



10th NABS-National Conference

on



Recent trends in Life Science: Research, Practices and Application for Sustainable Development

September 7 & 8, 2017



Organized by

Departments of Botany and Zoology

Bharathiar University, Coimbatore- 641 046

Tamil Nadu, India

Website: www.b-u.ac.in

Email: lifescienceconference2017@gmail.com

&

National Academy of Biological Sciences (NABS)

Chennai – 600 096, Tamil Nadu, India

Website: www.nabsindia.org

Email: secretarynabs@gmail.com

About Bharathiar University, Coimbatore

The Bharathiar University was established at Coimbatore by the Government of Tamil Nadu in February, 1982 under the provision of Bharathiar University Act, 1981 (Act 1 of 1982). In May, 1985 the University received the recognition from University Grants Commission (UGC), New Delhi for the purpose of grants. The University is named after the great national poet Subramania Bharathi is enshrined with the motto "Educate to Elevate". In the University, every effort is harnessed to realize his dream of making educational institutions as temple of learning. The University has 112 affiliated Colleges. It is re-accredited with "A" grade by NAAC and ranked 14th among the Indian Universities by HRD-NIRE. The DST, New Delhi has sanctioned over 10 crores under FIST (Fund for Improvement of Science and Technology) grant to Eight Departments of the University to augment research facilities. It had established DRDO-BU Centre for Life Sciences as a joint venture by DRDO, Bharathiar University and Government of Tamil Nadu to engage research in advanced areas of Life Sciences and Multidisciplinary areas which are relevant to defence.

About Department of Botany

The Department of Botany, established in July 1977, is offering M.Sc., M.Phil. and Ph.D. programmes in Botany. It has a long tradition of research in various fields such as Biotechnology, Microbiology, Molecular Biology/Genetic Engineering, Bioprospecting of medicinal plants, Pharmacology, Plant tissue culture and Reproductive Biology, Cytogenetics, Ethnobotany and Plant systematic. The Department of Botany received support of DST-FIST grant in the year 2011 and UGC-SAP grant in the year 2015. So far, the Department produced 127 Ph.D. and 215 M.Phil. scholars. Apart from 32 books/monographs, the faculty members, scholars and students have published a total of 900 research papers in both national and international journals, besides several patents and copyrights. The faculty members have so far completed around 40 research projects funded by various national and international funding agencies. The faculty members, scholars and students have visited various foreign countries such as USA, UK, Japan, China, Germany, New Zealand, Thailand, Sri Lanka, The Philippines, Singapore, Malaysia, France, Brazil and Australia in connection with collaborative projects and attending international conferences and workshops.

About Department of Zoology

The Department of Zoology at Bharathiar University was started in 1973. The Department focus on research activities in core areas like Aquatic Biotechnology and Live feed culture, Human genetics, Entomology, Toxicology, Crustacean Biology, Conservation Biology, Proteomics and Molecular Cell Physiology and Nematology. It is equipped well with laboratory facilities to realize the goals of research activities and also offers extension services, which include Human Genetic and Cytogenetic studies, Genetic Counselling, Vector Biology and Forecasting, Environmental Toxicology and Impact Assessment, Live Feed Culture, Prawn Culture, Conservation Education and Proteomic techniques. The Department is offering M.Sc. course in Zoology and offers research programmes of M.Phil. and Ph.D. degrees. The Department has so far produced 196 Ph.D., 361 M.Phil. and more than 922 research publications in National and International Journals. Faculty members are operating projects funded by various central agencies. Collaborative research schemes are also being operated in the department. The faculty members have visited various foreign countries across the globe for attending international conferences and collaborative research.

About the National Academy of Biological Sciences (NABS)

[Visit: www.nabsindia.org]

National Academy of Biological Sciences (NABS) was founded on 31st December, 2004 by (Late) Prof. Dr. S. Kannaiyan, the then Chairman, National Biodiversity Authority, Ministry of Environment and Forests, Government of India, Chennai, Tamil Nadu with a vision to provide a common platform for the biologists to interact with each other for mutual benefit and to further the knowledge on areas of biological sciences. The Academy was registered as "National Academy of Biological Sciences" under the Tamil Nadu Societies Registration Act 1975 (TN Act 27 of 1975) on 10th March, 2005 at Chennai South, Saidapet, Chennai – 600 015 with Certificate of Registration No. 110/2005.

Membership of Academy

The academy, as on date, has 729 members including 13 Honorary Life Members, five Corporate Life Members, 15 Provisional Life Members and one Corporate Fellow spread over in all States of India and abroad.

The Academy organizes its regular Annual General Body Meeting coupled with Interactive Workshop / Seminar / Conference on specific themes.

