# **Curriculum Vitae**

# Personal details

:	H. RAGHURAM
:	Assistant Professor
:	Zoology
:	20.09.2010
No:	8056563043
:	hraghuram@gmail.com
	: : : No: :



# **Educational Qualifications**

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	DEGREE	<u>INSTITUTION</u>	<u>YEAR OF</u> <u>PASSING</u>	<u>MARKS (%)</u>
	Ph.D. <b>(Biology)</b>	School of Biological Sciences Madurai Kamaraj University Madurai 625 021	Degree awarde	ed (15 Dec. 2006)
	M.Sc. (Integrated Biology)	School of Biological Sciences Madurai Kamaraj University	May 2001	Scored 64.6%
	SET <b>(Life Sciences)</b>	Bharathiyar University, Coimbatore	Oct. 2012	Scored 53.7%
	B.Sc. <b>(Zoology)</b>	Madura College, Madurai 625 011 (affiliated to Madurai Kamaraj University)	April 1999	Scored 76.3%
	H. Sc. (Mathematics, Physics, Chemistry & Biology)	St. Britto Higher Secondary School, Madurai 625 016	April 1996	Scored 72.8%
	S.S.L.C <b>(X STD)</b>	Madura College Higher Secondary School, Madurai 625 001	April 1994	Scored 80.2%

# **Specialization in Teaching**

Molecular biology, Recombinant DNA technology, Biochemistry, Medical Laboratory Technology, Animal Physiology, Animal Behavior and Ecology

# **Specialization in Research**

Animal Behaviour, Behavioural Ecology, Environmental Science, Neuroscience, Microbiology, Immunology and Molecular Biology

# **Academic Experiences**

PERIOD	<b>DESIGNATION</b>	<b>INSTITUTION</b>
Sept 2010 – to date	Assistant Professor (management)	Department of Zoology, The American College, Madurai 02
July 2010 – Sept 2010	Guest Lecturer	Department of Animal Science, School of Life Sciences, Bharathidasan University, Tiruchirappalli 24
May 2010 – June 2010	Visiting Fellow	Centre for Ecological Science, Indian Institute of Science, Bangalore 12
May 2007 – April 2010	CSIR-Post doctoral Research Associate	Centre for Ecological Science, Indian Institute of Science, Bangalore 12
Feb 2007 – April 2007	IISc Centenary-Post doctoral Research Associate	Centre for Ecological Science, Indian Institute of Science, Bangalore 12
Nov 2004 – Jan 2007	Senior Research Fellow	Dept. of Animal Behaviour & Physiology School of Biological Sciences, Madurai Kamaraj University, Madurai 21
Sept 2001 – Oct 2004	Junior Research Fellow	Dept. of Animal Behaviour & Physiology School of Biological Sciences, Madurai Kamaraj University, Madurai 21

# **Teaching Experiences**

S. No.	Name of the Institution	Level	Degree courses	Period of service	Total years of Experience
1.	School of Biological Sciences, Madurai Kamaraj University, Madurai	M.Sc.	Integrated Biology	July 2001 to April 2002	10 months
2.	-do-	M. Phil.	Biology	Aug. to Nov. 2006	4 months
3.	Dept. of Animal Science, School of Life Sciences, Bharathidasan University, Tiruchirappalli	M.Sc.	Life Sciences, Animal Biotechnology	July 2010 to Sept. 2010	2 months
4.	Madurai Kamaraj University (Evening), Alagar Koil road, Madurai	M. Phil.	Zoology	Jan 2018 to May 2018	5 months
5.	The American College, Madurai	B.Sc. & M.Sc.	Zoology & Microbiology	Sept. 2010 to Till date	11 years Four month 10 days (as on 31.01.2022)

# **Research Experiences**

#### 22 years of research experience in 'Animal behavior' with bats as a study animal

**Research supervisor to post-graduate students** (2011-to date) PG & Research Department of Zoology, The American College, Madurai 02 Research Area: *Animal Behaviour* 

**Post-doctoral research Associate** (2007-2010) **Center for Ecological Sciences, Indian Institute of Science, Bangalore 560 012** Title of work: *Calling behavior of paleotropical crickets (Gryllidae) and katydids* (*Tettigonidae*) in the context of predation by bats. **Supervisor: Dr. Rohini Balakrishnan, CES, IISc.** 

