

Faculty Profile



Name: Dr. Monika Sadananda

Designation: Professor-Biotechnology

Contact Details: Phone 9448869719
E-mail: monikasadananda@mangaloreuniversity.ac.in;
monikasadananda@gmail.com

Research Areas: Neuroscience, Immunology, Biotechnology

Link to detailed CV

Detailed CV

Name: Dr. Monika Sadananda
Educational Qualification: PhD (Germany); Post doc (Germany)
Designation: Professor-Biotechnology



Address for Correspondence: Department of Biosciences, Mangalore University,
Mangalagangothri – 574199, Karnataka, India
E-mail: monikasadananda@mangaloreuniversity.ac.in;
monikasadananda@gmail.com
Phone: +91 9448869719
Research Areas: Neuroscience, Immunology, Biotechnology

Professional Teaching Experience 22 years (PG); 1 year (UG)

Research Guidance (Ph.D.):

Completed students

1. Dr. Rashmi Rao M.
2. Dr. Reshma A. Shetty
3. Dr. Deepthi D'Souza
4. Mr. Hariprasad Shetty
5. Mr. Alemayehu Yismaw
6. Ms. Vidya Shukla
7. Ms. Akshata T. Inavally

Ongoing Registered Students

1. Ms. Poojitha G.
2. Ms. Sujay Daniel DG
3. Ms. Sanjana Shenoy
4. Ms. Vaishnavi

Research/Consultancy Projects

Completed:

1. Aquatic ecology and biodiversity study in 16 km study area around Kaiga Atomic Power Plant, Kaiga, Karnataka. Funding Agency: **MECON Pvt. Ltd., Ranchi/NPCIL, Govt. of India.** Amount **Rs. 7,36,000.** DOS: September 2025. Duration 1 year

2. PUFAs as potential radiomodifiers: Implications in radiation therapy and countermeasures. Funding Agency: **BRNS-DAE (35/17/118/2017-BRNS/311)**. Amount: **Rs. 22,40,400**. DOS: 26-12-2016. Duration 3 years
3. Anticipation in genes: Molecular, physiological and behavioural correlates of response of circa-annual clocks to seasons in night-migratory song birds. Funding Agency: **DBT (BT/PR4676/MED/30/752/2012)**. Amount: **Rs. 40,43,000**. DOS: 13-09-2013. Duration: 6 years
4. Behavioural and neural correlates of social preferences in birds: A study in the chick and in the zebra finch. Funding Agency: **DST-SERB (SR/S0/AS-38/2011)**. Amount: **Rs. 40,60,000**. DOS: 01.09.2012. Duration: 3½ years
5. Brain anatomy, neurochemistry and behaviour in a murine model of adolescent depression. Funding Agency: **UGC (41-545/2012 (SR))**. Amount: **Rs. 11,73,000**. DOS: 01.09.2012. Duration: 3½ years
6. Adolescent stress and depression: a behavioural study. Funding Agency: **DBT (BT/PR4676/MED/30/735/2012)**. Amount: **Rs. 17,84,300**. DOS: 01.10.2012. Duration: 3 years
7. Activity mapping in the brain in response to positive and negative stimulation: a study at the behavioural, neural and cognitive levels. Funding Agency: **DST - Cognitive Science Initiative (SR/CSI/05/2009)**. Amount: **Rs. 38, 76,000**. DOS: 01.11.2010. Duration: 3 years
8. Role of the avian amygdale in the development of filial preferences and emotional memory: a study in the chick and the zebra finch. Funding Agency: **DST - Fast Track (SR/FT/L-41/2004)**. Amount: **Rs. 10,11,000**. Duration: 01.04.2005-31-03-2007 (2 years).
9. Neurobiology of acquisition and retention of phonetic in birds: A study in the common Mynah and the Indian Hill Mynah. Funding Agency: **DST - Fast Track (SR/FTP/LS-192/2001)**. Amount: **Rs. 12,00,000**. Duration: 16.07.2001-15.07.2004 (3 years).

