

Name : Dr.T.RATHINAKUMAR, M.Sc., M.Phil., B.Ed, Ph.D

Position : Assistant Professor

Faculty of : PG & Research Department of Zoology
Vivekananda College, Tiruvedakam West
Madurai-625234

Email ID : sivarathina1986@gmail.com

Mobile Number : 9080922465

Date of Birth : 28-05-1986



Languages Proficiency:

Read: Tamil, English

Write: Tamil, English

Speak: Tamil, English

ACADEMIC QUALIFICATIONS

| Name of the Exam/ Degree | Discipline/ Subject | Name of Institution | Board/University | Month & Year of Passing | Percentage (%) |
|--------------------------|---------------------|---|--|-------------------------|--------------------|
| S.S.L.C | Science | Govt. High.Sec.School, Okkaraipatti, Theni District | Tamilnadu State Board | March, 2001 | 66.000 |
| H.Sc | Bio-Maths | Govt. High.Sec.School, Okkaraipatti, Theni District | Tamilnadu State Board | March, 2003 | 61.66 |
| B.Sc | Zoology | Vivekananda College, Tiruvedakam, Madurai | Madurai Kamaraj University, Madurai | April, 2006 | 67.75 |
| M.Sc | Zoology | Vivekananda College, Tiruvedakam, Madurai | Madurai Kamaraj University, Madurai | April, 2008 | 77.78 |
| M.Phil | Zoology | Thiagarajar College, Madurai | Madurai Kamaraj University, Madurai | September, 2009 | 70.62 |
| B.Ed | Education | Lakshmi College of Education, Dindigul | Tamilnadu Teachers Education University, Chennai | May, 2010 | 74.00 |
| Ph.D | Zoology | Thiagarajar College, Madurai | Madurai Kamaraj University, Madurai | January, 2016 | Highly recommended |

ADDITIONAL QUALIFICATION

| Course/ Degree | Discipline | College | Board/ University | Month & Year of Passing | Percentage (%) |
|--|---------------------|-------------------------------------|--|-------------------------------|-------------------|
| PGDCA | Computer science | Thiagarajar College, Madurai | Madurai Kamaraj University, Madurai | April, 2009 | 74.14 |
| Certificate in Sericulture | Sericulture | Vivekananda College, Tiruvedakam | Madurai Kamaraj University, Madurai | June, 2006 | 59.00 |
| Diploma in Medicinal Botany | Botany | Vivekananda College, Tiruvedakam | Madurai Kamaraj University, Madurai | June, 2006 | 61.33 |

TEACHING EXPERIENCES

| S.No. | Positions held | Name of the Institute | Level | Experience (in years & months) |
|--|--|--|--------------------------|--|
| 1 | Assistant Professor in Zoology (SF Stream) | Thiravium College of Arts and Science for Women , (affiliated to Mother Teresa University) Kailasapatti, Periyakulam road, Theni district-625605 | UG | 15.05.2018 to 31.10.2019 1 year & 6months |
| 2 | Assistant Professor in Zoology (SF Stream) | Saiva Bhanu Kshatriya College , (affiliated to Madurai Kamaraj University) Aruppukottai, Virudhunagar district-626101 | UG and PG | 11.12.2019 to 13.6.2023 3 years & 6 months |
| 3 | Assistant Professor in Zoology (SF Stream) (Presently working) | Vivekananda College , (affiliated to Madurai Kamaraj University) Tiruvedakam West, Madurai district-625234 | UG and PG | Since 19.06.2023 onwards |
| Total Cumulative years of service | | | | 5 years |

RESEARCH EXPERIENCE

Junior Project Fellow in UGC sponsored major research project entitled “Molecular systematics and dispersal pattern of mayflies (Insecta:Ephemeroptera) in Agasthiar hills of southern Western Ghats (Ref.No. 38-250/2009 (SR) dated 24th December 2009) **under the guidance of Dr.C.Balasubramanian, Associate Professor, Department of Zoology, Thiagarajar College, Madurai** Since March 2010 to February 2013

