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Work Experience

Feb 2025 – till date	Scientist , Seri Biotech Research Laboratory, Bangalore, INDIA
Nov 2018 – Feb 2025	Scientist , Central Muga Eri Research and Training Institute, Jorhat, INDIA
April 2018 – Oct 2018	Visiting Professor , Southwest University, Chongqing, CHINA
Jan 2011 – Dec 2017	Scientist and Group Leader , Centre for DNA Fingerprinting and Diagnostics, Hyderabad, INDIA.
Mar 2009 – Jan 2011	Postdoctoral Research Associate – California Institute of Technology, USA Project: Development of single allele under-dominance for population gene drive systems

Education

2003 - 2009 **Ph. D** – Centre for DNA Fingerprinting and Diagnostics, Hyderabad, INDIA.
2000 - 2002 **MSc (Agril.)** – Department of Biotechnology, University of Agricultural Sciences, Bangalore, INDIA. [GPA 9.15 (91.5%) on 10.00 point scale]

Awards and Fellowships

2022 Certificate of excellence awarded in recognition of the best services in Silkworm / Biotechnology Divisions of CMERTI, Jorhat for the year 2021-22
2022 Best Presentation Award (Third prize), in National Symposium on Vanya Sericulture: An Opportunity Galore held on 28th & 29th October conducted by CTR&TI, Ranchi.
2018 Best Trainee award in Foundation Training for Young Scientists (CSB, Bangalore)
2015 Founding Member, Indian National Young Academy of Science (INYAS)
2012 Innovative Young Biotechnologist Award (IYBA), Department of Biotechnology, Government of India
2011 Indian National Science Academy (INSA) Young Scientist Medal
2003 - 2008 Junior and Senior Research Fellowships (CSIR, Government of India)
2000 26th rank in Indian Council of Agriculture Research (ICAR) examination for Junior Research Fellowship to pursue postgraduate studies.

Particulars of memberships in academies/societies/professional bodies

- 1) Member, IBSC, CSIR-NEIST Jorhat Assam (2024)
- 2) Member, Scientific Advisory Board, International Congress of Entomology 2024, Kyoto, Japan.
- 3) Editorial Board Member, International Journal of Industrial Entomology (IJIE).

- 4) Scientific Section Convener, Genetics and Genomics. International Congress of Entomology 2024, Kyoto, Japan.
- 5) Editorial Board Member, International Journal of Wild Silkworm and Silk. 2020-
- 6) Member, Expert Group on biosafety and biosecurity issues arising from the research and environment release of GE insects, RCGM, Department of Biotechnology, Government of India. 2020-
- 7) Member, Working Group on International Collaboration, Central Silk Board, Bangalore. 2019-
- 8) Editorial Board member, *Scientific Reports* Journal (Nature Publishing Group) - 2017-2019
- 9) Member, Indian National Young Academy of Science (INYAS) - 2015-2020
- 10) Member, Expert Group on 'Research on Technology Development in Silk and its Applications in Biomaterials' Department of Biotechnology, Government of India, 2014-2018
- 11) Member, Research Advisory Committee, Seri-Biotech Research Laboratory, Central Silk Board, Bangalore, India. 2014-2017
- 12) Member, Scientific Advisory Committee, NCLAS, National Institute of Nutrition, Hyderabad, India. 2014-2019
- 13) Member, International Consortium on *Spodoptera litura* Genome Sequencing
- 14) Organizer of the symposium on 'Genomics and genome engineering in the silkworm' in the 'International Congress of Entomology' held in Orlando, USA from 25-30 September 2016.
- 15) Member, International Committee, The 5th Asia-Pacific Congress of Sericulture and Insect Biotechnology 2017.

