



**DEPARTMENT OF ZOOLOGY,
GOA UNIVERSITY**

**is organizing
through Virtual Mode,**

**NATIONAL SEMINARS
ON**

**"LIFE & LIFE PROCESSES:
Interdisciplinary Approach for
Sustainable Development"**



From: 19th - 21st JULY, 2021

Timings: 09.30 am to 06.00 pm for all three days.

About Goa University:



Goa University was established under the Goa University Act of 1984 (Act No. 7 of 1984) and commenced operations on 1 June 1985. It is located on Taleigao Plateau overlooking Zuari estuary on a picturesque campus spread over 427.49 acres with state-of-the-art infrastructure such as faculty blocks, administrative building, library, sports facilities, student hostels, bank, post-office, staff quarters, etc. A campus-wide Internet connectivity with strong bandwidth is available for all 24 hours a day.

The University took over the enhanced role of Centre of Post-Graduate Instruction and Research (CPIR) which was set after the annexation of Goa by India in December 1961, by the University of Bombay (now Mumbai), in June 1962. Since 1985 Goa University offers graduate and post-graduate studies and research programmes. It is currently (2014-19) accredited to the National Assessment and Accreditation Council (NAAC) in India with A Grade. The National Institutional Ranking Facility (NIRF) (an organ of Ministry of Human Resources and Development, Govt. of India) in its second cycle of ranking Indian Higher Educational Institutions in the year 2017, ranked Goa University at 64th rank among 3000+ institutions that participated from India. The University also ranked between 201-250 in QS World University Rankings for BRICS countries.

About Department of Zoology

The Department of Zoology was established in Goa University in the year 1990. Soon after the establishment, Department was elevated with regular faculty from the year 1992 and was made functional to a full-fledged Postgraduate department. Since its inception, the department has also produced many M.Phil. and Ph. D. scholars. To nurture conceptual interest in the students for the subject of Zoology and also to inculcate good laboratory practices in students and to train them about scientific handling of important instruments, department initially provides the platform for M. Sc. (Zoology) and Ph. D. in Zoology. Later in association with Goa Medical College, department started Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG&MLT), now this Programme is run as only PGDMLT. Under UGC's Innovative programme, department also initiated M. Phil. in Marine Zoology in the academic year 2002-2003. Over a period of time to facilitate student mobility across institutions within and across countries and also to enable potential employers to assess the performance of students, department has continuously updated the syllabi of various courses from time to time. A step towards skill development was undertaken through introduction of three clusters such as Aquaculture, Life Processes and Field Biology in the M. Sc. Zoology Programme along with internships with further vision towards expansion of the department in due course. Department also received grants regularly from National and International Funding agencies and was recognised for funding under UGC-SAP under thrust area "Biodiversity and Comparative Animal Physiology-Biochemistry" & DST-FIST in past. Department always welcomed and provided platform for Postdoctoral Research and also provides training to the students/Teachers Fellows nominated by various Academies of Sciences as Summer training on regular basis.

Organising committee

Patron

Prof. Varun Sahni

Vice-Chancellor, Goa University

Advisors

Prof. Radhika S. NayaK

Officiating Registrar, Goa University

Prof. Prabhat Kumar Sharma

Dean, Faculty of Life Sciences & Environment, Goa University.

Convenor

Prof. Ramaballav Roy

Head, Department of Zoology,
Goa University

Organising Secretary

Dr. Shanti N. Dessai

Assistant Professor,
Department of Zoology, Goa University

Members

Dr. Nitin S. Sawant

Assistant Professor, Department of Zoology, Goa University

Dr. Minal Desai Shirodkar

Assistant Professor, Department of Zoology, Goa University

Dr. Avelyno H. D'Costa

Assistant Professor, Department of Zoology, Goa University

Dr. Shamashad Bi Shaikh

Assistant Professor, Department of Zoology, Goa University

Ms. Gandhita V. Kundaikar

Assistant Professor, Department of Zoology, Goa University

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About theme:

“Life & Life processes: Interdisciplinary Approach for Sustainable Development”
Research approaches towards Life and Life processes need to be amalgamated with various scientific disciplines for the adequate achievement of sustainable development. As researchers we have perceived the necessity for a crucial paradigm shift towards interdisciplinary approach to achieve completeness of our research outputs. Thus, an Interdisciplinary approach is characterized as a perspective that integrates two or more disciplines into coherent connections to enable researchers to make relevant connections and generate meaningful associations.