Professional Collaboration:

International

1. With Prof. Dr. H-J. Bischof, University of Bielefeld, Germany – Post-doctoral work in April-May 2004
2. With Prof. Dr. RKW. Schwarting, Philipps University, Marburg, Germany – Visiting scientist April 2008 - May 2009
3. With Prof. Inga D. Neuman, Regensburg University, Germany (MHRD-GIAN Programme, July 2019)

National

1. Anticipation in genes: Molecular, physiological and behavioural correlates of response of circa-annual clocks to seasons in night-migratory song birds – Multi-institutional project with **University of Delhi, North Eastern Hill University-Shillong, CCS University-Meerut, Lucknow University, NISER-Bhubaneshwar, 2013-2019**
2. PUFAs as potential radiomodifiers: Implications in radiation therapy and countermeasures – Collaborative research project with **Bioscience Research Lab, GVP Institutions, Vizag 2016-**
3. Effect of Arsenicum album on anxiety- and depressive-like profiles using neurobehavioural paradigms - **Fr Muller's Homoeopathic Medical College, Derlakatte, 2019-**
4. Effect of Astaxanthin on cognition and social communication in the progeny of undernourished and nutraceutical supplemented dams – **KSHEMA, Nitte deemed to be University, 2020-**

Research Journal Publications:

International

1. Hegde PS, Agni MB, Rai P, **Sadananda M**, Mirajkar AM, Kumar BM, Ranade AV, Gowda DKM. (2025). Unraveling the synergistic effects of Astaxanthin and DHA on perinatal undernutrition-induced oxidative stress and cognitive deficit, *Learning and Behavior*, doi: 10.3758/s13420-025-00673-4
2. Alemayehu Y. **Sadananda M**. (2025). Differential avifaunal diversity and water quality analysis in various sampling sites on Lake Tana in Ethiopia, *Israel Journal of Ecology and Evolution*, 71(1-2), 14-25.
3. Alemayehu Y. Molla G, **Sadananda M**. (2024). Three decades of land use and land cover changes in an East African lake and their implications for the conservation of bird communities, *African Journal of Ecology* 2024;62:e13282. **Top cited article in 2024**
4. Inavally AT, **Sadananda M**. (2024) Differential strain sensitivity to low dose anxiolytic Diazepam in anxiety-related behaviour in male Wistars and Wistar-Kyoto, a rat model of endogenous depression, *Indian Journal of Pharmacology and Physiology* 2024;68:108-17. doi: 10.25259/IJPP_431_2023.
5. Inavally AT, D'Souza D, **Sadananda M**. (2024) Phytochemical characterization, antioxidant and anti-microbial activities of the Ayurvedic polyherbal formulation Mentone, *International Journal of Ayurveda Research* 2024;5:85-93.
6. Agni MB, Hegde PS, Rai P, **Sadananda M**, Gowda DKM. (2024). Astaxanthin and DHA supplementation modulates the maternal undernutrition-induced impairment of cognitive behavior and synaptic plasticity in adult life of offsprings: Exploring the molecular mechanism, *Molecular Neurobiology*, <https://doi.org/10.1007/s12035-024-04147-y>
7. Rao S, **Sadananda M**, Pakkala TPM, Shenoy KB. (2023). Bioprospecting of marine fungi from coastal Karnataka region as potential source of economically important enzyme L-Glutaminase and their comparative genomic study, *Journal of Pure and Applied Microbiology* 17(3) 1532-1553
8. Rengachar P, Bhatt AN, Polavarapu S, Veeramani S, Krishnan A, **Sadananda M**, Das UN. (2022) Gamma-linolenic acid (GLA) protects against ionizing-radiation induced damage: an in vitro and in vivo study, *Biomolecules*, doi: 10.3390/biom12060797
9. Shetty RA, **Sadananda M**. (2022) Effect of Mentone® on depression and anxiety in adolescent, endogenous depressive model of Wistar Kyoto rats, *Indian Journal of Physiology and Pharmacology*, 66: 103-110
10. Shukla V, **Sadananda M**. (2021) Social isolation-induced effects on male-specific courtship behaviours and dendritic architecture in associative forebrain areas in Zebra finches (*Taeniopygia guttata*), *Avian Biology Research*, 14: 59-68
11. Shetty RA, **Sadananda M**. (2021) Lipopolysaccharide-induced double hit on neurobehaviour and neurochemistry in the Wistar Kyoto rat, a model with endogenous depressive-like profile, *Int. Journal of Curr. Res. and Rev.*, 13: 65-73