Fellowships and Awards

In general, applications are received from members of NABS from 1 to 31 December of the election year for Fellowship and Awards which will be scrutinized by a Technical Review Committee (TRC) constituted by the President. However, Prof. S. Kannaiyan Memorial Award and Dr. APJ Abdul Kalam Memorial NABS-Life Time Achievement Award are selected by nomination as per the rules laid out.

i. Fellowships

Fellowship/Associate Fellowships are being conferred on selected members since 2005 which are normally presented during the Annual General Body Meeting. The application cum nomination is valid for n+2 years.

Awards

i. Prof. S. Kannaiyan Memorial Award

The award was instituted in 2011 in fond memory of Founder President (Late) Prof. S. Kannaiyan. The award is being conferred on Eminent Scientist of the country since 2012 who has substantially contributed in areas of biological sciences. The awardee shall deliver 'Prof. S. Kannaiyan Memorial Oration' during the award ceremony.

ii. Dr. APJ Abdul Kalam Memorial NABS-Life Time Achievement Award

The award was instituted in 2014. Eminent Scientist of the country who are 55 years and above and contributed substantially for the development of biological sciences and ultimately to the society is presented with this award.

iii. NABS-Best Woman Scientist Award

The award was instituted in 2010. Woman member with meritorious research contributions in biological sciences are presented with this award.

iv. NABS-Best Scientist Award

The award was instituted in 2014. The life members of NABS including woman scientists who has completed 30 years of age as on the election year are eligible. The award will be in the name of Eminent Scientists of our country. The award under Basic Sciences is named as 'Dr. G. S. Venkataraman Memorial NABS-Best Scientist Award'; under Agricultural Sciences and Forestry named as 'Dr. B. P. Pal Memorial NABS-Best Scientist Award'; under Veterinary and Fisheries named as 'Dr. V. S. Alwar Memorial NABS-Best Scientist Award'; under Food Sciences named as 'Dr. Smt. Rajammal P. Devadas Memorial NABS-Best Scientist Award'.

v. NABS- Leadership Award

All life members of NABS who have completed 50 years as on 1st December of the election year are eligible to apply for the award. The validity of application is only for one year and no carry over for the next year permitted. However, the candidate may apply for next year along with registration and processing fee.

vi. NABS- Young Scientist Award

The award was instituted in 2013. Young members of NABS who are below 35 years of age are selected for this award based on their meritorious contributions in biological sciences.

vii. NABS-Best Research Paper Award

The award was instituted in 2012. Best Research Papers published by life members / Provisional Life members in the past three years (1st of December of the election year is the base line) in reputed high impact journals are awarded; one each under Basic Sciences named as "Prof. T. S. Sadasivan Memorial- NABS Best Research Paper Award"; under Agricultural Sciences and Forestry named as "Prof. G. Rangawami Memorial – NABS Best Research Paper Award"; under Veterinary and Fisheries named as "Dr. C. M. Singh Memorial – NABS Best Research Paper Award" and under Food Sciences named as "Dr. V. Subrahmanyam Memorial – NABS Best Research Paper Award".

Note:

The awards and Fellowships mentioned above are meant for members of NABS. The selection process for this year is already over. Selected members will be conferred with Fellowship and awards during the Annual General Body meeting of NABS scheduled on 8th September, 2017.

Preamble about the Conference

Life Sciences are pure and applied sciences concerned with the structure and behaviour of living organisms including their organization, life processes and relationships to each other and their environment. Life sciences deal with the scientific study of various life forms which implies enormous applications to human beings. The list of life sciences comprise the branches of science that involve the scientific study of living organisms such as microorganisms, plants, animals, and human beings as well as related issues like bioethics. While biology remains the center piece of the life sciences, technological advances in biochemistry, microbiology, bioinformatics, biotechnology and nanotechnology have led to a burgeoning of specializations and interdisciplinary fields. The life sciences are helpful in improving the quality and standard of life to a greater extent. They have applications in health, agriculture, medicine, and the pharmaceutical and food science industries.

i. Conference Themes

1. Plant, Animal, Fishery Sciences and Aqua Culture
2. Plant Genetic Resources and Protection of Plant Varieties
3. Agriculture and Forestry Sciences
4. Biomedical and Pharmaceutical Sciences
5. Environmental Sciences
6. Microbial and Food Sciences
7. Biotechnology and Nanotechnology

ii. Carl Linnaeus and Prof. M.S. Swaminathan Awards Competitions

[Exclusively for students]

Details of the Awards

Carl Linnaeus Award : For Ph.D. students

Prof. M. S. Swaminathan Award : For M.Sc. students

Preamble:

The awards are instituted by NABS to bring out the ability to choose a hypothesis / problem, planning and execution of research programme and presentation skill of the students engaged in higher studies (M.Sc. & Ph.D.). Based on this, the following guidelines are developed to be followed by the participants in the said competition.