#### Senior Research Fellow (2004-2007)

Department of Animal Behaviour and Physiology School of Biological Sciences, Madurai Kamaraj University, Madurai 21 Title of work: '*Echolocation clicks of fulvous fruit bat Rousettus leschenaulti*'' **Supervisor: Dr. Sripathi Kandula, SBS, MKU** 

#### Junior Research Fellow (2001-2004)

**Department of Animal Behaviour and Physiology School of Biological Sciences, Madurai Kamaraj University, Madurai 21** Title of Thesis: '*Localization of prey by the gleaning bat Megaderma lyra*" **Supervisor & Ph.D. mentor: Dr. G. Marimuthu, SBS, MKU** 

#### M.Sc. Dissertation (2000-2001)

School of Biological Sciences, Madurai Kamaraj University, Madurai 21 Title of dissertation: '*Food choice and foraging behavior of Indian fulvous fruit bat Rousettus leschenaulti*'.

Supervisor: Dr. G. Marimuthu, SBS, MKU

# **Research Summary**

Papers	Citations	h-index	i-10 index
23	278	11	-
23	410	13	16
21	253	10	-
	Papers   23   23   23   21	23 278   23 410	23 278 11   23 410 13

\*As on October 2021

#### List of Publications in Peer reviewed Journals

- 1. Jenifer, S.G., Marimuthu, G. and **Raghuram**, **H** (2021) Isolation and characterization of chitinolytic bacterium, *Escherichia fergusonii* AMC01 from insectivorous bat, *Taphozous melanopogon*. *Journal of Basic Microbiology* 61: 940-946. (Impact Factor: 2.28)
- Allwin Mabes Raj, A.F.P., Emmanuvel Rajan, K. and Raghuram, H (2018) Responses of shortnosed fruit bat, *Cynopterus sphinx* (Vahl 1797) towards distress calls of their conspecifics from related and unrelated sites: Implications for building social relationship. *Current Science* 115 (11): 2150-2155. (Impact Factor: 0.93).
- Mahandran, V., Raghuram, H and Nathan, P.T (2016) Geophagy by the Indian Short-nosed fruit bat *Cynopterus sphinx* (Pteropodidae) while foraging on *Madhuca latifolia* (Sapotaceae) in Tamil Nadu, South India. *Acta Ethologica* 19(1): 95-99. (Impact factor-1.00)
- 4. Mariappan, S., Bogdanowicz, W., **Raghuram, H.,** Marimuthu, G and Emmanuvel Rajan, K (2016) Structure of distress call: implication for specificity and activation of dopaminergic system. *Journal of Comparative Physiology A* 202(1): 55-65. (Impact factor- 2.04).
- 5. **Raghuram**, H., Deb, R., Nandi, D and Balakrishnan, R (2015) Silent katydids are at higher risk of bat predation than acoustically signalling katydid males. *Proceedings of the Royal Society B* (*London*) 282 (1798): 20142319. (Impact factor-**5.05**)
- 6. **Raghuram, H.,** Jain, M and Balakrishnan, R (2014) Species and acoustic diversity of bats in a palaeotropical wet evergreen forest in southern India. *Current Science* 107(4): 631-641. (Impact factor-0.93)
- Raghuram, H., Satya priya, E.Y, Marimuthu, G and Elangovan, V. (2012) Effect of reproduction and nutritional qualities of fruits on food choice and voluntary food intake of Indian fulvous fruit bat, *Rousettus leschenaulti* (Desmarest 1820). *Proceedings of Indian National Science Academy* 78 (1): 1-7.
- 8. Ganesan, A., **Raghuram**, H, Nathan, P.T, Marimuthu, G and Rajan, K.E (2010) Distress call induced gene expression in the short-nosed fruit bat *Cynopterus sphinx*. *Journal of Comparative Physiology A*: 196(2): 155-64. (Impact factor-2.04)
- Nathan, P.T., Karuppudurai, T, Raghuram, H and Marimuthu, G (2009) Bat foraging strategies and pollination in *Madhuca latifolia* (Sapotaceae). *Acta Chiropterologica* 11(2): 435-441. (Impact factor-1.13)
- Raghuram, H, Thangadurai, C, Gopukumar, N, K. Nathar and Sripathi, K (2009)The role of olfaction and vision in the foraging behaviour of an echolocating megachiropteran fruit bat, *Rousettus leschenaulti* (Pteropodidae). *Mammalian Biology* 74 (1): 9-14. (Impact factor-1.48).
- 11. **Raghuram, H** and Marimuthu, G (2007a) Maternal feeding of offspring with vertebrate prey in captive Indian false vampire bat, *Megaderma lyra*. *Acta Chiropterologica* 9(2): 437-443. (Impact factor-1.13)