Based on this national seminar theme we welcome various researchers in Life sciences from all parts of India to share their research findings through this platform and contribute to interdisciplinary approach for sustainable development in the field of Life and Life Processes. Following are the topics for sending abstracts of research work to be presented and should match with our seminar theme,

1. Biodiversity
2. Ecology
3. Wild Life biology
4. Nutrition
5. Invertebrate Physiology
6. Vertebrate Physiology
7. Neurophysiology
8. Immunology
9. Medical Entomology
10. Aquaculture
11. Toxicology
12. Endocrinology
13. Cell Biology
14. Molecular Biology

National Seminars Programme:

Sessions of this national seminar will begin with key note address by the Eminent Speaker from the area suited for our seminar theme. This will be followed by various sessions covering different areas of research matching with our theme. Each session will be initiated with invited talks by Eminent scientists/ Researchers followed by participant session for Oral Presentation and Poster presentation.

Interested researchers may kindly send in their abstract of their research work if they want to present their work during Participant session.

Abstract Format:

File format: word document

Word limit: 300 words

Font: Times New Roman

Font size: 16B Title,
14B for authors names,
14 for affiliation &
12 for body of abstract.

Page size: A4 and **Margins:** Normal,
Line Spacing: 1.5

Abstract should reflect on introduction, methodology, important observations and inferences drawn based on your findings.

Last day for submission of abstract and registration is 7th July, 2021.

Oral Presentation guidelines:

Time allotted: 10 min for presentation followed by discussion.

Format: PPT **Slide Size:** 16:9

Poster Presentation guidelines:

Format: PDF, **Page size:** A4, **Margins:** Narrow
Poster Submission date: Till 10th July, 2021, to be emailed to organizing secretary.

Awards to be won:

There will be cash prize awards for Best Poster Presentation for participants.

NOTE: Only Ph. D. Scholars and M. Sc. Students will be allowed to contest for Poster presentation category.

Registration Fees & Payment Mode

Each participant needs to pay a Rs 300/- to register themselves for this national seminar. This fee will cover an e-certificate, a hard copy of abstract book that will be posted to them and seminar link for all the sessions for three days.

The seminar registration fee may be paid at **SBI COLLECT.**

Click on given below website and follow the instructions:

<https://www.onlinesbi.com/sbicollect/icollecthome.htm>

1. Accept terms and conditions to proceed
2. State of Corporate / Institution: **GOA**
3. Type of Corporate/ Institution: **EDUCATIONAL INSTITUTION**
4. Educational institution: **GOA UNIVERSITY.**
5. Payment category: **National Seminar on Life and Life Processes.**
6. Fill in the details & complete payment.

Save e-Receipt for your reference. Submit this e-Receipt while registering for this event through google form. Provision of file upload is given for this purpose.

Fees will not be refunded once the payment is done.

How to Register?

You may register yourself through online mode by filling google form through this link: <https://forms.gle/pH4cUSSmZr8NtNUW6>

Please keep following files and information ready before filling up registration form: Participant's photo: JPEG format, not exceeding 100Kb size.

- Abstract: word file as per specifications.
- Registration fee e-receipt copy
- If contesting for poster presentation then letter signed by Research guide in the case of Ph. D. scholar or Head of the department/Institute as a proof for you to be Ph. D. Scholar or M. Sc. Student.

