

V.V. Binoy

Assistant Professor

School of Natural Sciences and Engineering
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Scholarships and Fellowships

- Research Affiliate Centre for the Study of Neuro-Economics, George Mason University, USA
- External Affiliate, Kranow Institute of Advanced Study, George Mason University, USA
- Lead, Biology Education Team, *Connected Learning Initiative (CLIX)* A joint venture of Massachusetts Institute of Technology, USA and Tata Institute of Social Science (TISS), Mumbai.
- Young Scientist (*Fast-Track*), Department of Science and Technology, Government of India; 2013-2016
- Cognitive Science Research Initiative Postdoctoral Fellowship, Department of Science and Technology, Government of India; 2010-2012

Professional Positions

- Assistant Professor, School of Natural Sciences and Engineering, National Institute of Advanced Studies, Bangalore; June 2014- ongoing
- SERB Young Scientist, National Institute of Advanced Studies, Bangalore; 2013 – 2014
- Cognitive Science Research Initiative Postdoctoral Fellow, National Institute of Advanced Studies, Bangalore; 2010-2012
- Lecturer, Department of Zoology, MES KVM College, Valanchery, Kerala; 2009-2010

Educational Qualifications

<i>Degree</i>	<i>Subject</i>	<i>Year</i>	<i>University</i>
Doctorate	Zoology	2002-2009	University of Calicut Kozhikode
Master's degree	Zoology	1999-2001	University of Calicut Kozhikode
Bachelor's degree	Zoology	1996-1999	University of Calicut Kozhikode

Research Grants

Principal Investigator

- Rufford Small Grant, UK. *Sahyadri's underground fishes: developing conservation action plans for the subterranean fishes of Western Ghats.* (With Rajani M. B., National Institute of Advanced Studies, Bangalore and Anvar Ali, Kerala University of Fisheries and Ocean Sciences, Kochi). National Institute of Advanced Studies, Bangalore; November 2015- November 2016; *Grant:* INR 5,00,000
- Eco-Water and Sanitation Hygiene (Eco WaSH) Programme. National Council for Science and Technology Communication (NCSTC), Government of India, New Delhi. *"Understanding the role of 'student networks' in creating awareness about environment, water, sanitation and hygiene in rural and socio-economically marginalized areas"* (with Anitha Kurup and Sindhu Radhakrishna); National Institute of Advanced Studies, Bangalore; July 2014 - July 2016; *Grant:* INR 13,25,280
- Department of Science and Technology, Government of India, New Delhi. Young Scientist (*Fast Track*) Project. *"Intra-and inter-population variation in behavioural plasticity in a fish, the climbing perch Anabas testudineus: Role of behavioural syndromes and brain organisation"*; National Institute of Advanced Studies, Bangalore; July 2013 – July 2016; *Grant:* INR 23,80,000
- Department of Science and Technology, Government of India, New Delhi. Cognitive Science Research Initiative Postdoctoral Fellowship. *"Conspecific recognition, numerical competence and capacity for transitive inference in a freshwater fish, the climbing perch (Anabas testudineus)"*; National Institute of Advanced Studies, Bangalore; August 2010 – August 2012; *Grant:* INR 11,76,000

Co-Principal Investigator

- SERB Women Excellence Award Research Grant. “*Intraspecific variation in the slender loris Loris lydekkerianus*” (with Sindhu Radhakrishna); National Institute of Advanced Studies, Bangalore; August 2013 – August 2016; *Grant*: INR 18,00,000
- Education Programme, National Institute of Advanced Studies, Bangalore, India. “*Can we bridge educational institutions through citizen science project?*” (with Anitha Kurup and Sindhu Radhakrishna); National Institute of Advanced Studies, Bangalore and MES KVM College, Valanchery, Kerala; January 2010 – August 2010; *Grant*: INR 50,000

Consultant

- Water Programme, National Institute of Advanced Studies, Bangalore, India. *Cultural variation in drinking water choice in areas with multiple sources* (With Shantha Mohan); Part of a major project titled *Techno-Social Solutions to Major Water Challenges Facing India*. Water Initiative, Department of Science and Technology, Government of India, New Delhi; (PI Shantha Mohan) July 2012 – October 2012