- 12. **Raghuram, H** and Marimuthu, G (2007b) Development of prey capture in the Indian false vampire bat *Megaderma lyra*. *Ethology* 113 (6): 555-561. (Impact factor-1.79)
- Raghuram, H., Gopukumar, N and Sripathi, K (2007) Presence of single as well double clicks in the echolocation signals of a fruit bat *Rousettus leschenaulti* (Chiroptera: Pteropodidae). *Folia Zoologica* 56(1): 33-38. (Impact factor-0.59)
- Elangovan, V., Satya Priya, E.Y, Raghuram, H and Marimuthu, G (2007) Wing morphology and flight development in the Indian short-nosed fruit bat *Cynopterus sphinx*. *Zoology*: 110(3):189-196. (Impact factor-1.67).
- Raghuram, H., Balaji Chatopadhyay, Thiruchenthil Nathan, P and Sripathi, K (2006) Sex ratio, population structure and roost fidelity in a free-ranging colony of Indian false vampire bat *Megaderma lyra*. *Current Science* 91 (7):965-968. (Impact factor-0.93)
- Sripathi, K., Raghuram, H and Thiruchenthil Nathan, P. (2006) Echolocation sounds of painted bat *Kerivoulapicta* (Chiroptera: Vespertilionidae). *Current Science* 91 (9):1145-1147. (Impact factor-0.93)
- 17. Raghuram, H and Marimuthu, G (2005) Donald Redfield Griffin The Discovery of Echolocation. *Resonance* 10(2): 20-32.
- Ratcliffe, J.M., Raghuram, H, Marimuthu, G, Fullard, J.H, and Fenton, M.B (2005) Hunting in unfamiliar space: echolocation in Indian false vampire bat, *Megaderma lyra*, when gleaning prey. *Behavioral Ecology and Sociobiology* 58(2): 157-164. (Impact factor- 2.35)
- Nathan, P. T., Raghuram, H, Elangovan, V, Karuppudurai, T and Marimuthu, G (2005) Bat pollination on kapok tree, *Ceiba pentandra. Current Science* 88(10): 1679-1681. (Impact factor-0.93)
- 20. Elangovan, V., **Raghuram, H,** Satya Priya, E.Y and Marimuthu, G (2004) Wing morphology and flight performance in *Rousettus leschenaulti*. *Journal of Mammalogy* 85(4): 806-812. (Impact factor-1.84)
- 21. Sripathi, K., **Raghuram, H,** Rajasekar, R, Karuppudurai, T and Abraham, S.G (2004) Population size and survival in the Indian false vampire bat *Megaderma lyra*. *Acta Chiropterologica* 6(1): 145-154. (Impact factor-1.13)
- 22. Elangovan, V., Satya Priya, E.Y, **Raghuram, H,** and Marimuthu, G (2003) Postnatal development in the Indian short-nosed fruit bat *Cynopterus sphinx*: growth rate and age estimation, *Acta Chiropterologica* 5(1): 107-116. (Impact factor-1.13)
- 23. Elangovan, V., **Raghuram**, H, Satya Priya, E.Y and Marimuthu, G (2002) Post-natal growth, age estimation and development of foraging behaviour in the fulvous fruit bat *Rousettus leschenaulti*. *Journal of Biosciences* 27(7): 695-701. (Impact factor-2.06)

24. Doss, DPS., **Raghuram, H.,** Muthuselvam, S., Sudhakaran, M.R and Isaac, S (2018) Postnatal growth and age estimation in tropical insectivorous bat, *Hipposideros speoris*. *International Journal of Zoology and Applied Biosciences* 3(1): 34-40.

# **Publications as Book Chapters**

- Raghuram, H., Singaravelan, N., Nathan, P.T., EmmanuvelRajan, K and Marimuthu, G (2011) Foraging ecology of pteropodid bats: pollination and seed dispersal. *Chapter IV*. In: *Bats: Biology, Behavior and Conservation* (Jakob L. Zupan & Sara L. Mlakar, eds). Pp.177-188. Nova Science Publishers, Inc. New York, USA. 356 pp. (ISBN:978-1-61209-749-7)
- H. Raghuram. Box-9.2: Conservation of bats in India. Pp-145-46. *Chapter 9* Luis F. Aguirre, Rodrigo A. Medellin and Bernal Rodriguez-Herrera (2017) From Threat to opportunity strategies for bat conservation in the Neotropics. In: *Tropical Conservation Perspectives on Local and Global Priorities* (A. Alonso Aguirre and Raman Sukumar eds). Pp.140-153. Oxford University Press, UK. (ISBN: 9780199766987)
- Marimuthu, G. and Raghuram, H. (2021) Behavioural ecology of cave bats in Southern part of India. Chapter 4, In: *Cave Science: Insights from the Indian Subcontinent* (Biswas. J ed.), Pp-*in press*, Published by National Cave Research and Protection Organization, India. (ISBN: 978-81-939423-0-7)