Registration form

National Seminars on

“Life and Life Processes: Interdisciplinary Approach for Sustainable Development”
From 19th to 21st July, 2021

1. Name of the participant: _____
2. Photo of the participant: (File to be uploaded)
3. Designation of the Participant: _____
4. Name of the Institution: _____
5. Postal Address: _____
6. WhatsApp Number and Email ID: _____
7. Registration Fee e-receipt copy: (File Upload)
8. Specify whether? : Attending / Attending and wish to present my research.
9. If presenting? : Oral/ Poster Presentation
10. If presenting then upload Abstract: (File Upload)
11. If presenting a poster then upload Proof that you are either a Ph. D Scholar/M.Sc. Student: (File Upload)

Last date for submission of abstract and registration is 7th July, 2021.

We look forward for your participation for this upcoming virtual event.



Report

National Seminars on

“Life & Life Processes: Interdisciplinary Approach for Sustainable Development”

Organized by

Department of Zoology, Goa University Goa.

From 19th -21st July, 2021

The three days National Seminars on “Life & Life Processes: Integrated Approach for Sustainable Development” commenced on 19th July 2021. The Chief guest for the inaugural function was Prof. Varun Sahni, Vice Chancellor of Goa University. Honourable Chief guest also released the Abstract book for this function. Prof. P.V. Desai, Former Dean of Life Science and Head of the Department of Zoology was the Guest of honour.

There were four **sessions**:

1. Life and Life Processes: Economic Empowerment
2. Life Forms: Habit and Habitat
3. Integrated Approaches in Life Processes: Wellbeing state.
4. A sustainable step towards Lipid Biochemistry

There were 4 **plenary talks** by eminent researchers from esteemed Institutes detailed are as follows:

Plenary Talk

1. Plenary Talk for the session 2 was by Dr. Kailash Chandra, Former Director, ZSI, West Bengal, on “LIFE FORMS: HABIT & HABITATS” He gave an elaborate insight on biodiversity wealth of India of different ecosystems of India. His talk ranged from emphasis on faunal database of hotspots, to DNA barcoding of several species.
2. Plenary Talk for the session 3 was By Prof. Arun Bandyopadhyay, Director of Indian Institute of Chemical Biology, Kolkata. He spoke on ‘Plasma Proteomics Reveal dysregulated cholesterol transport and Compromised Inflammation-resolution in coronary artery disease.
3. Another Plenary Talk in session 3 was by Prof. P. Prakash Babu, Dean, School of Medical Sciences, University of Hyderabad, Telangana. He enlightened us with his talk on ‘Translational research for the treatment of Brain tumors’
4. Plenary Talk for the session 4 was by Prof. Reddanna Pallu, Professor & BSR Faculty Fellow, Department of Animal Sciences, School of Life Sciences, University of Hyderabad, Telangana. His talk was on ‘Eicosanoids, the Bioactive Lipids, in the Regulation of Cellular Homeostasis

There were total of nine Invited speakers from well-known institutes of India

1. Prof. Sumit Homechaudhuri, HOD, Department of Zoology, University of Calcutta, Kolkata. Sir briefed about the emergent properties in hierarchies and productive value for Ecological shifts, Ecosystem Stability, Riverine Ecosystem

and Ecological fish printing which is a relatively modern accounting tool that can be used to help distinguish between sustainable and unsustainable aquaculture practices.

2. Dr. Sreekanth G. B., Scientist, Scientist, ICAR-CCARI, Old Goa, Goa. 'Fisheries sector of Goa: present status, challenges and opportunities'
3. Dr. R. Suresh Kumar delivered an invited talk on 'Population status and conservation of a top predator of aquatic ecosystems -the Spot-billed Pelican *Pelecanus philippensis* of Peninsular India'. In gave a glimpse of waterbirds in general, elucidated on heronries in India and emphasized on heronry in Karnataka.
4. Dr. Dattesh V. Desai, spoke on the topic entitled 'Implications of habit and habitat characteristics in structuring benthic life'. He stressed on ecology on benthic fauna in Zuari estuary of Goa.
5. Dr. Ashwani Kumar, Director, ICMR-Vector control Research centre medical Complex Indira Nagar, Puducherry. 'One Health Approach for human well-being and sustainable Development: From a concept to reality'
6. Dr. Manjula Das, Senior Researcher, MSCTR, Bangalore. Delivered a talk on 2SolAce, A Novel Recombinant Protein to Fight Covid-19.
7. Prof. M. C. Subhash Peter, Professor, University of Kerala Kariavattom, Kerala. Spoke on 'Understanding life processes: Lessons from integrative biology'.
8. Dr. Angshuman Sarkar, Associate Professor, Biology Department, BITS-Pilani, K K Birla, Goa Campus. Talked about 'Old wine in New bottle: exploring the Potency of Anti-Malarial Drug for treating Breast cancers!
9. Prof. Shobhna Kapoor, Professor, Department of Chemistry, IIT Bombay, Mumbai. "Mycobacterium Tuberculosis Glycolipids Disorganize Host Cell Membranes and Rewire Membrane-Associated Functions During Infection"