Research Experience

Cognitive Psychology; Behavioural Ecology & Science Education and Communication

Post-doctoral Research

National Institute of Advanced Studies, Bangalore

Conspecific recognition, numerical competence and capacity for transitive inference in a freshwater fish, the climbing perch (Anabas testudineus); August 2010 – August 2012

PhD

University of Calicut, Department of Zoology, Christ College, Irinjalakuda, Kerala;
May 1, 2001 – March 31, 2009

Doctoral thesis Determinants of decision making in climbing perch
(*Anabas testudineus* Bloch), a freshwater fish

Research Fellow

Environmental correlates of spatial and social learning in fish: The role the neural circuitry of hippocampal pallium and amygdalar pallium

Department of Zoology, Christ College, Irinjalakuda, Kerala; *Funded by* University Grants Commission, Government of India, New Delhi; 2007-2009

Studies on seed production and enhancement of larval survival of indigenous freshwater food fishes of Kerala

Department of Zoology, Christ College, Irinjalakuda, Kerala; *Funded by* Department of Science and Technology, Government of India, New Delhi; 2004-2007

Behavioural ecology of some selected freshwater food fishes of Kerala

Department of Zoology, Christ College, Irinjalakuda, Kerala; *Funded by* University Grants Commission, Government of India, New Delhi; 2001-2004

Current Research

- Correlates of behavioural syndrome and behavioral plasticity in fish (*Anabas testudineus*) and amphibian (Asian common toad *Duttaphrynus melanostictus*)
- Influence of the exotic invasive piscine species on the shoal choice and collective decision making in indigenous fishes (*With Anindya Sinha National Institute of Advanced Studies, Bangalore and Vishweshia Guttal, Centre for Ecological Science, Indian Institute of Science, Bangalore*)
- Development of attitude towards biotic and abiotic natural resources and its influence on environmental decision-making (*With Sindhu Radhakrishna and Anitha Kurup, National Institute of Advanced Studies, Bangalore*)
- Autobiographical memory and meta-autobiographical memory in school children (*With Sangeetha Menon National Institute of Advanced Studies, Bangalore and Sandhya M, National Institute of Mental Health and Neurosciences, Bangalore*)
- Understanding the distribution, autecology and behaviour of hypogean fishes of Western Ghats and their epigeal counterparts (*With Rajeev Raghavan and Anvar Ali, Kerala University of Fisheries and Ocean Sciences, Kochi. Rajani M. B. National Institute of Advanced Studies, Bangalore*)
- Connected Biology Education (*With Padma Sarangapani Tata Institute of Social Science, Mumbai*)

Teaching Experience

Academic Courses

- Three-credit course of *Introduction to Consciousness* for doctoral degree and post graduate students (with Sangeetha Menon, Anindya Sinha, LM Patnaik and Sisir Roy). National Institute of Advanced Studies, Bangalore; August – December 2015
- Three-credit course of *Behaviour, Cognition and Consciousness* for doctoral degree and post graduate students (with Sangeetha Menon, Anindya Sinha and B V

Sreekantan). National Institute of Advanced Studies, Bangalore; September – December 2014

- Three-credit course of *Understanding the Biology of Behaviour* for doctoral degree and post-graduate students. Central University of Kerala, Kasargode. 1-5 September 2014
- Three-credit course of “*Essentials of Comparative Cognition*” for doctoral degree students (with Anindya Sinha); National Institute of Advanced Studies, Bangalore; January – April 2014
- A three-credit course of “*Human-Environment Interactions*”, consisting of lectures, paper presentations and discussion sessions for doctoral degree students (with Sindhu Radhakrishna); National Institute of Advanced Studies, Bangalore; October – December 2013
- Two-lecture module on “*Laboratory and Field Methodologies*” as part of a three-credit course on Research Methodologies for doctoral degree students; National Institute of Advanced Studies, Bangalore; January – April 2013 and 2014
- Theoretical and practical classes for undergraduate students of zoology; MES KVM College, Valanchery, Kerala; September 2009 – October 2010
- Guidance of research projects and dissertations, theoretical and practical classes in animal behaviour, ecology, evolution and biostatistics for postgraduate students of the Departments of Zoology and Environmental Science; Christ College, Irinjalakuda, Kerala; May 2001 – March 2009