# Publication in News letter

1. Kanagaraj, C., Nathan, P, **Raghuram, H** and Rajan, K.E (2007) Evolutionary dynamics of Hipposiderid bats in the Indian sub-continent. *Bat Research News* 48(3): 128.

# **GenBank Submission**

Jenifer, S.G and **Raghuram**, **H.** *Escherichiafergusonii* gene for 16S ribosomal RNA, partial sequence strain: AMC01. Accession number: LC060905.1.

# Full length Papers Published in Conference Proceedings

- Raghuram, H and Marimuthu, G (2003) Onset of gleaning during the postnatal growth of the Indian false vampire bat *Megaderma lyra*. In *Proceedings of 28<sup>th</sup> Ethological Society of India* (Annamalai, R., Narayanan, M and Vanitharani, J eds.), 93-96 Pp.
- Raghuram H, Velladurai P, Sivaruban T, Angeline T, Joy Sharmila E, Joseph Thatheyus A and Navaneethakannan K (2017) Stress, difficulties and challenges faced by the Zoology students of the American College, Madurai. In: Proceedings of NAAC sponsored National conference on *"Strategies of quality initiative, enhancement and sustenance in higher education"* (John Sekar J, Gnanasekar K, Muthuraja C and Sanjay R eds.) Pp.123-129, Published by Vergal Publication, Madurai. Conference organized by IQAC, the American College, Madurai during 21 & 22 February 2017.
- 3. Barathy S, Sivaruban T and **Raghuram H** (2018) Phenol and phenolic compounds are xenobiotics stressful environmental factors to *Oreochromis mossambicus*. In: Proceedings of

the National Seminar "*Emerging Challenges in Biodiversity Conservation with Special Reference to Recent Trends in Ecotoxicology*" (Bindu, V.S. ed.) organized by MSM College, Kayamkulum, Alappuzha District, Kerala from 26 to 27 February 2018. Pp.395-404.

#### Symposia and Conferences attended / Papers presented

#### National

- Elangovan, V., Raghuram, H, Satya Priya, E.Y and Marimuthu, G. Postnatal growth and age estimation in the fulvous fruit bat *Rousettus leschenaulti*. Poster presentation in the 26<sup>th</sup> *Conference of Ethological Society of India*, held in Madurai Kamaraj University, Madurai, India from 13.12.2000 to 15.12.2000.
- ii) **Raghuram, H.,** Elangovan, V and Marimuthu, G. Food choice and foraging behaviour of Indian fulvous fruit bat *Rousettus leschenaulti*. **Poster presentation** in the *Aqua-terr Annual Symposium* held on 04.04.2001 at Madurai Kamaraj University.
- iii) Raghuram, H., Elangovan, V, Satya Priya, E.Y and Marimuthu, G. Age estimation in the fulvous fruit bat *Rousettus leschenaulti*. Oral presentation in 27<sup>th</sup> Conference of the Ethological Society of India held during March 25-27, 2002 at University of Kerala, Kerala. India
- iv) Raghuram, H and Marimuthu, G. Onset of gleaning during the postnatal growth of Indian false vampire bat *Megaderma lyra*. Oral presentation in the 28<sup>th</sup> Conference of the Ethological Society of India held during February 7 and 8, 2003 at Sarah Tucker College, Tirunelveli, Tamil Nadu, India.
- v) Participated in the *Science day and Aqua-Terr Annual Symposium* conducted by the school of Biological Sciences, Madurai Kamaraj University, Madurai, India on 28.02.2003.
- vi) Sripathi, K., **Raghuram, H**., Rajasekar, R, Karuppudurai, T and Abraham, S.G. Population size and survival in the Indian false vampire bat *Megaderma lyra*. **Poster presentation** in the *Science day and Aqua-terr Annual Symposium* held on 05.03.2005 at Madurai Kamaraj University.
- vii) Nathan, P.T., **Raghuram, H**., Elangovan, V, T. Karuppudurai and Marimuthu, G. Chiropterophilly enhances fruit set in economically important kapok tree *ceiba pentandra*. **Poster presentation** in the *Science day and Aqua-terr Annual Symposium* held on 05.03.2005 at Madurai Kamaraj University.
- viii) **Raghuram, H**. Localization of prey by the gleaning bat *Megaderma lyra*. **Oral presentation** in the 4<sup>th</sup> SERC School in Chronobiology held during 24.12.05-04.01.06 at Annamalai University, Chidambaram, Tamil Nadu, India.
- ix) Sripathi, K., **Raghuram**, **H** and Thiruchenthil Nathan, P. Echolocation sounds of painted bat *Kerivoulapicta* (Chiroptera: Vespertilionidae). **Poster presentation** in the *Science day and Aqua-terr Annual Symposium* held on 04.03.2006 at Madurai Kamaraj University.