There was also a most interesting and enlightening **concluding address** by honourable Vice Chancellor Prof. Neelima Gupta, Tilka Manjhi Bhagalpur University, Bihar.

84 Delegates from 18 states registered for this National Conference. There was wide coverage of participant from Jammu Kashmir to Tamilnadu and from Gujrat to Assam. There were 19 oral presentations by Faculty members from Colleges and Universities from all over India.

Around 40 of our M. Sc. Zoology Students attended the Conference.

For Poster presentation session on 20th and 21st July, 2021, 38 poster presentations were done by the students pursuing Ph.D. and two of the best poster presentations were announced as prize winners during valedictory functions.

Valedictory function was scheduled from 3.00pm to 5.00pm on 21st of July, 2021,

Since participants were more than 100, Directorate of digital Learning and Initiative team did live streaming of this event for three days on Zoosem Youtube channel with live chat.

Prof P. K. Sharma, Dean, Faculty of Life science and Environment, Goa University for graced valedictory function of this National event as Chief guest.

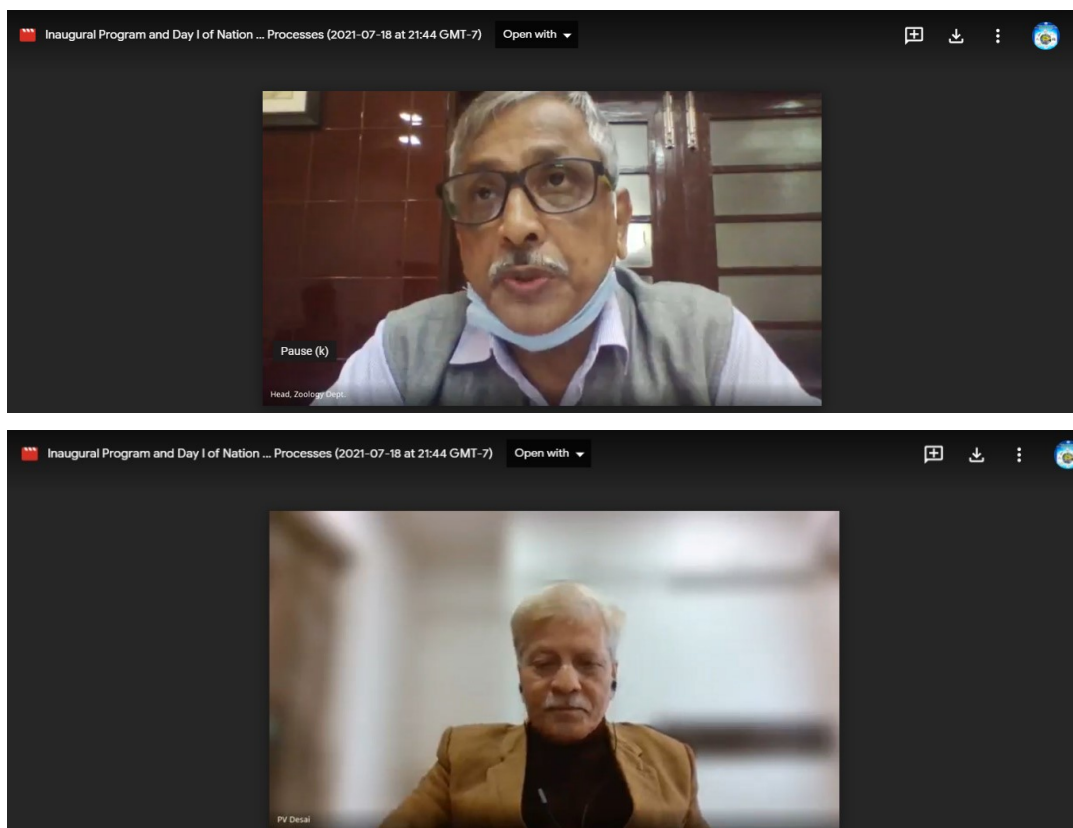
Dr A. B. Shanbhag, Former HOD and Professor of department of Zoology, Goa University graced this valedictory function as guest of honour.