Publications

A. Books

Bagla, P. and **Binoy V. V.** (*in press*) *Bridging the Communication Gap in Science and Technology: Lessons from India*. Springer

B. Refereed Journals

Binoy V V (*in press*) Food patch choice in climbing perch (*Anabas testudineus*), a freshwater fish. *Indian Journal of Fisheries*

Binoy V V, Kasturirangan R and Sinha A (2015) Sensory cues employed for the acquisition of familiarity-dependent recognition of a shoal of conspecifics by climbing perch (*Anabas testudineus* Bloch). *Journal of Biosciences* 40: 225-232

Binoy V V (2015) A comparative analysis of the boldness in four teleosts inhabiting an irrigation canal. *Indian Journal of Fisheries* 62 : 128-130

Kurup A, Chandra A and **Binoy V V** (2015). 'Little minds dreaming big science': are we really promoting 'children gifted in STEM' in India? *Current Science* 108: 779-781

Radhakrishna S, **Binoy V V** and Kurup A (2014). The culture of environmental education: Insights from a citizen science experiment in India. *Current Science* 107: 176-178

Binoy V V and Radhakrishna S (2013). Environmental decision making: The role of culture-induced divergence in cognition. *Current Science* 105: 757-759

Karmakar S and **Binoy V V** (2012). Tools as non-elaborated aesthetic form. *Science and Culture* 78: 347-350

Binoy V V, Roshan K S and Rakesh V B (2012). Occurrence of *Kryptoglanis shajii*, an enigmatic subterranean-spring catfish (Siluriformes, *Incertae sedis*), in channels of paddy field. *Current Science* 102: 161

Binoy V V (2010). Catfish *Clarias* is vanishing from the waters of Kerala. *Current Science* 90: 714

Binoy V V and Thomas K J (2008). Influence of hunger on the food stocking behavior of climbing perch. *Journal of Fish Biology* 73: 1053-1057

Binoy V V and Thomas K J (2006). Climbing perch (*Anabas testudineus*) can recognize members of a familiar shoal. *Current Science* 90: 288-289

Binoy V V and Thomas K J (2005). Comparative analysis of organochloride and organophosphate pesticides on the learning ability and sustained swimming capacity of climbing perch (*Anabas testudineus*), a freshwater fish. *Journal of the Indian Society of Toxicology* 2: 23

Binoy V V, Menon S and Thomas K J (2005). The influence of methyl parathion on the behaviour of the climbing perch (*Anabas testudineus*). *Pollution Research* 24: 253-259

Thomas K J, **Binoy V V** and Baby G (2005). Male Siamese fighting fish prefers larger females with distended belly. *Journal of Ecobiology* 17: 537-544

Binoy V V and Thomas K J (2004). The climbing perch (*Anabas testudineus* Bloch), a freshwater fish, prefers larger unfamiliar shoals to smaller familiar shoals. *Current Science* 86: 207-211

Binoy V V, Job N and Thomas K J (2004). The influence of dicofol on the behaviour of the climbing perch (*Anabas testudineus*). *Indian Journal of Fisheries* 51: 345-351

C. Book Chapters

Binoy V V, Radhakrishna S and Kurup A (*in press*) Bridging educational institutions for a citizen science project: a case study from Malappuram district, Kerala, India. In: *Bridging the Communication Gap in Science and Technology: Lessons from India*. Bagla, P. and Binoy V. V. (eds.) Springer

D. Technical Reports

Binoy V V (2012). Conspecific Recognition, Numerical Competence and Capacity for Transitive Inference in a Freshwater Fish, the Climbing Perch (*Anabas testudineus*). Final Technical Report, Cognitive Science Research Initiative, Science Engineering Research Board, Department of Science and Technology, Government of India, New Delhi, India

E. Conference Posters

Pankaj, Sandhya M, Menon S, Hegde AS, Srinivasa R and **Binoy V V** (2015) The autobiographical memory and self in the context of stroke and head injury. International Conference “Neurodegenerative Diseases: Pathogenesis to Therapy”. Centre for Neuroscience, Indian Institute of Science, Bangalore, 16-18 November 2015.