- x) Nathan, P.T., Raghuram, H and Marimuthu, G. Pollination of cauliflorus Crescentia cujeteand flagelliflorous Kigelia pinnata by the Indian short-nosed fruit bat Cynopterus sphinx. In the 1<sup>st</sup> Annual Conference of the Association for Tropical Biology and Conservation Asian Chapter held during 06.03.2007 to 08.03.2007 at Temple Bay Hotel, Mahabalipuram, Chennai, India (Presented by PTN)
- xi) Participated in the XIX National Symposium on Chronobiology conducted by the School of Biological Sciences, Madurai Kamaraj University, Madurai, India from 07.12.2007 to 08.12.2007.
- xii) Participated in the *Science day and Aqua-Terr Annual Conference* conducted by the school of Biological Sciences, Madurai Kamaraj University, Madurai, India on 29.03.2008.
- xiii) Raghuram, H and Marimuthu, G. Maternal feeding of offspring with vertebrate prey in captive Indian false vampire bat, *Megaderma lyra*. Oral presentation in the 1<sup>st</sup> Annual Student Meet on Ecology, Evolution and Conservation Science (SMEECS) held during August 20 and 21, 2008 at National Center for Biological Sciences (NCBS), Bangalore, India.
- xiv) **Raghuram, H** and Balakrishnan, R. Bats of Kudremukh National Park. **Oral Presentation** in the *Silver Jubilee Symposium- 'Ecology and the Environment in India: past, present and future'*, held during October 22-24, 2009 at the Indian Institute of Science, Bangalore, India
- xv) Participated in the one-day symposium On The Idea of Evolution: A Symposium to commemorate 150 years of The Origin of Species by Charles Darwin organized by Genesis, MRDG, IISc., on 24 November 2009 at IISc, Bangalore 12.
- xvi) **Raghuram, H.,** Jain, M and Balakrishnan, R. Species diversity and echolocation calls of bats of Kudremukh National Park. **Poster presentation** in the *National Science day and Aqua-terr Annual Symposium* held on 28.02.2011 at Madurai Kamaraj University.
- xvii) Suthagar, Rand Raghuram, H. Roosting in temples: Are bats safe? Poster presentation in the National Science day & 43<sup>rd</sup> Aqua-terr Annual conference on biological Sciences held on 28.02.2012 at Madurai Kamaraj University.
- xviii)Participated in the *National Science day and 44<sup>th</sup> Aqua-Terr Annual Conference* conducted by the school of Biological Sciences, Madurai Kamaraj University, Madurai, India on 28.02.2013.
- xix) Raghuram, H., Deb, R., Nandi, D and Balakrishnan, R. Response of lesser false vampire bat, Megaderma spasma towards calling songs of katydids and live fluttering katydids. Oral presentation in National symposium on behavioural ecology: molecules to organisms – 2014 held during November 7-9, conducted by Banaras Hindu University, Varanasi.
- xx) Nathan PT, Raghuram H, Karuppudurai T, Elangovan V and Marimuthu G. Bat foraging strategies and pollination of two Indian tropical trees, *Ceiba pentandra* (Bombacaceae) and *Madhucalatifolia* (Sapotaceae). Poster presentation in *National symposium on behavioural ecology: molecules to organisms 2014* held during November 7-9, conducted by Banaras Hindu University, Varanasi.