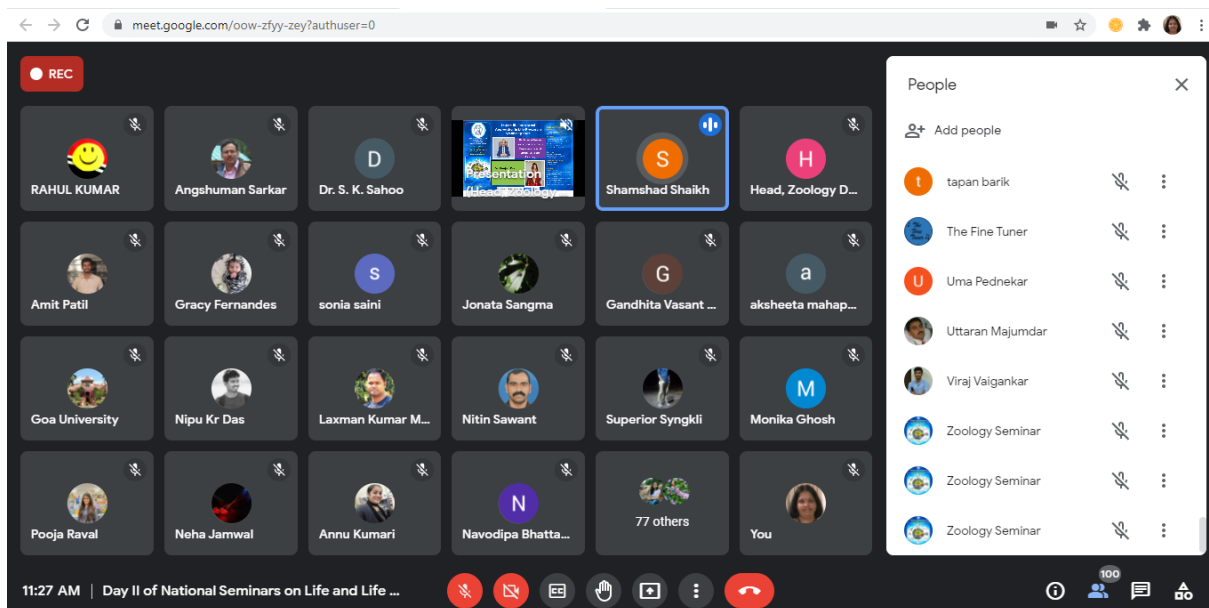
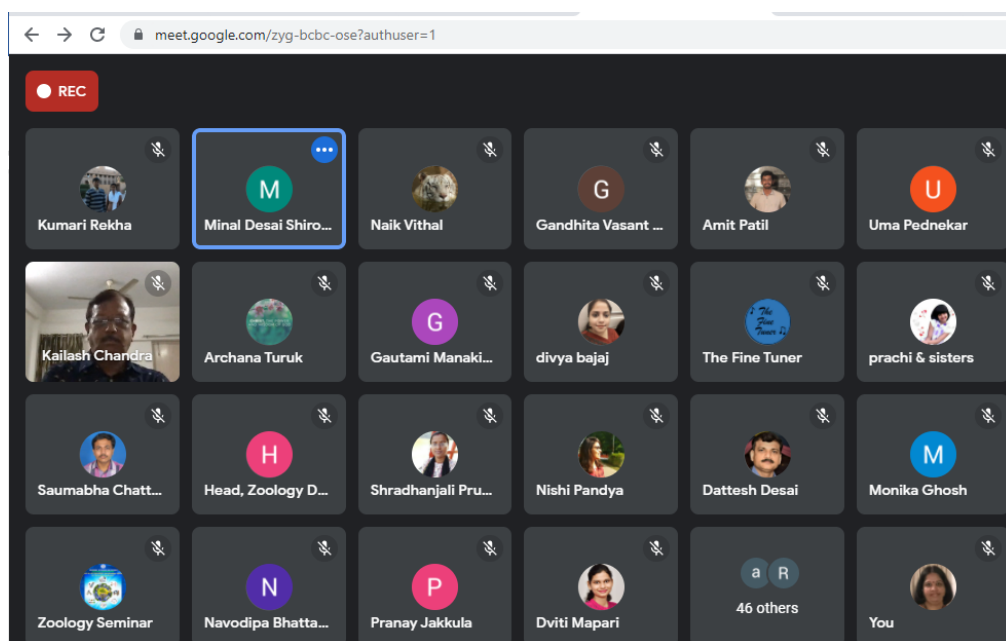
Three-day report of various sessions involving participations by invited guest and other delegates of this Nations Seminars was read out to all on virtual platform.