12. Shetty HS, **Sadananda M.** (2021) Bacterial lipopolysaccharide induces a ‘double hit’ with differential effects centrally and peripherally in a Diethylnitrosamine-treated Wistar rat model of hepatic cancer, *Int. Journal of Pharma. Sci. and Res.*, 12: 4730-4744
13. Shukla V, Rani S, Malik S, Kumar V, **Sadananda M.** (2020) Neuromorphometric changes associated with photo stimulated migratory phenotype in the Palaearctic-Indian male redheaded bunting, *Experimental Brain Research* (Springer) 238: 2245-2256
14. Das, U., Bathina, S., Gundala, N., Rhenghachar, P., Polavarapu, S., Devi, A. and **Sadananda M.** (2020) Resolvin D1 ameliorates nicotinamide-streptozotocin-induced type 2 diabetes mellitus by its anti-inflammatory action and modulating PI3K/Akt/mTOR pathway in the brain, *Archives of Medical Research* (Elsevier) 51: 492-503
15. D'Souza, D. and **Sadananda M.** (2019) Stressor during early adolescence in hyperreactive female Wistar Kyoto rats induces a ‘double hit’ manifested by variation in neurobehaviours and brain monoamines, *Neuroscience* (IBRO, Elsevier) 414: 200-209
16. D'Souza, D. and **M. Sadananda** (2017) Estrous phase-dependent changes on anxiety- and depression-like profiles in the late adolescent Wistar-Kyoto rat, *Annals of Neurosciences* (Karger) 24:136-145
17. Shetty, R.A. and **M. Sadananda** (2017) Brief social isolation in the adolescent Wistar-Kyoto rat model of endogenous depression alters corticosterone and regional monoamine concentrations, *Neurochemical Research* (Springer) 42:1470-1477.
18. Shetty, R.A. and **M. Sadananda** (2017) Immediate and delayed anxiety- and depression-like profiles in the adolescent Wistar-Kyoto rat model of endogenous depression following postweaning social isolation, *Behavioural Brain Research* (Elsevier) 320:323-332.
19. D'Souza, D. and **M. Sadananda** (2017) Anxiety- and depression-like profiles during early- and mid-adolescence in the female Wistar Kyoto rat, *International Journal of Developmental Neuroscience* (Elsevier) 56:18-26
20. Rao R.M. and **M. Sadananda** (2016) Influence of state and/or trait anxieties of Wistar rats in an anxiety paradigm, *Annals of Neurosciences* (Karger) 23:44-50
21. Rao R.M. and **M. Sadananda** (2015) Strain- and context-based 50 kHz ultrasonic vocalizations and anxiety behaviour in the Wistar-Kyoto rat, *Journal of Biosciences* (Springer) 40: 561-570.
22. **Sadananda, M.**, Natusch, C., Karrenbauer, B., and R.K.W. Schwarting (2012) 50-kHz calls in rats: effects of MDMA and the 5-HT_{1A} receptor agonist 8-OH-DPAT, *Pharmacology, Biochemistry and Behavior* (Elsevier) 101, 258-264.
23. **Sadananda, M.**, Wöhr, M., and R. K. W. Schwarting, (2008) Playback of 22-kHz and 50-kHz ultrasonic vocalizations induces differential c-fos expression in rat brain, *Neuroscience Letters*, (Elsevier) 435, 17-23.
24. **Sadananda, M.**, Korte, S., and H-J. Bischof, (2007) Afferentation of a caudal forebrain area activated during courtship behaviour: a tracing study in the zebra finch (*Taeniopygia guttata*). *Brain Research* (Elsevier) 1184, 108-120.
25. **Sadananda, M.**, and R. Shetty, (2007) Stress-induced changes in a spatial memory test in the domestic chick. *Behavioral Pharmacology* (Elsevier) 18, 103-104.
26. **Sadananda, M.**, and H-J. Bischof, (2006) C-fos induction in forebrain areas of two different visual pathways during consolidation of sexual imprinting in the zebra finch (*Taeniopygia guttata*). *Behavioural Brain Research* (Elsevier) 173, 262-267.