1. National Academy of Biological Sciences will hold the competition for Ph.D. and M. Sc. students of Biology (subjects as recognized by the Academy) in a separate session during the Conference.
2. At least a minimum quorum of three selected presenters shall be available for competition; least the competition shall be cancelled.
3. The award will carry a certificate and cash (Rs.5000/ for Ph.D., Rs.4000/ for M.Sc.)
4. The students should submit the full paper from his / her thesis (which will also be pertaining to the theme of the conference) **on or before 31st July 2017.**

5. The student shall be the senior author of the paper. The original paper must follow the typical research paper format [Title, author(s), affiliation, introduction, material & methods, results, discussion, conclusion, acknowledgement, reference] and shall not exceed 5000 words. Neatly typed manuscript in 1.5 space using 11 points of Times New Roman in A4 size is accepted.
6. Each student shall submit only one paper for the award.
7. The paper must pass through Turnitin Similarity Cut-off Score (Similarity shall not exceed 20%).
8. The paper shall be from his/her thesis within one year from the date of submission of thesis and should not have been presented elsewhere. However, the papers published from the thesis work as a mandatory publication for the award of Ph.D. degree could also be sent for the award. A certificate to this effect shall be given by the student which shall be endorsed by his/her guide and HOD.
9. The short listed papers for the award presentation shall be informed to the student concerned for presentation during the conference.
10. The abstracts of the award winning paper including the shortlisted papers for presentation will be published in the NABS News Letter.
11. Non-refundable processing fee of Rs. 1000/- for Ph.D. or Rs.500/- for M.Sc. student shall be paid along with the full paper submitted for the award.
11. Fee shall be transferred on line to the account of National Academy of Biological Sciences for which proper evidence of online transfer shall be attached along with the full paper sent to the Secretary, NABS by email (secretarynabs@gmail.com).
12. Presentation will be judged by a panel of judges and their verdict will be the final and binding on all aspects.
13. All contestants listed for the competition will be paid the train fare to and fro in Non-Ac II sleeper on production of a valid ticket from the nearest Railway Station of his institution to the venue of the Conference (in this case Coimbatore Jn.)
14. The account details of **National Academy of Biological Sciences:**

Name of the account holder	: National Academy of Biological Sciences
Account Number (Savings A/C)	: 104 9697 8637
IFS code	: SBIN0011721
Branch code	: 11721
Name & address of bank	: State Bank of India, Valmiki Nagr, Chennai, "Guru Guha", II Seaward Road, Thiruvannamiyur, Chennai- 600 041

About Coimbatore

Coimbatore is the third largest city in Tamil Nadu. It is often referred to as the "Manchester of South India" due to its cotton production and textile industries. Coimbatore has been selected as one of the hundred Indian cities to be developed as a smart city under Prime Minister Narendra Modi's flagship Smart Cities Mission. The city is well connected by buses, trains and flights.

Weather: During September the temperature normally ranges from 22 to 25°C with intermittent rains. However, there is no need for warm clothing.

Conference Venue

Dr. Usha Kirtilal Mehta Convention Centre, Bharathiar University, Coimbatore

Registration and Conference Fee

The participants are requested to send the filled in registration form to the Organizing Secretary along with the

registration fee as per the schedule (dates to remember) given below. The registration fee includes conference kit, session refreshments, lunch and dinner. The conference registration fee should be paid on line to the account of “The Organizing Secretary-Lifescience Conference”

Dates to remember

Registration & Submission of Abstract	: 31-07-2017
Acceptance of Abstract	: 05-08-2017
Submission of Full length Paper	: 10-08-2017

Registration Fee for Conference

Fellows of NABS & Corporate Fellow	: No registration Fee
Corporate Member/Life member/ Provisional Life member	: Rs.500/-
Research Scholars and Students	: Rs. 700/-
Faculties and Scientists from Universities/Colleges/Research Institutions	: Rs. 1000/-
Participants from Industry/Public Sector	: Rs. 5000/-
Spouse/Accompanying Persons	: Rs. 500/-

Communication:

All communications with reference to the Conference and submission of papers shall be addressed to Organizing Secretary (ies):

Dr. P. Ponmurugan

Associate Professor
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Bharathiar University
Coimbatore – 641 046
Mobile: +91 98658 57816
E-mail: lifescienceconference2017@gmail.com

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Associate Professor
Department of Zoology
Bharathiar University
Coimbatore – 641 046
Mobile: +91 98430 56645
E-mail: lifescienceconference2017@gmail.com

Details for Online transfer of registration fee

Name of Account Holder	: The Organizing Secretary-Lifescience Conference
Account Number	: 822610110011839
Name of Bank	: Bank of India, Bharathiar University Branch
IFSC Code	: BKID0008226
MICR Code	: 641013011

Call for Papers for Conference

The participants are requested to send the full papers directly as we intend to publish the full proceedings and release the same during inaugural function of the conference. The accepted full-length research papers will be published as a proceeding book with ISBN number from renowned publisher. The participating delegate will receive a copy of the proceeding book on the day of the seminar.