Valedictory function also witnessed felicitation of former HODs and Professors of Department of Zoology, Goa University.

Besides, the exposure of scientific knowledge that was exchanged for three days through this virtual platform of this event, we look forward for fruitful interactions leading to research and academic collaborations in near future for expansion of knowledge to enable use-inspired research for years to come.

Give below are some photographs of the three-day National Seminars,





meet.google.com/oow-zfyy-zey?authuser=0

REC Manjula Das is presenting

HepG 2 Cell Line As Diabetic Model

Cell Line Adaptation

Increased ROS and Lipogenesis

Sequencing

Upregulation of IL17 and TNF alpha

ACE2 Upregulation in 50mM

Manjula Das

Dr. S. K. Sahoo

93 others

You

People

Add people

- sujatha badavath
- Superior Syngkii
- The Fine Tuner
- Uma Pednekar
- Uttaran Majumdar
- Viraj Vaigankar
- Zoology Seminar
- Zoology Seminar

11:52 AM | Day II of National Seminars on Life and Life ...

meet.google.com/zyg-bcbc-ose?authuser=1

REC

Kumari Rekha

Minal Desai Shiro...

Naik Vithal

Gandhita Vasant ...

Amit Patil

Uma Pednekar

Kailash Chandra

Archana Turuk

Gautami Manaki...

divya bajaj

The Fine Tuner

prachi & sisters

Saumabha Chatt...

Head, Zoology D...

Shradhanjali Pru...

Nishi Pandya

Dattesh Desai

Monika Ghosh

Zoology Seminar

Navodipa Bhatta...

Pranay Jakkula

Dviti Mapari

46 others

You

Day III of National Seminars on Life a ... Processes (2021-07-21 at 01:25 GMT-7)

Open with

How infectious lipids alter host membrane properties: Design of Lab Infection Model

Mtb

Host cell

OM: outer membrane

PM: Plasma membrane

What changes are caused in the host membrane after interaction?

- Changes in Membrane Organization?
- Modulation in Membrane Dynamics?
- Membrane-associated signaling?

TLC Analysis

Extracted lipids from:

- i: untreated cells
- ii: pure lipid standard
- iii: SL-1 lipid-treated THP-1 cells

THP-1 Lipids

Exogenous lipid is incorporated in host cell membranes

Also confirmed by Mass analysis

Purified Mycobacterial SL-1 (H37Rv strain)*

Eriiayakawa et al. (2007) Biophysical Journal, Volume 93, 4018-4030

* From MDS Resources, USA

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