INTERNATIONAL CONFERENCE ON

"Biodiversity & Climate Change (ICBCC-2025)



Organised by

Dates: 13-14 February 2025



Venue: Fr.Caussanel Hall, St. Xavier's College, Palayamkottai

Department of Botany & Department of Zoology

(DST-FIST sponsored)

St.Xavier's College (Autonomous)

(Recognized as 'College with Potential for Excellence' by UGC)

(Accredited at A** Grade with a CGPA of 3.66/4 in the IV cycle by NAAC)

(Affiliated to Manonmaniam Sundaranar University)

Palayamkottai - 627 002.

ABOUT THE COLLEGE

St. Xavier's College was established at Palayamkottai in 1923 by Jesuit Fathers of the Jesuit Madurai Province with an aim of preparing generations of students for a happy, healthy and harmonious life. The motto of the college is *Veritate Lumen et Vita* (Light and Life through Truth). It is a grant-in-aid institution recognized by the UGC Act under sections 2(f) and 12(B). The college is affiliated to the Manonmaniam Sundaranar University. In recognition of its service and excellence, the college was granted autonomy in 1987. The UGC awarded the status "College with Potential for Excellence" in 2004 and again in 2010, 2014 and 2019. The NAAC accredited at A++ grade with a CGPA of 3.66 out of 4 in IV cycle in 2019. STAR College scheme has been awarded by DBT, Govt. of India. The college stands 36th in College Category 2024 NIRF ranking. Today more than 4500 students study in 15 post-graduate and 20 under-graduate departments. Doctoral research is carried out in 12 departments. With great joy and pride the college triumphantly marches towards 102nd year.

ABOUT THE ZOOLOGY DEPARTMENT

The Department of Zoology was started in 1927 when the subject was taught to the intermediate students. B. Sc. Degree program was started in 1957 and upgraded to M. Sc. In the year 1979. The department was recognized as a research department in 1985 with Ph. D. program and M. Phil. program is offered since 1986. In the year 2003 and 2018, the department was recognized as DST-FIST sponsored department. In 2014, the department was included under STAR-College Department Scheme offered by the Department of Biotechnology, Ministry of Science and Technology, Govt. of India. The department in 2018 celebrated its Diamond Jubilee commemorating its 60 successful years. At present, the faculty members have individual laboratories and guide research scholars for their doctoral degree and work in areas of basic and applied aspects of applied zoology, aquaculture, agriculture zoology, medical entomology, insect immunology, wildlife biology, phytochemistry and pharmacology.

ABOUT THE BOTANY DEPARTMENT

The Botany Department with a Post Graduate and Research Centre had its beginning in 1927 with an intermediate Botany programme. Botany has been offered as an Ancillary subject since 1957. Later, in 1970, the department had its own beginning offering B.Sc., Botany and in 1983 the M.Sc. programme was started. By the concerted efforts of the faculties from the period of its establishment, especially the extensive scientific works of Rev. Dr. V.S. Manickam S.J., the department has grown to the present status and it was upgraded as a Research Department in 1994. CBB (Centre for Biodiversity and Biotechnology) and Herbarium of Fern collections was established with international recognition by IAPT. Since then several major and minor research projects supported by agencies such as UGC, DBT, DST-SERB, CSIR, TNSCST, ICSSR and UBCHEA have been completed. More than 100 scholars have completed their Ph.D., from the Research Centre of the department. The Department of Science and Technology, Govt. of India has chosen this department as one of the centers for FIST. It has become a full-fledged Research Centre to offer research programme in vast areas of Plant Sciences. Moreover, the department has its own Instrumentation Centre with sophisticated instruments for Molecular Biology, Microbiology, Phytochemistry and Plant Tissue Culture.

ABOUT ICBCC - 2025

This interdisciplinary international conference on biodiversity and climate change will provide an impressive deliberation for a high-quality research methodologies and strategies for conservation of biodiversity and climate change. The availability of cutting-edge technologies are sole strategy that will allows researchers to explore untapped biodiversity on one hand while on the other, the climate change to harness unexplored information, for sustainable exploitation of these resources. The two-day international conference aims to enlighten the researchers, students, and other stakeholders to share knowledge and experiences working on conserving biodiversity, provision of ecosystem services, to discover unexpected biological knowledge for technological invention. We expect that this conference will bring new collaborations and help define areas within life science that most need research attention to ensure better survival of