The full-length paper should not exceed 10–15 pages (including tables, figures and references); should be typed

in Microsoft (MS) word (Times New Roman, font size 12, line spacing 1.5), highlighting the results of original research work in the following format: Title (with font size 14); author(s) name (font size 12) and affiliation (address of the institution with e-mail ID of corresponding author etc. (font size 11)). Presenting author should be indicated with an asterisk (*) symbol. Title, author's name and affiliation should be center aligned. Keywords (font size 10) should be limited to 5 words. The full length research papers should be submitted by e-mail to: lifescienceconference2017@gmail.com on or before 10-08-2017.

Submission of full papers: Oral/Poster

- Full paper should have the sequence of Title of the paper with author(s) name, affiliation with e-mail ID, abstract (not exceeding 300 words) with key words, followed by Introduction, Materials and Methods, Results and Discussion, References as per format shown below [limit the references to 10-15].
- Cite references in the text as: (Marimuthu, 2010) or Marimuthu and Nakkeeran, 2012 or when more than two authors- (Kannaiyan et al., 2011). Do not give serial numbers for references listed in the text.
- List references in alphabetical order [No serial number]

How to cite references

- All initials to be at the end of author's name, give full name of journal.

To cite a journals

Selvam, P., Muruges, N., Witvrouw, M., Keyaerts, E., and Neyts, J. 2009. Studies of antiviral activity of cytotoxicity of *Wrightia tinctoria* and *Morinda citrifolia*. *Indian Journal of Pharmaceutical Studies*, 71(6): 670-672.

To cite Proceedings / Book chapters

Ajanta Birah, Singh, D. R., Ramamurthy, V.V. and Srivastava, R.C. 2009. Surveillance of insect pests of Noni (*Morinda citrifolia* L.) in Andaman. In: (Eds.) P. Rethinam and T. Marimuthu, *Proceedings of Fourth National Symposium on Noni for Empowerment and Prosperity*, Oct., 24-25, pp: 40-50.

To cite Books

Peter, P.I. 2009. *Compendium of Noni Research*, World Noni Research Foundation, Chennai, p.884.

Oral/Poster Presentation

The authors are requested to indicate their choice for oral/poster presentation. The scientific committee will decide on the suitability of paper for oral or poster presentation. The poster should contain the title, author (s) name, affiliation (s) and address (s). The size of the poster should be with a dimension of 4 feet height × 3 feet width. The content of the poster should be easily readable from a distance of 2-3 meters. Poster should be in one piece either in flex or laminated sheet. Each oral presentation by the participants is restricted to 10 minutes including discussion.

Best oral or poster presentations made during the Conference will be awarded during valedictory function.

Accommodation

Accommodation may be arranged in the guest house and international hostel at university campus (on a first come first served basis) on prior request and payment. The hotels are in the city which is about 5-10 kms away from the University.

Accommodation Rate per	
dayUniversity Guest House / Hostels	: Rs.300/-
Hotels – A Grade	: Rs.3500/-
Hotels – B Grade	: Rs.2000/-
Ordinary Hotels	: Rs.1000/-

Travel Arrangements

The participants are requested to make their own travel arrangements. If assistance is needed, the participants are requested to contact the organizers.

Chief Patron

Prof. M.S. Swaminathan

Founder Chairman
M.S. Swaminathan Research Foundation
Chennai, Tamil Nadu

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Vice Chancellor
Bharathiar University, Coimbatore, Tamil Nadu

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Department of Botany



REGISTRATION FORM

10th NABS-National Conference



on

Recent trends in Life Science:
Research, Practices and Application for Sustainable Development
September 7 & 8, 2017

I am interested to present a paper / participate in the 10th NABS-National Conference.

Name :

Designation:Organization :

Full Postal Address with PIN :

Mobile Number:E-mail ID :

I intend to attend / submit oral paper / poster entitled :

I need accommodation in University/ Faculty Guest House / Hotels in the city.

In case of hotels- mention the tariff range:

I have transferred the Conference Registration Fee on line (Rs.) (evidence attached)

[Details for online transfer [Name of Account Holder:

The Organizing Secretary-Lifescience conference, A/c No.822610110011839,
Bank of India, Bharathiar University Branch, IFSC Code: BKID0008226, MICR Code:
641013011].

Place :

Date :

Signature :



Welcome to

10th NABS National Conference

7-8 September 2017