Kumaraswamy T R and **Binoy V V** (2015) ‘Student network’ - An axiological future key for conservation. Student Conference on Conservation Sciences- 2015, Indian Institute of Science, Bangalore, 8-11 September 2015.

Watve M, **Binoy V V** and Sinha A (2014). Changing personalities? Are behavioural syndromes modified during metamorphosis in the Indian common toad? First Annual Conference on Cognitive Science, New Delhi, India, March 2014

Rao A, **Binoy V V** and Sinha A (2014). Cube vision: Can blindfolded Rubik’s cubing provide insights into the formation of mental imagery and its application to problem solving? First Annual Conference on Cognitive Science, New Delhi, India, March 2014

Binoy V V and Sinha A (2013). The impact of an alien invasive fish, the tilapia, on the cognitive abilities and lateralized utilization of brain hemispheres in a freshwater fish, the climbing perch. Young Investigators’ Meeting 2013, Jodhpur, India, February 2013

Bino V V, Kasturirangan R and Sinha A (2012). From sentience to consciousness: What can fish tell us? Looking Within: An International Conference on Multidisciplinary Approaches to Consciousness, National Institute of Advanced Studies, Bangalore, India, January 2012

F. Conference Abstracts and Presentations

Radhakrishna S and **Bino V V** (2015). Least Concern cause for much concern?: The impact of human-macaque conflict on bonnet macaque conservation status. Association of Tropical Biology Asia-Pacific chapter meeting on the theme of “The Future of Biodiversity in Tropical Asia: addressing local and global challenges”, Phnom Penh, Cambodia. April 2015.

Naresh Keerthi and **Bino V. V.** (2015) "Angling in the Sanskrit sea' – insights on ichthyology from the Sanskrit literary canon. Seminar on “Flora and Fauna in Ancient Indian Literature” Department of Zoology, Dr. A. V. Baliga College of Arts and Science, Kumta, Karnataka. 13-14 March 2015

Watve M, Rao A, **Bino V V** and Sinha A (2014). Inter-population variation in exploratory behaviour during metamorphosis in the Asian common toad. 51st Annual Conference of the Animal Behavior Society. Princeton, USA, August 2014

Rao A, Watve M and **Bino V V** (2014). Exploration of linkages between morphology and personality in the Common Asian Toad. 51st Annual Conference of the Animal Behavior Society. Princeton, USA, August 2014

Watve M, Rao A, **Bino V V**, Sinha A (2014). Population versus individual behavioral syndromes: How metamorphosis changes correlated behaviors in the common Indian toad. 15th Conference of the International society for Behavioural Ecology (ISBE-2014), New York University, USA, July 31- August 5 2014

Watve M, Rao A, **Bino V V** and Sinha A (2014). Inter-population variation in exploratory behaviour during metamorphosis in the Asian common toad. 51st Annual Conference of the Animal Behavior Society. Princeton, USA, August 2014

Rao A, Watve M and **Bino V V** (2014). Exploration of linkages between morphology and personality in the Common Asian Toad. 51st Annual Conference of the Animal Behavior Society. Princeton, USA, August 2014

Watve M, Rao A, **Bino V V**, Sinha A (2014). Population versus individual behavioral syndromes: How metamorphosis changes correlated behaviors in the common Indian toad.