AS CO-ORDINATOR

| Title | Funding agency | Period | Reference and Grant |
|---|---|--|---|
| Three days Programme on “ Creation of Scientific Awareness ” for Students, Farmers, and Self help groups | Tamilnadu State Council of Science and Technology (TNSCST), DOTE Campus, Chennai | 12.02.2019 to 14.02.2019 at Thiravium College, Periyakulam | C.O.No.TNSCST/CSA/AR 2018 Grant amount: 65,000 dated 12.12.2018-Completed and Report submitted |

AS RESOURCE PERSON

| Title | Funding agency | Place |
|--|------------------------|--|
| Programme on “ Young Student Scientist Programme-2018 ” for Students held on 28.12.2018 | TNSCST, Chennai | Theni Kammavar Sangam College of Arts and Science, Koduvilarpatti, Theni-625 534 |

AREA OF RESEARCH SPECIALIZATION

1. Aquatic entomology
2. Fish toxicology
3. Vermitechnology

KNOWLEDGE & SKILLS

SUBJECT KNOWLEDGE

- ✦ Basics in Zoology, Invertebrata, Chordata, Animal Physiology, Genetics, Cell Biology, Environmental biology, Developmental biology, Evolution, Biochemistry, Biotechnology, Immunology, Biostatistics, Microbiology
- ✦ Conducted laboratory experiments, seminars, and examinations

SKILLS & TECHNIQUES

- Analysis of physico-chemical characteristics of water samples
- Sampling, preservation and morphological characterization techniques of aquatic insects especially mayflies
- Fish culture
- Bio-molecules isolation and quantification
- Composting and Vermicomposting techniques
- Estimation of macronutrients and micronutrients
- Data analysis, presenting and publishing research in meetings and scientific journals

Separation Techniques such as

- ✓ Agarose Gel Electrophoresis,
- ✓ SDS-Poly Acrylamide Gel Electrophoresis (SDS-PAGE),
- ✓ Paper and Thin Layer chromatography
- ✓ UV-Spectroscopy

Microbiology

- ✦ Isolation and characterization of microbes such as Bacteria and Fungi

Statistical Analysis

- ❖ Microsoft Excel (Basic statistics, Correlation, ANOVA)
- ❖ Probit Analysis (LC50, & LC90)
- ❖ PAST (Diversity Indices, Principal Component Analysis, Dendrogram)

Technical Profile

- Working Knowledge in Internet and Type writing, MS Office and Photoshop

RESEARCH PAPER PUBLICATIONS

❖ NO. OF RESEARCH PAPERS PUBLISHED: 8

| S.No | DETAILS OF RESEARCH PUBLICATIONS |
|------|---|
| 1 | ❖ Kubendran, T., T.Rathinakumar , C.Balasubramanian, C.Selvakumar and K.G. Sivaramakrishnan. 2013. A new species of <i>Labiobaetis</i> Novikova & Kluge, 1987 (Ephemeroptera: Baetidae) from southern Western Ghats in India, with comments on the taxonomic status of <i>Labiobaetis</i> . <i>Journal of Insect Science</i> ; 4(86): 1-10 |
| 2 | ❖ T.Rathinakumar , C.Balasubramanian and T.Kubendran.2014. Decomposition of three leaf litter species and associated aquatic insects in Kurangani stream of Western Ghats, South India. <i>International Journal of Environmental Biology</i> ; 4(2): 100-106 |
| 3 | ❖ T.Rathinakumar , C.Balasubramanian and T.Kubendran.2014. Species composition, diversity of mayflies (Insecta:Ephemeroptera) and their relationship with the environmental variables in hill streams of Tamiraparani river basin, Tamilnadu. <i>Acta Biologica Indica</i> , 3(2):712-725 |
| 4 | ❖ Vinayaga Moorthi, P., Balasubramanian, C., Pasco B. Avery, Selvarani, S., Kubendran, T., Rathinakumar, T and Najitha Banu, A. 2014. Pathogenicity and proteome production of <i>Isaria fumosorosea</i> (= <i>Paecilomyces fumosoroseus</i> WISE) isolates against lemon butterfly, <i>Papilio demoleus</i> (Papilionidae: Lepidoptera). <i>African Journal of Entomology</i> . 13 (43) 4176-4182 |

