

Present Status and Future Trends in Entomological & Wildlife Studies

(Proceedings of International Conference)



Editors Prof. Arti Prasad Dr. Vijay Kumar Koli



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Message



Prof. Amarika Singh Vice-Chancellor



Mohanlal Sukhadia University

(Formerly Known as Udaipur University) Established by Ministry of Higher Education, Government of Rajasthan, India in 1962 University Campus, Udaipur-313001 (Rajasthan)

It gives me immense pleasure to know that the Department of Zoology. Mohanlal Sukhadia University, Udaipur is organizing the International Virtual Conference on "Present status and future trends in Entomological and Wildlife studies: An emerging platform for zoologists" from 13-14th July, 2021.

The theme of the conference "Present status and future trends in Entomological and Wildlife studies" is very contemporary and relevant in the present scenario.

This conference will elaborate past practices, recent advances and future aspects in the state of art research work in the field of entomological and wildlife biology. Amidst this pandemic time the conference will provide a platform to scientists, faculties, researchers and students for interacting with each other and share their knowledge.

Participation of WHO and NVBDCP further emphasizes for importance of theme of the symposium and it is indeed prestigious for the department of zoology as well as for the university. I am sure that this conference shall be a platform for zoologist in sharing and learning that will go a long way in service of mankind. It is heartening to observe that burning issues are being covered by panel of experts of eminence in the field from various prestigious Institutions of the country.

I wish the organizers and participants best of luck and success in their endeavors.

Prof. Amarika Singh Vice Chancellor

Message



Dr R.S. Sharma PhD. FISCD Director, Absolute Human Care Foundation Delhi

I am indeed to learn that Department of Zoology, Univ. college of Science MLSU Udaipur is organizing virtual conference on "Present status and future trends in entomological and wildlife studies: An emerging platform for Zoologists" 13-14 July 2021. The international conference is covering different themes including Public Health Entomology, a very important branch of zoology dealing with vector borne diseases which accounting risk of 80% of the world's population of one or more vector borne diseases. There is 17% of the global burden of communicable diseases is due to vector borne diseases. Over 700,000 deaths are caused by vector borne diseases annually.

The technical sessions also focused on forensic entomology, insect taxonomy, insect biodiversity, agriculture, forest and urban entomology, Covid 19 effect on biodiversity etc. During this pandemic, conference will provide a platform for scientist and students for interacting with each other and share the knowledge. I believe that outcome of conference will be envisioned to translate the knowledge into application effectively and efficiently particularly for the management of vectors and vector borne diseases in the country and ultimately benefit the society.

As a colleague and well wisher of public health entomology, I congratulate Prof Arti Prasad, Head Zoology department and her all conference organizing team for arranging such an excellent conference with a cluster of eminent Zoologists, entomologists, researchers and students from all over country and abroad.

I extend my warm best wishes for the endeavors.

Dr. Rajander S. Sharma

Member : Malaria Vector Control Expert Group, WHO, Geneva Member : Steering committee of Stockholm Convention on development and deployment of DDT, United Nations Environment Program (UNEP), Geneva Member : Global Alliance for DDT alternatives , UNEP, Geneva Member : ICMR SAC Member ,VCRC -Pondicherry, RMRC,Dibrugarh, Port Blair, ,Bhubaneswar,Gorakhpur, DMRC Jodhpur,NIRTH,Jabalpur,NII, Mumbai Member-ICMR-NIMR Research Advisory Committee Member : ICMR Advisory Group on Vector Borne Diseases Science Forum Member : Vector Control Working Group Roll Back Malaria, Geneva



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Dr. Arti Prasad

Professor & Head

Message

I take great pride in welcoming all the attendees in the International Virtual Conference on "Present status and future trends in Entomological and Wildlife studies: An emerging platform for zoologists" from 13-14th July, 2021.

it is my pleasure to welcome all of the great scientists, academicians, young researchers, delegates and students from all over the world to attend the International Conference on International Virtual Conference on "Present status and future trends in Entomological and Wildlife studies: An emerging platform for zoologists" from 13-14th July, 2021. On behalf of my department of Zoology, University college of Science, Mohanlal Sukhadia University, Udaipur Rajasthan, I welcome you all, and wish you a successful conference.

This conference shares an insight into the recent research and cutting edge technologies, which gains immense interest with the colossal and exuberant presence of great scientists, Dr ,R.S Yadav from WHO Geneva, Dr Thomas Sharp, Co-Chair IUCN SOS-USA, Dr C.P Singh, ISRO, Dr R S Sharma from National centre for Disease Control(NCDC) New, Delhi, and many National Institutes ,young and brilliant researchers, and talented student communities. The main aim of the conference is to bring together, a multi-disciplinary group of scientists from all over the world to present and exchange break-through ideas relating to the physics. It promotes top level research and to globalize the quality research in general, thus making discussions, presentations more internationally competitive and focusing attention on the recent outstanding achievements in the field of Zoology, and future trends and needs.

Since this conference covers very global aspects on zoological sciences from very fundamental issue to practical applications of the principle of Zoology, anyone interested in future progress of Zoological sciences should not miss this event.

The two days will be dedicated to cover a wide spectrum of themes related to "Entomological and Wild life research and Developments . The Conference, tackles important topics on entomology and wild life fields. I am sure that each one of you will identify subjects of his/her interest and will benefit from many fruitful and enriching discussions.