15 th Conference of the International society for Behavioural Ecology (ISBE-2014), New York University, USA, July 31- August 5 2014

Binoy V V and Sinha A (2014). 'Left eye – right brain': Exploring the impact of social isolation on personality traits and lateralised utilisation of the brain in an air-breathing freshwater fish, the climbing perch. First Annual Conference on Cognitive Science, New Delhi, India, March 2014

Binoy V V, Jayasree V and Shantha Mohan M (2014). What kind of water do 'they' prefer? Drinking water choice in areas with multiple sources. International Symposium on Integrated Water Resources Management (IWRM - 2014), Kozhikode, India, February 2014

Nathan H S K, Jayashree V and **Binoy V V** (2014). Is roof water harvesting an answer to urban water crisis? A case study of Bangalore. International Symposium on Integrated Water Resources Management (IWRM - 2014), Kozhikode, India, February 2014

Watve M and **Binoy V V** (2013). Can metamorphosis alter behavioural syndromes in the Indian common toad. Young Investigators Talk and Interact (YETI), Nagaland University, Lumami, India, December 2013

Binoy V V (2012). Impact of an exotic invasive species tilapia (*Oreochromis mossambicus*) on the shoaling decisions of climbing perch (*Anabas testudineus*). Student Conference on Conservation Science, Bangalore, August 2012

Shabeer K K, **Binoy V V**, Sreekumar S and Thomas K J (2008). Investigations on the influence of sediment and water quality on the plankton community of a wetland ecosystem. Lake-2008: Conservation and Management of River and Lake Ecosystems, Centre for Ecological Sciences, Indian Institute of Science, Bangalore, December 2008

Binoy V V, Shahin A and Thomas K J (2007). Bio-film formation in *Euglena gracilis*: The influence of time of the day and wavelength of light. XIX National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 2007

Binoy V V and Thomas K J (2007). The influence of hunger on food stocking behaviour of climbing perch, a freshwater fish. Abstracts of the 31st Conference of the Ethological Society of India, Bangalore, April 2007, p. 110

Avinash T A, **Binoy V V** and Thomas K J (2007). Analysis of the route learning ability of climbing perch. Abstracts of the 31st Conference of the Ethological Society of India, Bangalore, April 2007, p. 108

Shiron J, **Binoy V V** and Thomas K J (2007). Predator avoidance behaviour of naïve juveniles of *Puntius sarana*, a freshwater fish. Abstracts of the 31st Conference of the Ethological Society of India, Bangalore, April 2007, p. 109

Binoy V V and Thomas K J (2005). Comparative analysis of organochloride and organophosphate pesticides on the learning ability and sustained swimming capacity of climbing perch (*Anabas testudineus*), a freshwater fish. Abstracts of TOXOCON 1, Inaugural Conference of Indian Society of Toxicology, Cochin, November 2005, p. 38

Binoy V V and Thomas, K.J. (2005). Individual recognition in a fish, the climbing perch (*Anabas testudineus*) and the cues involved in the formation of familiarity. Abstracts of the 29th Conference of the Ethological Society of India, Bangalore, February 2005, p. 51

Binoy V V, Sandhya V V and Thomas K J (2005). Altered environment alters stimulus-response paradigm: Effect of pH and salinity on the ontogeny of behaviour in *Heteropneustes fossilis*, a freshwater fish. Abstracts of the 29th Conference of the Ethological Society of India, Bangalore, February 2005, p. 52

Vincent M, Asha K, **Binoy V V** and Thomas K J (2005). Preference for higher wavelength colour in the larvae of *Heteropneustes fossilis*, a freshwater fish. Abstracts of the 29th Conference of the Ethological Society of India, Bangalore, February 2005, p. 50

Binoy V V and Thomas K J (2003). Avenues and opportunities in ethology and behavioural sciences. *Lectures on Recent Trends in Ethology and Behavioural Sciences* (ed Thomas K J), Department of Zoology, Christ College, Irinjalakuda, India, pp. 13-17

Binoy V V and Thomas K J (2003). Factors reducing wandering behaviour in climbing perch (*Anabas testudineus*). *Proceedings of the Twenty-eighth Conference of the Ethological Society of India* (eds Annamalai R, Narayanan M and Vanitharani J), Department of Zoology, Sarah Tucker College and Tamil Nadu Forest Department, Kalakad-Mundanthurai Tiger Reserve, Tirunelveli, India, p. 48

