiation of research in Environmental Biology.
- 1983 : Commencement of research in Neurobiology.
- 1999: Launch of DRS (Departmental Research Support) Phase 1, focusing on Neurobiology and Animal physiology.
- 2004: DRS SAP (Special Assistance Program) Phase 2, with support from UGC-ASIST and DST-FIST.
- 2007: Commencement of research in Molecular Taxonomy.
- 2010 : Implementation of DRS SAP Phase III.
- 2015 : Introduction of DSA SAP (Departmental Special Assistance Program) Phase 1, with a focus on Neurobiology and Systems biology.
- 2017: Inclusion of Systems biology and Research methodology papers in the MSc curriculum.

#### **HYDERABAD CITY**

Nestled in southern India, Hyderabad harmoniously intertwines history, culture, and climate into a captivating tapestry. As the "City of Pearls," Hyderabad boasts historic marvels like the Charminar, a 16th-century masterpiece fusing Persian and Indian styles. The Golkonda Fort showcases architectural brilliance, reflecting the city's military grandeur. The Qutb Shahi Tombs and Salar Jung Museum spotlight the city's rich heritage and global influence. Palaces like the resplendent Falaknuma Palace and the elegant Taramati Baradari mirror the regal history etched in Hyderabad's architectural wonders. Religious diversity also blooms in the form of the serene Hebron House of Worship, the grand Shahi Masjid, the tranquil Ananda Buddha Vihara, and the towering Birla Mandir, where faith and climatic comfort merge. This city is a cultural melting pot, epitomized by its renowned Hyderabadi Biryani and the coexistence of festivals like Eid and Diwali.

Parks and gardens like the Nehru Zoological Park, the serene Lumbini Park, and the wild expanse of the Mrugavani National Park create lush sanctuaries within the urban oasis, all shaped by Hyderabad's semi-arid climate. Hyderabadi cuisine, a culinary blend of traditional South Indian, Mughalai, and Persian flavors, tantalizes taste buds against a backdrop of warm temperatures and occasional monsoon showers. A city known for its multi-lingual culture, Hyderabad thrives as a melting pot of languages and traditions.

The tropical wet and dry climate adds an intriguing dimension. With distinct seasons, Hyderabad's cooler months from November to February are ideal for exploration. The city's many lakes, including the Hussain Sagar, offer tranquil oases and recreational activities.

The South-Central Railway, headquartered in the twin city of Secunderabad, forms an integral part of the city's connectivity, enabling travel within and beyond Hyderabad. For international connections, the Rajiv Gandhi International Airport, located in Shamshabad, 22 km away from the city center, serves as a gateway to the world.



















## **BROAD THRUST AREAS**

- Animal Diversity
- Animal Physiology Physiological system modeling
- Structural biology
- Economic Zoology
- Environmental Biology, Global pollution problems
- Evolutionary Biology
- Genetics
- Entomology
- Neuroscience
- Biomedical and Health Sciences
- Bioinformatics and Computational Biology
- Biotechnology, Genetic manipulation and drug discovery
- Cell and Molecular Biology
- Immunology
- Health and Disease Management
- Biochemistry and Biophysics
- Innovations of multidisciplinary Research
- Biofuels and Fermentation technology

#### **CALL FOR PAPERS**

The participants are requested to send a copy of the abstract for oral or poster presentation not exceeding 250 words in MS Word file through the registration link & or email to razcomm28@gmail.com on or before 30/11/2023. The poster should be prepared in the size of 120 cm height X 90 cm height.

## **BEST ORAL / POSTER PRESENTATION AWARDS**

There will be one best oral & one poster presentation award and awarded for the best presentation during the Symposium.

	IMPORTANT DATES	
Abstract Submission	30/11/2023	
Registration (Last Date)	30/11/2023	
Abstract Acceptance	05/12/2023	

#### **REGISTRATION FEES**

	India & South Asian Countries	Other Countries
Scientists / Academicians	Rs. 1500/-	US \$ 50
Research Scholars with Fellowshi	p Rs. 700/-	US \$ 25
Research Scholars without fellow	ship Rs. 500/-	US \$ 1 <i>5</i>
Accomplices	Rs. 500/-	US \$ 1 <i>5</i>

#### **TRAVEL & ACCOMMODATION**

Participants are required to make their own traveling arrangements. Limited accommodation is available in the University Guest House for the participants on a payment basis. Prior intimation is required for assistance in booking accommodation.

#### **HOW TO REGISTER**

To register please click the following link. https://forms.gle/gh2cQNHiZKgDCZiS6

Add the abstract file and the receipt of the registration fee paid in the relevant place in the Google form. Only after receiving the registration fee, your abstracts will be processed for further consideration. For any assistance, regarding registration or any other matter, contact us at razcomm28@gmail.com.

## Registration Fee should be paid to the following Bank Account

1. Name of A/c Holder	Head, Department of Zoology
2. A/c No. of Pass Book	52198260046
3. Bank Name	State Bank of India, Hyderabad
4. Bank Branch	Osmania University, Hyderabad
5. IFS Code	SBIN 0020071
6 MICR Code	500004044

Note: Registration Fees paid through DDs or Cheques must be sent to the following Address. Prof. Dr. M. Madhavi, Head, Department of Zoology, Osmania University, Hyderabad, Telangana, India – 500007.

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## **Address For Correspondence**

## Prof. M. Madhavi

Organizing Secretary & Head, Department of Zoology, Osmania University, Hyderabad, Telangana, India. razcomm28@gmail.com