- xxi) Participated in the DBT sponsored National conference on 'Community microbial consortia and the human holobiont – implications of yet-unculturable microorganisms in systemic health, disease and personalized medicine' held during 7-8 December 2015 at the American College, Madurai.
- xxii) Raghuram H. Species diversity and echolocation calls of bats in Kudremukh National Park, Southern Western Ghats. Poster presentation in National Conference on Western Ghats: Threats and Conservation conducted by the PG & Research Department of Zoology, The American College, Madurai on 17 October 2018.
- xxiii)Priyanka S.V.L., Soniya K., Kasthuri M and Raghuram H. Can microbes contribute to the persistence of coral reefs? Poster Presentation in National Conference on Coral Reefs: Threats and Conservation conducted by the PG & Research Department of Zoology, The American College on 12 February 2019.
- xxiv) Raghuram H (2019) Insect preys of lesser false vampire bat, Megaderma spasma. Poster Presentation in National Conference on Emerging Trends in Entomology conducted by the PG & Research Department of Zoology, The American College, Madurai during 7-8 March 2019.
- xxv) Participated in *National Conference on 'Recent Trends in Biological Sciences'* on Feb 2020 organized by the PG and Research Department of Zoology, The American College, Madurai.

#### International

- i) Participated in *The IISc centenary Conference* conducted by the Indian Institute of Science, Bangalore, India held at IISc campus from 13-12-2008 to 16-12.2008.
- Raghuram, H and Marimuthu, G. Mother-young relations and prey capture in Indian false vampire bats. In the 3<sup>rd</sup> International Symposium of Integrative Zoology: 'Biological consequences of global change and Darwin 200', held during July 8-10, 2009 at Beijing, China (Presented by GM)
- iii) Raghuram, H., Nathan, P.T, Karuppudurai, T and Marimuthu, G. Bat foraging strategies and pollination in *Madhucalatifolia* (Sapotaceae). Oral presentation in the 5<sup>th</sup> International Canopy Conference 2009, held during October 25-31 at Indian Institute of Science, Bangalore, India.
- iv) **Raghuram, H.** Foraging behavior of lesser false vampire bat, *Megadermaspasma*. **Oral presentation** in the *ICPM (International Conference on Physiology and Medicine) 2014*, held during 15-17 October 2014 at Periyar University, Salem.
- v) **Raghuram, H.,** Sivaruban, T. and Velladurai. Selenium rich foods and their role in immune system a review. **Poster Presentation** in the DBT & ICMR sponsored *International Conference on "New Horizons, Emerging Challenges and Recent Paradigms in Food Mediated Immunity and their Role in Human Health and Longevity* held during 31 August and 1 September 2016, at the American College, Madurai.

- vi) Sivaruban, T., S. Barathy., **Raghuram, H.,** Venkatesh, S. and Karuthapandi, S. Antioxidant properties of *Spirulina platensis* and *S. maxima*. **Poster Presentation** in the DBT & ICMR sponsored *International Conference on "New Horizons, Emerging Challenges and Recent Paradigms in Food Mediated Immunity and their Role in Human Health and Longevity* held during 31 August and 1 September 2016, at the American College, Madurai.
- vii) Allwin Mabes Raj, A.F.P., Emmaunavel Rajan K. and Raghuram H. Assessing the role of distress calls in the short-nosed fruit bat, *Cynopterus sphinx*. Poster Presentation in the TNSCST Sponsored International Conference on Current Scenario in Physiology & Medicine held during 22-23 February 2019 at the Periyar University, Salem.

#### **Participation in Workshops and Training Programmes**

- 1. Participated in the practical Workshop on *Field techniques, Taxonomy & Conservation of Bats of India and South Asia* conducted by CCINSA, Coimbatore held in Madurai Kamaraj University, Madurai, India from 6.07.2000 to 7.07.2000.
- 2. Participated in the Conservation Assessment and Mangement Plan (CAMP) Workshop for South Asian Chiroptera conducted by CCINSA, Coimbatore held in Madurai Kamaraj University, Madurai, India from 21.01.2002 to 25.01.2002.
- 3. Participated in the *Practical Workshop on Field Techniques for Ecological Studies, Captive Maintenance and Public Education for Chiroptera Conservation* conducted by CCINSA, Coimbatore held in College of Forestry, Kerala Agricultural University, Thirussur from 28.07.2003 to 01.08.2003.
- 4. Participated in the two-weeks training workshop *Methods in Bahavioural Ecology* conducted by Centre for Ecological Sciences, Indian Institute of Science, Bangalore from 12.01.2004 to 24.01.2004.
- 5. Participated in the two-weeks training *Refresher Course on Animal Behaviour* conducted by Department of Animal Behaviour and Physiology, School of Biological Sciences, Madurai Kamaraj University, Madurai from 08.12.2004 to 21.12.2004.
- 6. Participated in the two-week training workshop 4<sup>th</sup> SERC School in Chronobiology conducted by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram, Tamil Nadu, India from 24.12.05 to 04.01.06.
- 7. Participated in 4 days Regional Training Workshop on *Surveillance and Prevention of Emerging Infectious Diseases from Wildlife* conducted by United States Agency International Development (USAID) and PREDICT (India), Asian Nature Conservation Foundation (ANCF), Indian Institute of Science, Bangalore from 27.07.2010 to 30.07.2010.
- 8. Participated in 2 days Workshop on *Science Academies' lecture workshop and 45<sup>th</sup> Aqua-Terr annual conference* conducted by the School of Biological Sciences, Madurai Kamaraj University, Madurai from 27-28, February, 2014.