H. Popular Articles (in Malayalam)

Nadan Mushi Namavaseshamkundu. Deshabimani Daily, March 21, 2011

Namukku Guppy Venda Kothukum. Deshabimani Daily, June 30, 2011

Students Guided

Post-doctoral Fellow

Gagandeep Kaur; National Institute of Advanced Studies, Bangalore

Cognitive dimensions of 'Talim', the cryptographic language of Kasmiri rug weavers. With Sangeetha Menon (National Institute of Advanced Studies, Bangalore); February 2015-Ongoing

Master's Degree Students

Anusree N S, Central University of Kerala, Kasargode

Analysis of the attitude towards different water resources and draught mitigation strategies in school and college students of Kerala

Dissertation submitted to the Department of Environmental Sciences, Central University of Kerala, Kasargode; April 2015

Prashitha U, Central University of Kerala, Kasargode

Exploration of the attitude of farmers towards crop raiding by bonnet macaque (Macaca radiata) in Kasargod District

Dissertation submitted to the Department of Environmental Sciences, Central University of Kerala, Kasargode; April 2015

Sajina K V, Central University of Kerala, Kasargode

Understanding human-wild boar (Sus scrofa cristatus) conflict in Kasargod District, Kerala: A perceptionist approach

Dissertation submitted to the Department of Environmental Sciences, Central University of Kerala, Kasargode; April 2015

Aneesha B, Central University of Kerala, Kasargode

Mapping human- animal conflict in Northern Kerala

Dissertation submitted to the Department of Environmental Sciences, Central University of Kerala, Kasargode; April 2015

Bhagyashree J Ingle, College of Fisheries, Mangalore

Exploration of group dynamics, patterns of decision making and personality traits in a shoal of climbing perch (Anabas testudineus); July 2012 – July 2013

Dissertation submitted to the Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar; July 2013

NIAS-Mani-Bhaumik Research Fellows

Stephan Salazar

Personality trait of a shoal; Ongoing

Roshan KS

Development of meta-autobiographical memory in Indian school children. With Sangeetha Menon (National Institute of Advanced Studies, Bangalore); Ongoing

Pankaj

Can mild stroke and head injury remould autobiographic memory and self? With Sangeetha Menon (National Institute of Advanced Studies) and *Dr. Sandhya M.* (Ramaiah Insitute of Neuroscience, Bangalore), November 2015

Mukta Watve

Behavioural syndromes in the Asian common toad and their changes during metamorphosis; January 2015

Abhinav Kadambi

Lateralised utilation of brain and one time exposure memory (OTM) of conspecific in an airbreathing freshwater fish climbing perch; December 2014

Awards and Honours

Best Paper Award, National Symposium on Chronobiology, Madurai Kamaraj University, Madurai, December 2007, for the paper, *Bio-film formation in Euglena gracilis: The influence of time of the day and wavelength of light*, authored by Binoy V V, Shahin A and Thomas K J

Rachel Carlson Lecture on *Pesticides and Cognition*, Kerala Shastra Sahithya Parishad, Thrissur, Kerala; October 13, 2008

Conferences and Workshops Organised

Workshop on *Freshwater Fish Conservation: Concepts, Techniques and Strategies*. (With R. Raghavan, KUFOS Kochi; N. Dhanukar IISER Pune; Neeti, Coorg Wildlife Society Madikeri, U. Katwate, BNHS Mumbai; S. Philip, Nirmalagiri College, Kannur) Student Conference on Conservation Sciences- 2015, Indian Institute of Science, Bangalore , 9th September, 2015.

Workshop on *Martial Arts: Harmony of Body and Mind*
National Institute of Advanced Studies, Bangalore With *Sangeetha Menon* (National Institute of Advanced Studies, Bangalore); 13 March 2015

Workshop on *Conservation Psychology: Attitude and Environmental Decision-Making*.
Student Conference on Conservation Science-2014, Indian Institute of Science, Bangalore;
With *Sindhu Radhakrishna* (National Institute of Advanced Studies, Bangalore); 25 - 28
September 2014

Seminar on *When Science Meets the Public: Bridging the Gap*.
National Institute of Advanced Studies, Bangalore; With *Pallava Bagla*, (NDTV New Delhi);
20 – 21 June, 2014.