27. **Sadananda, M.,** and H-J. Bischof, (2006) Afferentation of the lateral nidopallium: A retrograde and anterograde tract-tracing study of a brain area involved in sexual imprinting in the zebra finch (*Taeniopygia guttata*), ***Brain Research*** (Elsevier) 1106, 111-122.
28. **Sadananda, M.,** and H-J. Bischof, (2004) C-fos is induced in the hippocampus during consolidation of sexual imprinting in the zebra finch (*Taeniopygia guttata*), ***Hippocampus*** (Wiley) 14, 19-27.
29. **Sadananda, M.,** (2004) Acetylcholinesterase in central vocal control nuclei of the zebra finch (*Taeniopygia guttata*), ***Journal of Biosciences*** (Springer) 29, 189-200.
30. **Sadananda, M.,** and H-J. Bischof, (2002) Enhanced fos expression in the zebra finch (*Taeniopygia guttata*) brain following first courtship, ***Journal of Comparative Neurology*** (Wiley) 448, 150-164.

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31. Shetty HS, **Sadananda M.** (2021) Lipid peroxidation and anti-oxidant activity in brain and liver during variable stage of Diethylnitrosamine-induced hepatocarcinoma ***Karnatak University Journal of Science***, 52: 106-114
32. **Sadananda, M.,** Natusch, C., and R. K. W. Schwarting, (2008) 50-kHz vocalizations in rats: A dose-dependent study of 3,4-methylenedioxymethamphetamine (MDMA). ***Annals of Neurosciences***, 15, 63-64.
33. **Sadananda, M.,** (2005) Avian brain nomenclature changes, ***Current Science***, 89, 1662-1664.
34. **Sadananda, M.,** (2004) Adult neurogenesis in the brain of higher vertebrates: the paradigm shift, ***Current Science***, 87, 297-307.

Books / Book chapters / Translations published:

35. **Sadananda, M.** (2017) Biodiversity and Biotechnology - Interfacing between science, society. In: Chakravarty, K.K., Chattopadhyay, S., Chaubey, N.P. (Eds.), *Emerging interfaces of social science and public policy in India*, Indian Academy of Social Sciences, Allahabad, pp. 230-236 (ISBN 978-81-7097-318-8)
36. Shetty, R., and **M. Sadananda** (2009) Stress-induced behavioural changes in novelty test in the domestic chick. In: Sridhara, S., Nagachaithanya, B., Chakravarthy, A.K., Shetty, T.K.P. (Eds.) *Recent trends in animal behaviour*, New India Publishing Agency, New Delhi, pp. 115-117 (ISBN 978-8189422-54-7)

Papers / poster presentations in Conferences / Seminars / Symposia:

International

1. **Sadananda M.,** Rao RM. (2021) Differential neuronal activity in stress circuitry as assessed by c-fos expression and corticosterone in a potentiated state anxiety model at ***International Symposium on Advances in Comparative Endocrinology and Behavioral Ecology***, Savitribai Phule Pune University, 1-3 July 2021
2. **Sadananda M.** (2021) Modelling for treatment resistant depression (TRD): Neurobehaviours and monoaminergic neurochemistry across ages in the female Wistar Kyoto rat, **in *Indian Academy of Neurosciences International e-Conference and XXXIX Annual meeting of the Indian Academy of Neurosciences***, IISER, Kolkata, 16-19 December, 2021

3. **Sadananda M. (2016)** Ibotenate induced c-fos expression as a tool for mapping multi-synaptic pathways. *International Conference on Genomics*, Central University of Kerala, 3-4 April 2016
4. **Sadananda, M**, Natusch, C, and Schwarting RKW. (2008) 50-kHz vocalizations in rats: A dose-dependent study of 3,4-methylenedioxymethamphetamine (MDMA). *International Conference on Advances in Neurosciences, Indian Academy of Neurosciences*, Cochin. Annals of Neurosciences, CUSAT, Kochi, 15, 63-64.
5. **Sadananda, M., (2005)** Nidopallial circuitry in birds. *XXIII Annual Conference of the Indian Academy of Neuroscience and International Symposium on Emerging Trends in the Neurosciences*, NIMHANS, Bengaluru, p. 68.
6. **Sadananda, M., and H-J. Bischof, (2003)** Archistriatal afferents to the lateral neostriatum – the amygdalar influence on mate choice in birds. *NCBS Neurobiology Symposium on Networks and Behaviour*, NCBS, Bengaluru, p. 17.
7. **Sadananda, M., and H-J. Bischof, (1997)** The afferentation of the lateral neostriatum – a brain area implicated in sexual imprinting in the zebra finch. *Göttingen Neurobiology Conference*, Goettingen, Germany, p.654
8. **Sadananda, M., and H-J. Bischof, (1996)** Fos expression in the zebra finch brain following courtship and unspecific arousal. *Göttingen Neurobiology Conference*, Goettingen, Germany, p.512

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9. Rao, RM, **Sadananda, M. (2012)**. Ultrasonic vocalization - Spectral analysis of context-specific emission in rats, *Satellite Symposium on Neurobiology of Cognition, Indian Academy of Neurosciences*, p.77

Regional

Invited / plenary talks delivered:

1. **Sadananda M. (2024)** Immunotherapeutic approaches to disease treatment: Prospects and Challenges, *Biotrendcon – International Conference on Emerging Trends in Biotechnology*, Department of Biotechnology, PA College of Engineering, 23 April 2024 (KEYNOTE ADDRESS)
2. **Sadananda M. (2022)** *Research Grants and Publications* at *National Seminar on Research Methodology and Biostatistics*, Srinivas College of Pharmacy, Valachil, Mangalore, 13-15 October 2022 (INVITED LECTURE)
3. **Sadananda M. (2022)** *Effects of peripheral infection on the brain: A study using LPS* at National Webinar on Integrated microbiological and biotechnological approaches for scientific advancements (IMBSA-2022), Dept. of Microbiology, Mangalore University, 7 March 2022 (INVITED TALK)
4. **Sadananda M. (2021)** Insights from bird neuroscience towards advancement of biomedical research at *Webinar on Emerging models in biomedical research*, Kasturba Medical College, Mangalore, 24 July 2021 (INVITED LECTURE)
5. **Sadananda M. (2021)** Developmental trajectories of neurochemical pathways in model of treatment resistant depression, at *42nd Annual Conference of Indian Association of Biomedical Scientists (IABMS) on Recent Trends and Advances in Biomedical Sciences – An*

integrated approach, Nitte deemed to be University, 25-27 November 2021 (INVITED LECTURE)