- 9. Participated in 2 days Workshop on *Science Academies' lecture workshop on recent trends in biological sciences* organized by the PG and Research Department of Zoology, The American College, Madurai on 21 & 22 January 2016.
- Participated in 2 days Workshop on DNA Barcoding: Hands-on practice for beginners organized by Molecular Biodiversity Research Division, Govt. Arts College, Ootty in collaboration with Paul Hebert Centre for DNA Barcoding and Biodiversity studies, Dr. Babasheb Ambedkar Marathwada University, Aurangabad, Maharashtra on 30<sup>th</sup> and 31<sup>st</sup> of March 2016.
- 11. Participated in 3 days Workshop on *Science Academies' lecture workshop on Introduction to Modern Biology* organized by the PG and Research Department of Zoology, The American College, Madurai between 19.01.2017 and 21.01.2017.
- 12. Participated in 3 days Workshop on *Science Academies' lecture workshop on Recent Trends in Modern Biology* organized by the PG and Research Department of Zoology, The American College, Madurai between 23.01.2018 and 25.01.2018.
- 13. Participated in one day workshop on *Curriculum Developments* organized by PG & Research Department of Zoology, The American College, Madurai on 21 June 2019.
- 14. Participated and completed 2 weeks online Faculty Development Programme (FDP) on *Pedagogy & Research Methods* from 24.05.2021 to 06.06.2021 Organized by Human Resource Development Centre (HRDC) and Internal Quality Assurance Cell (IQAC), AMET (Academy of Maritime Education & Training) University, Chennai.
- 15. Participated and completed 3 days online course on *DNA Taxonomy & Phylogeny* during 23-25 June 2021 organized by Centre for Climate Change Studies, Sathyabama Institute of Science and Technology, Chennai.

# **Participation in Seminars**

- 1. Participated in the Seminar on *Current Trends in Bio-Statistics* conducted by Department of Applied Mathematics, Madurai Kamaraj University on 01.10.2003.
- 2. Participated in the seminar on *Recent Trends in Ecotoxicological Research* conducted by the Department of Zoology, Directorate of Distance Education, Madurai Kamaraj University on 09.08.2017.

# Invited Lectures delivered (As resource person)

- 1. 'How do bats catch frogs?' on 19.11.2004 at School of Biological Sciences, Madurai Kamaraj University, Madurai, India
- 'Echolocation and resource partitioning in the Indian false vampires Megaderma lyra and M. spasma' on 28.04.2009 at National Center for Biological Sciences (NCBS), Bangalore, India.

- 3. 'Batting for bats''- (Biology and behavior of bats) on 28.12.2011 at Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu, India.
- 4. *'Anatomy of angiosperms'* on 08.07.2016 at TVS Lakshmi School, Karuppayurani, Madurai, Tamil Nadu, India.
- 5. 'Carbohydrates and its functions' on 16.07.2016 at TVS Lakshmi School, Karuppayurani, Madurai, Tamil Nadu, India.
- 6. *'Proteins and its functions'* on 22.07.2016 at TVS Lakshmi School, Karuppayurani, Madurai, Tamil Nadu, India.
- 7. Participated as chief guest and as a resource person delivered a special lecture on *Conservation of Biodiversity*' at the BioStar 2016& wildlife week celebrations of Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu, India on 14.10.2016.
- 8. As resource person, delivered a special lecture on the topic '*Biodiversity and Conservation of bats of India*' at the one-day National Level Thematic Workshop on Biodiversity conservation issues and challenges conducted by the Dept. of Zoology, NGM College (Autonomous), Pollachi 642 001 on 21.03.2017.
- 9. Delivered a special lecture on the topic "Foraging behavior, pollination and seed dispersal by fruit bats of South India" at the Plascia-Botany Association Meeting held at the Department of Botany, The American College, Madurai on 01.10.2018.
- 10. Delivered a special lecture in Uyiri 1.0: A Webinar Series conducted by BioTrivia on the topic 'Bats and public health' on 20.06.2020.
- 11. As a resource person delivered a lecture on the topic "Ecology of bats: Species diversity, behaviour and conservation' in the National Webinar on 'Taxonomy and its application: Learn from the experts' organized by the Zoological Survey of India, Western Regional Centre, Pune, Maharashtra on the 09.09.2020.