Workshop on *Citizens Science Project and Science Communication*
National Institute of Advanced Studies, Bangalore and MES KEVEEYAM College, Valanchery,
Kerala; January 25, 2010

National workshop on *Recent Trends in Ethology and Behavioural Sciences*
Animal Behaviour and Wetland Research Laboratory, Christ College, Irinjalakuda, Kerala;
August 5-8, 2003

Seminar on *Environmental Laws*
Interdisciplinary Scientific Research Development Organisation, Irinjalakuda, Kerala;
February 14, 2004

Workshop on *Conservation of Medicinal Plant Diversity: and Revitalization of Basic
Phytomedical Systems*
Interdisciplinary Scientific Research Development Organisation, Irinjalakuda and
Community Agro-Biodiversity Centre and M S Swaminathan Research Foundation, Kalpetta,
Wynad, Kerala; June 10-11, 2006

Talkes

Conservation and Ethology: Can the Twain Meet? Workshop on Freshwater Fish
Conservation: Concepts, Techniques and Strategies. Student Conference on Conservation
Sciences- 2015, Indian Institute of Science, Bangalore , 9th September, 2015.

Student Networks', MES, KVM College Valanchery, Malappuram, Kerala, 12th June, 2015

Free Choice Learning and Information Technology Based Biology Education. Connected
Learning Initiative (CLIX), Tata Institute of Social Science (TISS), Mumbai, 25-28 April 2015

Human-Wildlife Conflict: The Mitigation Strategies. Panchayath Secretaries Forum, Kasargode, Kerala, 23 February, 2015

Introduction to Cognitive Science; Course for ISHAN VIKAS-UDHAN Programme. National Institute of Advanced Studies, Bangalore; 25 December, 2014

Bringing Environmental Pro Behaviours Amongst School Children: How Knowledge from Conservation Psychology and Citizen Science Movements Can Help. Environmental Conference. Swasraya Bharat-2014, College of Agriculture, Padannakad, 16 October 2014

Human Mind: "The Source of Environmental Problems as well as the Hope for Solutions". National Symposium on "Human-wildlife Conflict or Coexistence-What We Want? Central University of Kerala, Padannakad, Nileshtar, 15 October 2014

Behavioural Syndrome and Lateralised Utilisation of Brain Hemisphere in an Air Breathing Fish, Climbing Perch. National Institute of Mental Health and Neuro Sciences (NIMHANS), 30 August 2014

Our Natural Resources. Green Olympiad, The Energy and Resources Institute (TERI), Bangalore, 9 July, 2014

"When Spider Webs Unite, They Can Tie Up a Lion" Efficacy of Citizens science projects in data collection and science communication. African Delegation, visiting the Centre for International Cooperation in Science, Chennai. National Institute of Advanced Studies, Bangalore, India; April 15, 2014

Big Science and Little Hands: Understanding the Knowledge and Attitude Towards Mammals in School Children Using Student Network. Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, 18 October, 2013

Determinants of Shoaling Decision in Climbing Perch, a Freshwater Fish. Center for Ecological Science, Indian Institute of Science, Bangalore, 11th September 2013

Can Behavioural Science Help Save Biodiversity? ATREE, Bangalore, 19th June 2013

"I Know All About The Tiger, but What is A Civet?": Understanding attitudes towards wildlife by school children in Malappuram, Kerala; NIAS Wednesday Discussion Meeting, 17 April, 2013

Can Humans Love Unconditionally: The Perspectives of an Abandoned Pet. People for Animal Welfare Services (PAWS), Thrissur, 2 March, 2013

Animal Rights. People for Animal Welfare Services (PAWS), Thrissur, 5 November, 2012

Fish Behaviour and Cognition:New Horizons. Department of Marine Biology, Microbiology & Biochemistry, School of Marine Sciences, Cochin University of Science & Technology, Kochi, 27 September, 2012