| | |
|----|---|
| 5 | ❖ T.Rathinakumar , T.Kubendran and C.Balasubramanian.2019. New record of the genus Povilla (Navas,1912) Ephemeroptera: Polymitarciidae from Southern Western Ghats, India. <i>Journal of Entomological Research</i> . 43(1) 89-92 |
| 6. | ❖ M. Muthukatturaja, C.Balasubramanian, T.Rathinakumar & K. G. Sivaramakrishnan. 2021. A new species of <i>Isonychia</i> Eaton, 1871 (Ephemeroptera: Isonychiidae) from Kapila River, Central Western Ghats, India. <i>Zootaxa</i> . 4908 (2): 283–291 |
| 7 | ❖ T.Kubendran, T.Rathinakumar , M Vasanth, Fatima Jabeen, Ka Subramanian, Akhil Nair (2021)Composition, trophic categorization and biomonitoring potential of EPT complex in Giri River, Sirmour, Himachal Pradesh, India International Journal of Ecology and Environmental Sciences; Volume 3, Issue 2, Page No. 227-234 |
| 8 | ❖ T.Kubendran, M Vasanth,C.Selvakumar, Fatima Jabeen, K.A. Subramanian, and T.Rathinakumar .2022. Redescription of <i>Cloeon bicolor</i> Kimmins, 1947 (Ephemeroptera: Baetidae), <i>Journal of Entomological Research</i> . 46(2)-398-402-ISSN 0974-4576 |

CHAPTER IN EDITED BOOK

| S.No | Details of book chapter |
|------|--|
| 1 | Kubendran, T., C. Balasubramanian., T.Rathinakumar and Vinayagamoorthi, P. (2013). Hydrochemistry and Generic diversity of Aquatic insects of Kurangani and Valiparai streams of Western Ghats, Theni district, Tamilnadu, India (Eds) Impact of Global change on Earth ecosystems. D.R.Khanna, A.K. Chopra, Gagan Matta, Vikas Singh and Rakesh Bhutiani. Published by Biotech books, New Delhi. |

M.SC. PROJECT GUIDED (Regular student submitted to SBK College)

| S.No | Candidate | Title of Dissertation | Year |
|------|-------------------------|---|------|
| 1 | Vignesh.C (B8E17408) | Study of Physico-Chemical Characteritics of Three Ponds in Aruppukottai Taluk, Virudhunagar District, Tamilnadu, India | 2020 |

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|----|-----------------------------|--|------|
| 2. | Subha.U (B9E18002) | Physico-Chemical and Microbial characterization of a well in Aruppukottai Taluk, Virudhunagar District | 2021 |
| 3. | Dineshkumar.M (C0E18605) | Study of Physico-Chemical Characteristics and aquatic insects in Petchiamman stream, Shenbagathoppu, Srivilliputhur | 2022 |
| 4 | Sangavi.D (C1E20053) | Analysis of water quality parameters of Thenoor pond, Kariapatti Taluk, Virudhunagar district, Tamilnadu | 2023 |

SHORT TERM COURSE / ONLINE / FACE TO FACE FACULTY DEVELOPMENT PROGRAMME

| S.No. | Name of the Organization, Venue | Title of the Programme | Date |
|-------|---|--|-----------------------------|
| 1 | UGC Academic Staff College, Pondicherry University, Puducherry | UGC sponsored National Interaction Programme for Research Scholars | 30.09.2010 to 01.10.2010 |
| 2 | VHNSN College, Virudhunagar and PEARL -A Foundation for Educational Excellence, Bengaluru | Five day Faculty Development Programme on "AGRICULTURE, ENVIRONMENT AND CLIMATE CHANGE | 20.07.2020 to 24.07.2020 |
| 3 | Internal Quality Assurance Cell, Saiva Bhanu Kshatriya College, Aruppukottai | Embracing New Normal in Teaching | 28.08.2021 |
| 3 | Postgraduate and Research Department of Zoology in association with the IQAC, Ayya Nadar Janaki Ammal College, Sivakasi | Three Day Faculty Development Programme on "Lab to Land Transformation-Focus on Entrepreneurial Skill Development under UGC PARAMARSH Scheme | 20.09.2021 to 22.09.2021 |
| 4 | Department of Zoology (UG) in association with the IQAC, Ayya Nadar Janaki Ammal College, Sivakasi | Three Day online Faculty Development Programme on Research & Extension, under UGC PARAMARSH Scheme | 23.09.2021 to 25.09.2021 |