humankind in the future for sustainable development. Participation in this conference will be the prime opportunity to keep pace with cutting-edge research on such exciting topics and network with other scientific community members. Over the past decade or so, we witness huge loss of our environment; hence it is befitting to have such conference to have constructive remedies to preserve mother nature. Through this scientific forum, we pledge to become agents of change for the benefit of biodiversity and providing an opportunity to hold bonds with regional, national and international participants; delegates from diverse sectors, to create a movement to enlighten a transformative change in the present scenario. International conference of this kind will lead the young generations to engage in creative sessions and develop conservative projects to amplify the innovative thoughts through meaningful action for a sustainable future in which we live in harmony with nature.

ABOUT TIRUNELVELI

Also known as Nellai, is a major city located in the south-west Tamil Nadu. The down town is on the west bank of Thamirabarani river and its twin Palayamkottai is on the east bank, renowned as the Oxford of South India being a hub of many schools and colleges. The city is famous for its historical monument – Nellaiappar temple, iconic sweet Iruttukadai halwa, and the only perennial river of the state – Tamirabarani having its origin from Pothigai hills of the Western Ghats with seven major tributaries draining 4400 sq.km crossing Karaiyar, Papanasam reservoirs and seven dams making nine waterfalls in its course and with its scenic Mundanthurai reserve forests, Manjolai hills, Agasthiyamalai biosphere reserve, Kalakkadu reserve forests and Kutralam hills that harbours rich biodiversity. Tirunelveli is well-connected by road, rail and air with nearest airport Tuticorin (22 km). Port city Thoothukudi (50 km) and India's end Cape Comorin Kanyakumari (70 km) are notable tourist destinations in vicinity.

CALL FOR ABSTRACTS

Abstracts from the following topics relevant to the conference theme are invited from interested participants

- · Impact of climate change
- · Human impact on environment
- · Climate change, agriculture and biodiversity
- · Climate and biodiversity challenges
- · Biodiversity loss and emerging diseases
- · Climate change mitigation
- · Carbon sequestration
- Biodiversity conservation
- Biodiversity and sustainable development goals
- · Indigenous knowledge and biodiversity conservation
- · Crop improvement and genetic engineering
- · Plant-microbe interactions
- · Livestock production and management
- Vector-borne diseases
- Integrated pest management

- · Conservation and restoration ecology
- · Bioenergy, biofuels and bioremediation
- · Nano-biotechnology
- Phyto-chemistry
- · Biomedical and health sciences
- · Cell and molecular biology
- · Immunology and Microbiology
- · Agricultural sciences
- · Plant and animal systematic
- Pharmaceutical biotechnology
- Economic zoology and blue economy
- · Sustainable fisheries and aquaculture
- · Phytotherapy and phytochemistry
- · Wildlife ecology and conservation
- · Marine Biodiversity

Authors are requested to submit their manuscript in Microsoft Word format to E-mail ID: botanysxc1923@gmail.com. Abstract, not exceeding 250 words, followed by 5-6 relevant keywords, should be typed in Times New Roman font (font size 12), double spaced and thoroughly revised before submission. No editing or material changes at the proof stage shall be permitted. The title should be short, specific and informative, not exceeding 25 words. Give affiliation of the authors and complete addresses (institute's address with designation and corresponding address) along with the email address of author(s). All correspondence will be done through email only. Best Abstracts and Presentations will be selected and called for publication in the Journal Sciencia Acta Xaveriana (ISSN 0976 - 1152) or additional web of science indexed journal.

Presentation

Oral : 10 minutes, maximum 20 slides Poster : 1m X 1m or 90 cm x 120 cm (Size)

Best paper and poster presentations will be awarded.

Important dates

Abstract submission deadline : 02.02.2025
Acceptance notification : 04.02.2025
Paper submission deadline : 08.02.2025
Registration deadline : 08.02.2025

OBJECTIVES OF ICBCC-2025

- To provide a platform for experts, policymakers, researchers, and practitioners to share knowledge and perspectives
 on the interconnections between biodiversity conservation and climate change.
- To highlight emerging research on the direct and indirect impacts of climate change on biodiversity at local, regional, and global levels.
- To encourage collaboration between the biodiversity and climate change communities, particularly in aligning
 conservation efforts with climate adaptation and mitigation strategies.
- To promote innovative tools for monitoring, managing, and restoring ecosystems to strengthen resilience against climate impacts.
- · To document the innovative and economical viable options for sustainable development for future reference.