I am particularly happy to be present in this unique event and to exchange views and share experiences with otherhigh level professors, colleagues and friends, representing many well-known Universities and Research Institutes together with members of relevant international organizations. would like to use this opportunity to welcome you all and wish you a successful meeting, inspiring and motivating discussion in support of research, development and innovation of next generation of automation and robotics technologies.

Your valuable contributions are very important for the scientific growth of our young researchers and will be published in the conference proceedings.

I feel highly thankful to our Honorable Vice Chancelleor Prof Amarika Singh ji for his blessings on our every effort .It gives us great enthusiasm to work more and more .I am also thankful to Dean, Prof G.S. Rathore his blessings and co operation in organizing such event.

I feel myself lucky to be blessed by my most loving teacher Prof Reena Mathur mam. She means a lot for me.

My sincere thanks to my Organising Secretary of this conference Dr Vijay kumar Koli who has worked day and night to make this conference a grand success. My department colleagues, research Scholars and students deserve a sincere thanks for their help to make this conference successful .Special thanks to Mr Rajesh Sharma for designing a beautiful conference brochure and Chowdhry for all smart printing work

Publishing proceedings of any international conference is a very tough task Dr Vijay Koli and his entire team deserve a big thanks and blessings for compiling editing and doing all hard work for the proceedings publication. I hope researchers will enjoy reading some of the excellent researches on Entomology and wild life fields.

Finally I congratulate you all for your commitments and active participation and wish all the success for this conference.

Prof. Arti Prasad

Convenor, PENWI 2021

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I express hearty congratulations to the Department of Zoology, Mohanlal Sukhadia University, for organising the international virtual conference titled "**Present Status and Future Trends in Entomological and Wildlife Studies: An Emerging Platform for Zoologists**".

Such multidisciplinary conferences are the need of the hour in countries like India that have seen relatively sparse research in the broad fields of entomology and wildlife studies.

I hope the conference will succeed in its mission in providing a platform for researchers, and in becoming a platform for broad sharing between researchers of varied institutions. I also look forward to the proceedings which will no doubt set high standards both in Rajasthan and in the region.

Warm regards,

K.S. Geri Sunt.

K.S. Gopi Sundar

Editor-in-chief, "Stork, Ibis and Spoonbill Conservation" Co-chair, IUCN-SSC Stork, Ibis and Spoonbill Specialist Group Scientist, Nature Conservation Foundation



DR NISHITH DHARAIYA PhD Associate Professor Department of Life Sciences Hemchandracharya North Gujarat University, PATAN 384 265



Foreword

It is with great pleasure and appreciation that I write this Foreword to the Book of proceedings of International virtual conference on "Present status in future trends in entomological and wildlife studies: An emerging platform for zoologists" organized by Department of Zoology, Mohanlal Sukhadia University, Udaipur on July 13 and 14, 2021. According to my knowledge, this is the first virtual conference of its kind in India where the two most significant aspects of zoology, entomology and wildlife were discussed on the single platform, which is actually the need of an hour and help to initiate the integrated zoology research. I would like to congratulate the convener Prof Arti Prasad, the organizing secretary Dr Vijay Koli and the entire organizing crew of this conference.

The conference particularly encouraged the interaction of research students and developing academics with more established academic community in an informal setting to present and to discuss the contemporary work. The conference has become instrumental to create the forum for communication amongst the researchers, students, academicians and the scientists and have created the community of practice.

In addition to the research studies, four eminent speakers from different national and international institutions have given their talks during the conference, which has enriched the knowledge of 140 participants in a virtual mode. The speakers have discussed the contemporary development in different fields of zoology such as, vector control insecticides, natural history and conservation of sloth bear public health entomology in India and geomatics for wildlife management.

Out of 140 around 50% of the delegates have presented their research work in the form of oral and poster presentation related to the broad them of the conference which is the indicator of the success of the conference and a great motivation for the students and young researchers working in the field of animal science.

I am so delighted to share my views and write the forewords for the book of proceedings for this conference and I also take an opportunity to thank the organizers for considering me for the same. These proceedings will furnish the scientists of the world with an excellent reference book. I trust also that this will be an impetus to stimulate further study and research in the area of entomology and wildlife research in India. I also thank all the renowned speakers, participants and contributors who have actively participated and contributed their knowledge in this conference.

August 04, 2021 Patan





~Nishith Dharaiya

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From the desk of the organizing secretary

The Department of Zoology, Mohanlal Sukhadia University is delighted to welcome eminent scientists, distinguished Researchers, and respected Guests to the International Virtual Conference on "Present status and future trends in Entomological and Wildlife Studies: An emerging platform for Zoologists" (PENWI-21).

The conference is a wonderful platform for brilliant minds to come together, ponder, and debate on various issues concerned with the important vital systems. Humans are obliterating a beautiful, living resource. Time is running out for the biodiversity of life that inhabits our planet and for our quality of life. We are all reliant on the health of our planet, and if it continue to deteriorate, as it has done over the past century, and then human health and well-being will decline as well. Biodiversity is a global issue that brings scientists and activists from all over the world together to assure its continued existence and, with it, our own survival. Now is the moment to act!

The conference is nestled amidst the green Aravalli hills in South Rajasthan, with a necklace of lakes, and I greet the delegates. I hope that each of you will take away new ideas and fond memories from the twoday virtual conference. I'm taking advantage of this opportunity to thank the organising committee and all those who have worked so hard to make this conference a success.

Vijay Kumar Koli

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