# Webinars attended

- Participated in the International Virtual Conference on "COVID-19 recent updates and current advances" organized by the Department of Microbiology, The American College, Madurai during 3rd and 4th June 2020
- Attended the National level Webinar on 'Teacher Vs Learner: Impact of COVID-19 in colleges' Conducted by the Internal Quality Assurance Cell (IQAR) of The American College, Madurai on 22 July 2020
- Attended the International web conference on 'The Science of Yogic Breathing' conducted by Presidency College, Chennai on July 24, 2020 (forenoon).

• Attended National Webinar on 'Microplastics - identification, quantification and its impact on Marine biodiversity' organized by the Department of PG Zoology, Aditanar College of Arts and Science, Tiruchendur on July 24, 2020 (afternoon).

# **Professional Recognition (Awards / Fellowships received)**

- State Level Best NSS (National Service Scheme) volunteer award for the year 1997-1998
- Junior Research Fellowship (JRF) from *Department of Science & Technology* (DST), INDIA (3 years during October 2001 to September 2004) through a research grant sanctioned to Prof. G. Marimuthu, Madurai Kamaraj University, INDIA.
- **Research Associateship (RA)** from *Centenary Post-doc Fellowship* awards from Indian Institute of Science, Bangalore, INDIA (3 months during February 2007 to April 2007)
- Research Associateship(RA) from *Council of Scientific and Industrial Research* (CSIR), INDIA (3 years from May 2007 to April 2010)
- Best Poster Presentation Award during the International Conference on Current Scenario of Physiology & Medicine held at Periyar University, Salem on 22-23 February 2019.

# Peer Reviewer in Journals

2007 onwards to date: Journal of Threatened Taxa, JoTT (National)

- 2007 onwards to date: Small mammal mail (National)
- 2010 Mammalia (International)
- 2013 Anatomy and Physiology Current research (International)
- 2015 Journal of Microscopy and Ultrastructure, Elsevier (International)
- 2018 Austral Ecology, Wiley (International)
- 2019 Tropical Ecology, Springer (International)
- 2019 Biology Letters, Royal Society, London (International)
- 2020 Environmental Technology and Innovation, Elsevier (International)
- 2021 ZOO's Print (National)
- 2022 Environmental Technology and Innovation, Elsevier (International)

# **Member of Scientific Bodies**

Life Member - Chiroptera Conservation and Information Network of South Asia (CCINSA) Life member - Indian Society for Chronobiology (ISC)

#### Administrative works at the American College, Madurai:

- 1. 2012 Academic advisor for II B.Sc. Zoology.
- 2. 2013 Academic advisor for III B.Sc. Zoology.
- 3. 2014 Academic advisor for I M.Sc. Zoology.
- 4. 2015 Member in 'Prize distribution' committee for college day function.
- 5. 2015 Member in 'May I Help You' (Student Service Committee) for Admission 2015.
- 6. 2014-2016 Member in collecting evidences and reports for all NAAC committees.

- 7. From 2011 to 2018 served as member in the admission committee in the PG & Research Dept. of Zoology, in scrutinizing applications for M.Sc. Zoology Program.
- 8. Served as member in 'Time table committee' in preparing the time table for UG and PG Zoology Program during the academic year 2014-2016.
- 9. 2016 Member in preparation of proposal for DBT-STAR college scheme.
- 10. 2016 Member in preparation of proposal for DST-FIST.
- 11. 2016 Member in preparation of report for UGC-Autonomy Review.
- 12. 2017 Member in Preparation of proposal for DST-INSPIRE Science Internship program.
- 13. 2020-2021 Member in NAAC criterion III committee