EXPECTED OUTCOME OF ICBCC-2025

- Documentation and dissemination of successful research studies and best practices in ecosystem restoration, species conservation, and climate-smart strategies through proceedings.
- Deeper understanding of the impacts of climate change on ecosystems and species, as well as the role of biodiversity
 in climate mitigation and adaptation.
- · Creation of region-specific strategies for implementing nature-based solutions.
- Generation of policy recommendations for governments and international organizations that align biodiversity conservation with climate action.
- · Opportunities for young researchers to work in nationally and internationally renowned scientists and institutions.

REGISTRATION DETAILS

Registration Fees

Students : Rs.500/- Industry : Rs.800/- International Participants : 50/25 USD

Research scholars : Rs.600/- (Faculty / Students)

Faculty/Scientist : Rs.700/-

*Registration benefits include Conference Kit, Abstract Book, Certificates, Working Lunch and Tea. Accommodation can be arranged by organizing secretaries on prior request and payment basis.

PAYMENT DETAILS

Account name : The Society of St. Francis Xavier

Account Number : 36555195365

Bank name : State Bank of India

IFSC code : SBIN0010482

Register through Google Form Link https://forms.gle/WDUt2eQn5Y7UrMFJA

Scan code to register



RESOURCE PERSONS



Dr. G. Umapathy
Chief Scientist and Co-ordinator for LaCONES
Laboratory for the Conservation of
Endangered Species (LaCONES)
CSIR-Centre for Cellular and
Molecular Biology (CCMB)
Hyderabad



Dr. T. T. Ajith Kumar
Principal Scientist & Head
Peninsular Aquatic Genetic Resources Centre
ICAR-National Bureau of Fish
Genetic Resources, Kochi



Rev. Fr. Roberto Jaramillo, S.J.
Director of the Secretariat for
Social Justice and Ecology (SJES)
Rome (Italy)



Dr. A. John De BrittoPro Vice Chancellor
Joy University,
Tirunelveli, Tamil Nadu



Dr. Baskaran Ponnusamy
Principal Scientist & Head of Research
Univanich Palm Oil Public Company Limited
Thailand



Dr. S. Jayakumar
Assistant Professor of Zoology Department of Zoology A.V.C. College (Autonomous),
Mayiladuthurai, Tamil Nadu



Dr. Premkumar Albert
Visiting Scientist, Spanish National Research
Council (CSIC)
Instituto de Recursos Naturales y
Agrobiología (IRNAS)
Plant Biotechnology Department, Spain



Mr. G. Sundarrajan
Climate activist, Environmentalist,
Member of the Governing council of
Tamil Nadu Green Climate Company,
Nandanam, Chennai, Tamil Nadu



Dr. Mohanan Padmanaban GeneUs Deputy General Manager Research & Development Department Seoul, Republic of Korea



Rev. Fr. Dr. S.M. John Kennedy, S.J.
Co-ordinator, Global Ignatian Advocacy Network
(GIAN), South Asian Ecology Commission,
Madurai, Tamil Nadu

Our Collaborators





ADVISORY BOARD

INTERNATIONAL

Dr.Yongxiang song,

Associate Professor, South sea Institute of Oceanology, China

Dr. Luben Dimov,

Assisant Professor, Center for Forestry, Ecology and Wildlife, USA

· Dr. C. John Burk,

Assisant Professor, Clark Science Centre, USA

• Dr. P. Saravana Kumar,

Postdoctoral Fellow, Westlake University, China

· Dr. Antony Stalin,

Assistant Professor, Institute of Fundamental and Frontier Sciences, University of Electronic Science and Technology of China, Chengd, China

· Dr. S. A. Alharbi,

Assistant Professor, Department of Botany and Microbiology, College of Science, King Saud University, , Saudi Arabia

· Dr. Ali S. Alqahtani,

Assistant Professor, Department of Pharmacognosy, College of Pharmacy, KingSaud University, Riyadh, Saudi Arabia

· Dr. Muthu Thiruvengadam,

Assistant Professor, Department of Crop Science,
College of Sanghuh Life Sciences, Konkuk University, Seoul, South Korea

• Rev. Fr. Dr. S. M. John Kennedy, S.J.