Five Selected Publications (Last 10 years)

1. Dubey H, Pradeep AR, Neog K, Debnath R, Aneesha PJ, Shah SK, Kamatchi I, Ponnuvel KM, Ramesha A, Vijayan K, Nongthomba U, Bora U, Vankadara S, VijayaKumari KM, **Arunkumar KP** (2024) Genome sequencing and assembly of Indian golden silkworm, *Antheraea assamensis* Helfer (Saturniidae, Lepidoptera). *Genomics*. 9;116(3):110841. doi: 10.1016/j.ygeno.2024.110841. Epub ahead of print. PMID: 38599255.
2. Zhang J, Li S, Li W, Chen Z, Guo H, Liu J, Xu Y, Xiao Y, Zhang L, **Arunkumar KP**, Smagghe G, Xia Q, Goldsmith MR, Takeda M, Mita K (2021) Circadian regulation of night feeding and daytime detoxification in a formidable Asian pest *Spodoptera litura*. *Communications Biology* 4: 1-11.
3. Meccariello A, Salvemini M, Primo P, Hall B, Koskinioti P, Dalikova M, Gravina A, Gucciardino M, Forlenza F, Gregoriou M, Ippolito D, Monti S, Petrella V, Perrotta M, Schmeing S, Ruggiero A, Scolari F, Giordano E, Tsoumani K, Marec F, Windbichler N, **Arunkumar KP**, Bourtzis K, Mathiopoulos K, Ragoussis J, Vitagliano L, Tu Z, Papathanos P, Robinson M, Saccone G (2019) Maleness-on-the-Y (MoY) orchestrates male sex determination in major agricultural fruit fly pests. *Science* 365: 1457-1460
4. Li S, Ajimura M, Chen Z, Liu J, Chen E, Guo H, Tadapatri V, GangiReddy C, Wang X, Feng L, Zhang J, Chakraborty S, Kishino H, Abe H, Xia Q, **Arunkumar KP** and Kazuei Mita (2018) A new approach for comprehensively describing heterogametic sex chromosomes *DNA Research* 25:375-382.
5. Cheng T, Wu J, Wu Y, Chilukuri RV, Huang L, Yamamoto K, Li F, Li W, Chen Z, Guo H, Liu J, Li S, Wang X, Li P, Liu D, Guo Y, Fu B, Li Z, Liu C, Chen Y, Tomar A, Hilliou F, Montagne N, Jacqin-Joly E, d'Alencon E, Seth RK, Bhatnagar RK, Jouraku A, Shiotsuki T, Kadono-Okuda K, Promboon A, Smagghe G, **Arunkumar KP***, Kishino H, Goldsmith MR, Feng Q, Xia Q and Mita K (2017) Genomic adaptation to polyphagy and insecticides in a major East Asian noctuid pest. *Nature Ecology and Evolution* 1:1747-1756.

Projects (Last 5 years)

Sl. No	Name of the agency	PI / Co-PI	Title	Period	Amount (in lakhs ₹)
1	DBT	PI	Advanced level Institutional Biotech Hub at Central Muga Eri Research and Training Institute, Assam (BT/PR44417)	2023-2026	58.04
2	CSB	PI	Development of chemical based control measures for management of pebrine disease in muga silkworm, <i>Antheraea assamensis</i> Helfer	2021-2023	19.92
3	CSB	PI	Integrating genomic and transcriptomics resources for functional insight into the biology of muga silkworm <i>Antheraea assamensis</i>	2021-2022	64.16
4	CSB	PI	Breeding of muga silkworms for improved silk quality and disease tolerance	2019-2022	18.32

Professional Service

Reviewer of manuscripts submitted to: PLoS ONE, BMC Genomics, Genetica, Genomics, Journal of Biosciences, Journal of Genetics, Insect Molecular Biology, International Journal of Biomedical Science, The Canadian Entomologist, Applied Biochemistry & Biotechnology, Current Science, Journal of Insect Physiology, Journal of Insects, Insect Science, Journal of Virological Methods, Molecular and Cellular Probes, Scientific Reports, etc., and grants submitted to The International Foundation for Science (IFS), Sweden, BBSRC, UK, Czech Science Foundation, Czech Republic, Department of Science and Technology (DST) and Department of Biotechnology (DBT), Government of India.

Databases developed

VanyaSilkBase: A database of wild silkworm genomes

SilksatDb: A microsatellite database of silkworm, *Bombyx mori*

WildSilkbase: An EST database of wild silkworms