DETAILS OF CONFERENCES/ SEMINARS/ WORKSHOPS

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|---|-------------|---|
| 1 | WORKSHOPS | FOUR STATE & NATIONAL LEVEL WORKSHOP PARTICIPATED |
| 2 | CONFERENCES | FIVE INTERNATIONAL & NATIONAL LEVEL CONFERENCES/ SEMINAR PARTICIPATED AND PRESENTED |
| 3 | SEMINARS | TWENTY ONE NATIONAL & STATE LEVEL SEMINARS PARTICIPATED |

PARTICIPATION IN WORKSHOP : 4

| S.No | Title of the Workshop | International/ National/ State | Date | Venue |
|------|---|--------------------------------------|-----------------------------|---|
| 1 | Workshop on “Bioinformatics”– Techniques in Genomics and Proteomics | State level | 06.02.2008 | Department of Zoology, S.V. N.College, Nagamalai Pudukottai-625019 |
| 2 | National Workshop on “Bioinformatics tools for Life Science” | National level | 18.12.2008- 20.12. 2008 | Department of Bioinformatics, Biotechnology and Zoology, A.N.J.A.C Sivakasi (West)-626124 |
| 3 | One Day Training of Mushroom Cultivation and its Value addition | State level | 11.07.2018 | Horticultural College and Research Institute, Periyakulam |
| 4 | Two days technical workshop on “Intellectual Property Rights” | State level | 07.12. 2018- 08.12. 2018 | TNSCST & Thiravium College of Arts and Science for Women, Kailasapatti,Theni-625 605 |

PAPER PRESENTED IN SEMINARS / CONFERENCE / SYMPOSIA : 5

| S.No | Name & Title of the Seminar / Conference / Symposia | International/ National/ State | Date | Venue | Title of the Paper |
|-------------|--|---------------------------------------|-------------------------|---|---|
| 1 | International Conference on Bioresource Technology-its applications & Achievements | International (within India) | 07.08.2010-08.08.2010 | Department of Botany, Nirmala College for Women, Coimbatore-18 | Aquatic insect composition and Biomonitoring in Valiparai and Azhagar hill streams of Southern Western and Eastern Ghats, Tamilnadu |
| 2 | Young Ecologists Talk and Interact (YETI) 2012 | International(within India) | 05.12.2012 - 07.12.2012 | Wildlife Institute of India-Dehradun, India | “Diversity and abundance of Ephemeroptera larvae in Nambiyar, South Western Ghats |
| 3 | National Science Day & 43 rd Aqua-Terr Annual conference on Biological sciences | National | 28.02.2012 | School of Biological Sciences, Madurai Kamaraj University, Madurai-625 021 | Diversity, Seasonal abundance and Biomonitoring of aquatic insects in Agasthiar hill streams of Southern Western Ghats, India |
| 4 | UGC. Sponsored National seminar on Water resources management in Tamilnadu | National | 06.03.2014 | Post Graduate Department of Zoology, Jamal Mohamed College, Tiruchirappalli-620 020 | Decomposition of three leaf litter species and associated aquatic insects in Kurangani stream of Western Ghats, South India |
| 5 | International conference on Biodiversity, Bioresources and Biotechnology | International | 30.01.14 - 31.01.14 | Association for the dvancement of Biodiversity Science at Quorum Hotel, Mysore-Karnataka, South India | Species composition, diversity of mayflies (Insecta:Ephemeroptera) and their relationship with environmental variables in hill streams of Tamiraparani river basin, Tirunelveli district, Tamilnadu |