Co-ordinator, Global Ignatian Advocacy Network (GIAN), South Asian Ecology Commission

NATIONAL

- Dr. J. A. Johnson, Scientist E, Department of Habitat Ecology, Wildlife Institute of India, Dehradun
- Dr. S. M. Rajendran, Senior Principal Scientist and Nodal Coordinator Head, Skill Development Group, CECRI, Karaikudi.
- Dr. M. Gabriel Paulraj, Research Scientist, G.S. Gill Research Institute, Chennai
- Dr. Velusamy Sundaresan, Senior Scientist, CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP), Research Center, Bangalore
- Dr. C. Murugan, Scientist 'F', Botanical Survey of India, Government of India, Kolkata
- Dr. A. Benniamin, Scientist F & Head of Office,

Western Regional Centre, Botanical Survey of India, Pune

- Dr. A. Hannah Rachel Vasanthi, Professor, Department of Biotechnology, Pondicherry University
- Dr. M. Radhakrishnan, Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology, Chennai
- Dr. C. Viswanathan, Scientist B, NCSCM, MoEFCC, Gol, Chennai
- Prof. K. Arunkumar, Dean of the School of Biological Sciences, Professor of Plant Science, at Central University of Kerala
- Dr. J. Rajesh Banu, Professor & Head, Department of Biotechnology, Central University of Tamil Nadu, Thiruvarur, Tamil Nadu
- Dr. S. Kalidass, Associate Professor, Department of Animal Science, Manonmaniam Sundaranar University, Tirunelveli
- Dr. P. Ravichandran, Professor & Head, Department of Plant Science, Manonmaniam Sundaranar University, Tirunelveli
- **Dr. P. G. Biju,Professor,** Department of Biochemistry, University of Kerala, Thiruvananthapuram
- Dr. L. Ranjith, Senior Scientist, ICAR-CMFRI, Thoothukudi
- Dr. G. JeyaJothi, Assistant Professor, Plant Biology and Biotechnology, Loyola College, Chennai
- Dr. C. Babu, Senior Instructor, CIFNET, Chennai
- Dr. K. Diraviyaraj, Assistant Professor, SDMRI, Tuticorin
- Dr. R. Mary Josephine, Associate Professor, Botany, Nirmala College for Women, Coimbatore
- Dr. R. Kottaimuthu, Scientist 'C', Botanical Survey of India, Estern Regional Centre, Shillong
- Rev. Fr. Dr. Anthony Samy, S.J. Co-ordinator of Ecology commission, Jesuit Madurai Province

ORGANIZING COMMITTEE

PATRONS

Rev. Fr. Dr. S. Ignacimuthu, S.J.
Rector

Rev. Fr. Dr. G. Pushparaj, S.J.
Secretary

Rev. Fr. Dr. Godwin Rufus, S. J. Principal

CONVENERS

Dr. P. Raja,

Assistant Professor & Head, Dept. of Zoology

Dr. L. Joelri Michael Raj,Assistant Professor & Head (i/c), Dept. of Botany

ORGANIZING SECRETARIES

Dr. S. Mabel Parimala, Assistant Professor, Dept. of Zoology
Dr. N. Vasanth, Assistant Professor, Dept. of Botany

ORGANIZING TEAM

SCHOOL OF LIFE SCIENCES

DEPARTMENT OF ZOOLOGY

Dr. K. Sahayaraj

Dr. A. Jevaseeli

Dr. J. Ronald

Dr. P. Selvarai

Dr. J. Babila Jasmine

Dr. T. Pushpanathan

Dr. T. Elizabeth Thangamani Sunitha

Dr. R. Santha Kumari

Dr. R. Azhagu Raj

Rev. Fr. Y. Alex, S.J.

DEPARTMENT OF BOTANY

Dr. G. Sahaya Anthony Xavier

Dr. M. Johnson

Dr. J. John Peter Paul

Dr. T. Leon Stephan Raj

Dr. M. Joe Virgin Largia

Dr. M. Johnson Gritto

Dr. N. Maria Francis Jeffrey Bose

Dr. Y. Justin Koilpillai

Rev. Fr. Dr. M. Anthony Samy, S.J.

For further details contact:

Dr. S. Mabel Parimala
Assistant Professor,
Department of Zoology, SXC
E-mail: mabel_parimala@yahoo.com
Mobile: 96005-50844

Dr. N. Vasanth
Assistant Professor
Department of Botany, SXC
E-mail: vasanthbiology@gmail.com
Mobile: 99656-08108