Familiarity-Bred Shoaling Decisions in Climbing perch, a Freshwater Fish. NIAS Wednesday Discussion Meeting, 12 September, 2012

Is Homo sapiens Matchless? Cognition Summer school. National Institute of Advanced Studies Bangalore, July 10 2012

“Not Like Us–Like Us–Not Like Us” Cognition in Non Human Species. Cognition Summer school. National Institute of Advanced Studies Bangalore, July 9 2012

Citizen Science and Student Network. Workshop on 'Citizens Science Project.' National Institute of Advanced Studies Bangalore and MES KEVEEYAM College, Valanchery, January 25, 2010

Why Should I Learn Science? SIGN (An Educational Society for The Upliftment of Tribal Communities), Konnakadu, Wynad, Kerala, April 6, 2009

Choosing and Using Statistics. Workshop on Research and Research Methodology, Sree Narayana College, Nattika, Kerala, March 12, 2008

Pesticide and Cognition. Rachel Carlson Lecture. Kerala Shastra Sahithya Parishad, Thrissur, Kerala, October 13, 2008

Quantifying Fish Behaviour in the Laboratory. Homibabha Center for Science Education, Mumbai. 2007

Seeds and Society. Department of Social Work, St Joseph’s College, Irinjalakuda, Kerala, March 14, 2007

Why Conservation of Local Biodiversity is Important for Ecosystem Homeostasis. Workshop on Biodiversity: Conservation of Medicinal Plants and Revitalization of Basic Phytomedical Systems. ISRDO, Irinjalakuda and Community Agro-biodiversity Centre, M S Swaminathan Research Foundation, Kalpetta, Wynad, June 10-11, 2006

Agriculture and Environment. Department of Social Work, St Joseph's College, Irinjalakuda, Kerala, February 28, 2006

Quantifying Behaviour of Zooplanktons. International Training Course in Tropical Freshwater Zooplankton. Limnological Association of Kerala, Irinjalakuda, April 1- 15, 2004

Studying Animal Behaviour in the Laboratory. Seminar on Animal Behaviour and Behaviour Control. Blue Cross Society of Thrissur (BCST) and College of Veterinary and Animal Science, Kerala Agriculture University, Mannuthy, Kerala. December 2, 2003

Designing and Developing Low-cost Instruments to Study Animal Behaviour in the Laboratory. National Workshop on Recent Trends in Ethology and Behavioural Sciences. Animal Behaviour and Wetland Research Laboratory, Christ College, Irinjalakuda, Kerala, August 5-8, 2003

Introduction to Model Systems Popular in Animal Behaviour Research in the Laboratory. National Workshop on Recent Trends in Ethology and Behavioural Sciences. Animal Behaviour and Wetland Research Laboratory, Christ College, Irinjalakuda, Kerala, August 5-8, 2003

Talks for school children

Water Sanitation Hygeine (WaSH). Anekkal Public School, Anekal, Karnataka. 14th November 2015.

Imagination and Creativity, BVM High School Thrissur, Kerala. 6th November 2015.

'Student Scientists' and Natural Resource Conservation. Govt. High School Irimblyam, Malappuaram Kerala. 2nd August 2015

Animal welfare and Pet Animals. Sandeepani High School Thrissur Kerala, 2 March, 2013

Plastic and Environment. Government Model Boys' Vocational Higher Secondary School, Irinjalakuda, Kerala, October 11, 2005

In Television

Sand Mining and River Health. Indiavision. April 25, 2010.

Nilayude Kalasncharangaliloode. Indiavision. April 15, 2010.

Solar Eclipse and Animal Behavior'. Asianet. January 15, 2010.

River Nila. Indiavision. December 19, 2009.

Science Notes. All India Radio, October 23, 2005

Membership in Professional Organisations

IUCN Freshwater Specialist Group – South Asia

Freshwater Fish Conservation Network – South Asia

Ethological Society of India

Limnological Association of Kerala

Centre for Fundamental Studies, Thrissur, Kerala

Extra-Curricular Activities

Trainer of Yoga and Asian martial arts