PARTICIPATION IN SEMINARS/ SYMPOSIUM : 21

| S.No | Title of the Seminar | International/ National/ State | Date | Venue |
|------|--|--------------------------------------|----------------------------|---|
| 1 | Regional seminar on "Bioinformatics" | State level | 03.01.05 | Department of Zoology, Vivekananda College, Tiruvedagam -625 217 |
| 2 | State level Symposium on "Vermicomposting Technology for Rural Development" | State level | 22.12.05 to 23.12.05 | Department of Zoology, Vivekananda College, Tiruvedagam (West), Madurai-625 217 |
| 3 | State level inter-disciplinary seminar on "Natural Disasters and Management" | State level | 28.12.06 to 29.12.06 | Department of Zoology, Vivekananda College, Tiruvedagam (West), Madurai-625 217 |
| 4 | State level inter-disciplinary seminar on "Current trends in Biotechnology and Bioinformatics" | State level | 18.12.07 to 19.12.07 | Department of Zoology, Vivekananda College, Tiruvedagam (West), Madurai-625 217 |
| 5 | State level seminar on "Transgenic Plants" | State level | 23.02.08 | Department of Botany, Arulmigu Palaniandavar Arts College for women, Palani-624 615 |
| 6 | State level student's seminar and presented a paper titled "Testing natural selection with genetics" | State level | 26.02.09 | Department of Zoology, Thiagarajar College, Madurai-625 009 |
| 7 | Conference on Biodiversity for sustainable development: Threats, indicators, climate change, poverty alleviation and targets for safeguarding biodiversity | National | 25.08.2010 to 27.8.2010 | Centre for Biodiversity and Forest studies, School of Energy, Environment & Natural resources, MKU, Madurai-625021 |
| 8 | UGC. Sponsored National seminar on Water resources management in Tamilnadu | International Level | 08.02.2019 | Thiravium College of Arts and Science for Women, Kailasapatti, Theni district-625605 |

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| 9 | National level seminar on Recent trends in Zoology | National level | 28.02.2020 | Post Graduate Department of Zoology, SBK College |
| 10 | National level webinar on COVID-19 and its link with Environment and Its Biodiversity | National level | 28.07.2020 | High Altitude Regional Centre, ZSI Solan, Himachal Pradesh |
| 11 | National level webinar on Human health and infectious diseases | National level | 30.07.2020 | Department of Zoology, VHNSN College, Virudhunagar |
| 12 | National level webinar on Freshwater fish diversity in India | National level | 13.08.2020 | Freshwater Biology Regional Centre, ZSI, Hyderabad |
| 13 | National webinar on Faunal diversity of India | National level | 19.08.2020 | Western Regional Centre, ZSI, Pune |
| 14 | National webinar on Principles and Practices of Animal Taxonomy: Classical and Molecular approach | National level | 24.08.2020 | Western Ghats Regional Centre, Zoological Survey of India, Kozhikode |
| 15 | National webinar on Faunal diversity of India | National level | 25.08.2020 | Northern Regional Centre, ZSI, Dehradun |
| 16 | National webinar on Structure and Genome of COVID-19 | National level | 30.08.2020 | PG & Research Department of Zoology, Vivekananda College, Tiruvedakam |
| 17 | National webinar on Fauna of Western Ghats: Spiders and Vespid Wasps | National level | 24.09.2020 | Western Ghats Regional Centre, ZSI, Kozhikode |
| 18 | National webinar on Beetle (Insecta: Coleoptera) diversity of India | National level | 01.10.2020 | Training and Extension division, ZSI, Kolkata |
| 19 | Perspectives of National Education Policy' held on 06th March 2021, Organized by the Department of Education and Internal Quality Assurance Cell of the Institution. | National level | 06.03.2021 | Department of Education and Internal Quality Assurance Cell of the Institution, Institute of Advanced Study in Education, Saidapet, Chennai |
| 20 | Ecological Restoration - A Need for Future | National level | 05.06.2021 | Department of Environmental Biotechnology, School of Environmental Sciences, Bharathidasan University, Trichy |

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|----|---|----------------|-----------------------------|---|
| 21 | Six-day National Seminar series on "Career Opportunities for FoodTechnologists" | National level | 14.06.2021 to 19.06.2021 | Department of Food Technology, Karpagam Academy of Higher Education, Coimbatore |
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Declaration

I hereby declare that all information given above by me is true to the best of my knowledge and belief. If I get an opportunity to work in your concern, I assure that I shall render my duties to the fullest satisfaction of my Employer and to the best of my ability.

Thanking You

Place: Tiruvedakam

Your's faithfully

Date: 19.6.2023



(T.RATHINAKUMAR)