6. **Sadananda M. (2021)** *Effective restructuring of the curriculum in higher education in accordance with the provisions of NEP – from the Science perspective* at **Webinar on Teacher's Role in NEP Implementation – Awareness, Orientation, Challenges and Responses** jointly organized by Bharatiya Shikshan Mandal, Niti Ayog and Mangalore University, 26 Feb 2021 - (INVITED TALK)
7. **Sadananda M., Shetty RA, D'Souza D. (2019)** Critical periods of brain and behavioural development as time windows of vulnerability and adaptability: Modelling adolescent anxiety- and depressive-like disorders in animals, **International Symposium on Biological Rhythms and Biennial Meeting of the Indian Society of Chronobiology**, 11-13 March 2019 (INVITED LECTURE)
8. **Sadananda M. (2019)**. Role of higher order sensory and associative brain areas in migration-related cognition. **Workshop on Time, Brain and Behaviour**, 6-10 March 2019, CCS University, Meerut, UP (INVITED LECTURE)
9. **Sadananda M, D'Souza D & Shetty RA (2018)** – Modelling of adolescent anxiety- and depressive-like disorders at neurobehavioural and neurochemical levels in the Wistar-Kyoto rat: age- and sex-specific differences, **International Symposium on Translational Neuroscience: From basic to clinical research & XXXVI Annual meeting of the Indian Academy of Neurosciences**, BHU, Varanasi, 29-31 October 2018 (SYMPOSIUM LECTURE)
10. **Sadananda M. (2018)**. Modeling depression / adolescent depression in animal models, **UGC-sponsored National Conference on Mind Body Matters - An interdisciplinary insight**, Jyoti Nivas College (Autonomous), Bengaluru, 1-2 February 2018 (INVITED LECTURE)
11. **Sadananda, M. (2016)** Contributions of the Basel missionaries to science and environment – a glimpse, **International Seminar on Mission Moves 200 years of Basel Mission**, Mangaluru, October 2015 (INVITED LECTURE)
12. **Rao RM & M Sadananda (2013)** - Activity mapping in the brain and anxiety-related behaviours in a state anxiety paradigm, **International Conference on Comparative Endocrinology and Physiology**, Nagpur University, 21-23 October 2013 (INVITED LECTURE)
13. **Sadananda, M. (2012)**. Psycho-stimulation of dopaminergic and serotonergic pathways: Bioprocesses in the brain of animal model system, **National seminar on Biomolecules and Biocatalysts in Bioprocesses**, p.24 (INVITED LECTURE)
14. **Sadananda, M., (2004)** Activity-dependent plasticity in developing neuronal networks: Mechanisms underlying sexual imprinting in birds. **Indian Society of Developmental Biologists, Symposium on Epigenetics, Plasticity and Imprinting**, p. 19. (INVITED LECTURE)

Impact of publications in terms of:

h-index: 16

i10 index: 17

Citation index: 844

Conferences / Seminars / Workshops / Symposia organized:

1. **Two-day Academies-sponsored Lecture Workshop on "Genetics and Human Diseases"**
IAS, INSA, NASI Science Academies, Grant of 2.10 lakhs received from Academies, 4-5 December 2025
2. **International Brain Research Organization-sponsored Brain Awareness Programme and International Day of Immunology**, Grant of 1.5 lakhs received from IBRO France, 21st April 2026
3. **Optum Campus Selection** on 20th June 2025 and **5-week Training Programme** from 24th July to 28th August 2025. 150 students took part in the campus selection and 104 students underwent training.
4. **DBT-Karnataka Skill Vigyan 14-day Faculty Training Program** on Advanced Techniques in Genetic Engineering and Immunotechnology, Grant of 6 lakhs received from DBT, New Delhi, 14-28 February 2022.
5. **Workshop on Research Methodology** on 18 December 2021
6. **E-Step Bootcamp Karnataka – Mangaluru** organized in association with Karnataka Innovation and Technology Society, Govt. of Karnataka on 29 May 2021.
7. **Skill Development Programme on Presentation Skills in English for Science Students** on 23 February, 2021
8. **Special Lecture Series on Bioprospecting of Mushrooms and Canavalia for Nutrition** from 18-21 November 2020.
9. **Bio-Quiz 2019 under the auspices of India Bio@Bengaluru Tech Summit of the Dept. of IT & BT, Govt. of Karnataka**, 8 November 2019. Degree and BTFS students from colleges in Dakshina Kannada District participated.
10. **5-day MHRD-GIAN Course on Neuropeptides in socio-emotional behaviour: From health to disease** from 2-6 July 2019 with **Prof. Inga D. Neumann, Professor & Dean, Faculty of Biology and Preclinical Medicine, University of Regensburg, Germany** was the Foreign Faculty. Rs. 5.44 lakhs received from MHRD for the Course. A total of 25 participants from Delhi, Orissa, Tamil Nadu and Karnataka participated.
11. **UGC-sponsored National Seminar on Research Trends in Frontier Areas of Biological Sciences**, 20 March 2019 under SAP Program UGC-SAP Rs. 60,000/-, Mangalore University 25,000/-
12. Interaction Workshop on **Biotechnology Ignition Grant (BIG)**, 26 July 2018
13. **BRNS and UGC-sponsored 2-day National Seminar on Lab to clinic: Approaches and challenges in drug discovery, design and delivery** jointly organized by Mangalore University and Royal Society of Chemistry (London) on 23-24 February, 2018, Grant received: UGC-SAP Rs. 60,000/-, BRNS Rs. 75,000/-, RSC-IDLS Rs. 9,000/- + travel of RSC speakers
14. **VGST-sponsored One-day Lecture Workshop on Frontier Areas in Biological Sciences" cum Project Presentations of VGST Grantees** on 13 January, 2018, Grant received Rs. 1,00,000/-
15. **IAS, INSA, NASI-Science Academies sponsored 3-day-Lecture Workshop on "Genomics, transcriptomics and beyond"** on 9-10 November, 2017. Grant received Rs. 1,53,500/-
16. **Lecture Series in Avian Neuroscience by Prof. Dr. Hans-Joachim Bischof, University of Bielefeld, Germany**, 3-4 March 2015
17. **14-day SERB School in Chronobiology** 21 Dec 2014 – 4 Jan 2015. Grant of Rs. 18,00,000/- received from SERB for the conduct of the School

18. **Workshop on Animal Welfare, Ethics and Experimentation**, 17 August 2012
19. **Three-day International Workshop on Applications of Nanotechnology to Energy, Environment and Biotechnology**, 14-16 Dec 2010
20. **International Brain Research Organization-sponsored Two-day Lecture Workshop and Poster/Model Exhibition on Brain Awareness**, 20-21 March 2009. Grant of Rs. 1,00,000/- received from IBRO, Paris France for conduct of this workshop.
21. **IAS-INSA-NASI Academies-sponsored 3-day-Lecture Workshop on Evolutionary Biology: Darwin and Beyond**, 17-19 Dec 2009. Grant of Rs. 90,000/- + travel expenses of resource persons received from the Science Academies.
22. **International Brain Research Organization-sponsored Two-day Lecture Workshop and Poster/Model Exhibition on Brain Awareness**, 20-21 March 2009. Grant of Rs. 1,00,000/- received from **IBRO**, Paris France for conduct of this workshop.

Awards / Fellowship / Recognition:

1. Dr. M. Appaswamy Rao Prize for obtaining **FIRST RANK** in the M.Sc. Examination of Karnatak University, Dharwad, 1989
2. **Graduierten Foerderung (Graduate Fellowship)**, State of Nordrhein Westfalen, Germany for PhD work on activity-dependent neuronal gene expression and afferentation of the brain loci involved in consolidation of imprinting in the zebra finch – University of Bielefeld, Germany July 1996-June 1997
3. **Visiting Scientist Fellowship** for carrying out **post-doctoral work and part time teaching at Philipps University, Marburg, Germany** (Ultrasonic vocalizations as indices of positive and negative affective states: a behavioural, pharmacological and neuroanatomical study in rats), April 2007-May 2008
4. **Visiting Scientist, University of Bielefeld, Germany** (Afferentation of ANC, a brain area implicated in courtship in zebra finch, April-May 2004
5. **Young Scientist Project and Fellowship**, DST, New Delhi for Role of the avian amygdala in the development of filial preferences and emotional memory: a study in the chick and the zebra finch (SR/FT/L-41/2005), April 2005-March 2007
6. **Young Scientist Project and Fellowship**, DST, New Delhi for Neurobiology of acquisition and retention of phonetic in birds: A study in the common mynah and the Indian hill mynah (SR/FT/LS-192/2000) July 2001-June 2004
7. **Member-Executive Committee**, Indian Society of Chronobiology **2019-2022**
8. **DBT Nominee**, Institutional Biosafety Committee, Yenepoya University, **2016-2019**
9. **Member**, Institutional Stem Cell Research Committee, Nitte University, **2014-2017: 2018-**
10. **Member**, National Advisory Committee, International Symposium on Chronobiology, March 2019
11. Member, Scientific Committee, 36th Meeting of **Indian Academy of Neuroscience**, Oct 2018
12. **Member**, National Advisory Committee, International Congress on Bioacoustics, Oct 2017 (*Reviewed abstracts of the International Congress*)
13. **Member**, National Advisory Committee, International Conference in Chronobiology, **Oct 2012**
14. **Member**, National Advisory Committee, SERB School in Chronobiology, **2014** (*Course Coordinator of 13th SERB School in Chronobiology 21 Dec 2014 – 3 Jan 2015*)
15. **Member**, BoS in Bioscience, Yenepoya deemed to be University **2022-2025**

16. **Member**, BoS in Biochemistry and Molecular Biology, Central University of Kerala **2025-2028**
17. **Assessor**, NAAC, 2022-
18. **Member**, State Level Committee for NEP Syllabus in Biotechnology, **2022-24**

Membership of Professional Bodies:

- Indian Society for Chronobiology (**2012-**
- Indian Academy of Neurosciences (**2005-**
- Indian Society of Developmental Biologists (**2004-**
- The Ethological Society of India (**2002-**

Any other Information

Additional Qualifications:

- **Certificate (1986-87), Diploma (1987-88) and Advanced Diploma (1988-89) in German**, from the Department of Foreign Languages, Karnatak University (1986-1989).
- **Mittelstufe (C1) of Goethe Institute**, Rothenburg ob der Tauber, Germany (December 1992-February 1993).
- Course to **Problem Based Learning in Higher Education**, UNESCO Aalborg Centre for PBL in Engineering Science and Sustainability, Aalborg University, Denmark – 2021
- **ToT in Clinical Research Associate** organized by Life Science Skill Sector Development Council (LSSSDC) in association with Govt. of Karnataka, Ministry of IT, BT, S&T, KITS, Bengaluru, 1-12 August 2022

Peer review activity:

- Frontiers in Behavioral Neuroscience, Journal of Neuroendocrinology, Scientific Reports, Progress in Neuropsychopharmacology and Biological Psychiatry, Metabolic Brain Disease, Learning and Motivation, Journal of Basic Microbiology, Neuropsychopharmacology, Indian Journal of Experimental Biology, Behavioral Brain Research, Brain Research, Neuropsychopharmacology, PLOS One, Cell Tissue Research, Colloids and Surfaces B: Biointerfaces, Current Science, Journal of Biosciences, Journal of Medicinal Plant Research, African Journal of Microbiology Research
- Project Proposals of DST-SERB, DBT, SERB-POWER

BSc project guidance:

13 (upto 2026)

MSc project guidance in Biotechnology, Biosciences and Zoology:

39 (upto 2026)

Countries visited:

Germany, Austria, Czech Republic, Poland, Switzerland, Italy, New Zealand and France.