**Dr. A. P. AJAYKUMAR**

ASSISTANT PROFESSOR, DEPARTMENT OF ZOOLOGY,

SNGS COLLEGE, PATTAMBI

I. **PERSONAL DETAILS**

1. Name of Teaching Faculty :  Dr. Ajaykumar. A. P
2. Designation : Assistant Professor
3. Department : Zoology
4. Address : Anthyalam parambil house, Tavanur post

Malappuram-679573

1. Contact No & email ID : 9446433104, ajaytavanur@gmail.com
2. Date of Birth   : 23/11/1978

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| 14. | Academic Qualifications | | | | | | |
| *Examinations* | *Name of the Board/University* | *Year of Passing* | *% of marks* | *Division/ Class* | *Subject* |
| Graduation | University of Calicut | 1999 | 71% | I | Zoology |
| Post Graduation | University of Calicut | 2001 | 74% | I | Zoology |
| MEd | University of Calicut | 2003 | 65% | I | Natural Science |

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| 15. | Research Degrees | | | | |
| ***Degree*** | ***Title of Thesis/ Dissertation*** | ***Date of Award with Reg. No.*** | ***Discipline/ Subject*** | ***University*** | |
| M.Phil. | Studies on the adipokinetic neuropeptide hormone of the paddy pest, *oxya nitidula* | 08/09/2005  CUAEPZL001 | Zoology | University of Calicut | |
| Ph.D. | Elucidation of primary structures of adipokinetic neuropeptides of the insects, *Oxya nitidula*, *Aularches miliaris,Iphita limbata* and *Oryctes rhinoceros* | 10/11/2009 | Zoology | University of Calicut | |

**National Level Tests Passed**

1. **CSIR- JRF** in Life Sciences (2003)
2. **UGC-NET** in Education (2006)

**RESEARCH PAPERS**

1. **A.P. Ajaykumar** and M. Gokuldas. (2011).Primary structure of an adipokinetic neuropeptide from the rhinoceros beetle, *Oryctes rhinoceros* L (Coleoptera: Dynastidae). *Annals of Neurosciences*, 18 (3), 100-104.
2. **A.P. Ajaykumar** and M. Gokuldas**.** (2011).Elucidation of the Primary Structure of an Adipokinetic Neuropeptide from the Coffee Locust, *Aularches miliaris* L. (Pyrgomorphidae: Orthoptera). *International Journal of Biological chemistry*, 5 (2):127-135.
3. **A. P. Ajaykumar** and M. Gokuldas**.** (2011).Amino acid sequence of an adipokinetic neuropeptide from th plant bug*, Iphita limbata*. American *Journal of Biochemistry and Molecular biology*. 1(4): 349-358.

4. V.S.Binitha, K.V. Lazar and **A.P.Ajaykumar** (2010): Acute effects of carbaryl on total protein and phosphatases in the hemolymph of heteroteran bug, *Iphita limbata* Stal. *Journal of Advanced Zoology*. Vol. 31 (2).

6. V.S. Binitha, K.V. Lazar and **A.P.Ajaykumar** (2012): Imine formation in the hemolymph of a heteroteran bug, *Iphita limbata* Stal, after topical application of carbaryl, *Journal of Advanced Zoology*,Vol. 33 (1):13-15

7. V.S.Binitha, K.V. Lazar and **A.P. Ajaykumar** (2012): Chronic effect of carbaryl on the levels of glucose, total protein and total free amino acids in the reproductive system of plant bug, *Iphita limbata* Stal (Heteroptera:Pyrrhocoridae). *journal of Entomological Research* .36 (4):359-362.

8. V.S.Binitha and **A.P. Ajaykumar** (2012): Toxic effects of three synthetic pesticides on survival and behaviour of a brackish water fish, *Etroplus Suratensis. Journal of Ecotoxicology and Environmental Monitoring* 22 (2). 149-154.

9. D. Umadevi, M. Gokuldas, **A. P., Ajaykumar, (**2012): Hyperlipaemic and hyperglycemic effects of a metabolic peptide hormone from the neuronal tissues of the mango leaf webber, *Orthaga exvinaceae* .*International Research journal of Pharmacy*, 3(2), 271-276.

10. M. Gokuldas, **A. P., Ajaykumar**, D. Umadevi, V. s., Binitha, K. M., Ismail and K. A. Rasheed. (2013): Identification of an AKH/RPCH family peptide in the rice grasshopper, *Hieroglyphus banian* (Acrididae: Orthoptera). *Journal of Entomology*. 10(2), 95-102.

11. D. Umadevi, KUA. Rafeeq, **A. P. Ajaykumar**, K.M, Ismail, K. A, Rasheed and M. Gokuldas: (2013). Identification and structure characterization of a hyperlipaemic neuropeptide from the Mango leaf Webber, *Orthaga exvinaceae* Hampson. *American Journal of Biochemistry and Molecular biology*. 3 (3): 304-313.

1. V. S. Binitha, Smina M. S., **A.P. AjayKumar** and Mani Shankar Babu (2018): Toxic effect of Malathion on the Fresh water Common Carp *Catla catla*. Journal of Advanced Zoology, 39(2): 108-112.
2. **A. P. Ajaykumar**, M. Gokuldas and V. S. Binitha (2018): Hyperlipaemic response of topically applied synthetic neuropeptides in the plant bug *Iphitalimbata* Stal (Pyrrhocoridae: Heteroptera). Journal of Entomological Research, 2018, 42 (4): 525-528.

**Papers presented in Conferences/Symposia’s**

**International conference**

1. **A. P. Ajaykumar** and M. Gokuldas: Elucidation of primary structures of adipokinetic neuropeptides from the corpora cardiac of the paddy pest, *Oxyanitidula* (Orthoptera: Acrididae). International Structural neuropeptide conference on peptides. February,2-3, 2008), Dept. Pharmaceutical science, Nagpur university, Nagpur.p-16.
2. **A. P. Ajaykumar** and M. Gokuldas: Structural and functional studies on the adipokinetic neuropeptides of the plant bug, *Iphtalimbata* Stal.(Pyrrhocorridae: heteroptera). Neuropeptide festival,20-23 July, 2009, Salzburg, Austria. P.429.
3. **A. P. Ajaykumar** and M. Gokuldas; The rice grass hopper, *oxyanitidula* contains three *adipokinetic* Neuropeptides. Brain storming meeting on proteomics; Present and future, 22-24 November-2014. Centre for cell and molecular biology (CCMB), Hyderabad.p.16.

**National conference**

1. **A.P. Ajaykumar** and M. Gokuldas**.** (2011).Elucidation of the Primary Structure of an Adipokinetic Neuropeptide from the Coffee Locust, *Aularches miliaris* L. (Pyrgomorphidae: Orthoptera). *proceedings of 97th Indian Science Congress*, January 2010, Karyavattom, Trivandrum, pp.68.
2. **A. P. Ajaykumar** and M. Gokuldas. Elucidation of the Primary Structure of an Adipokinetic Neuropeptide from the Rhinoceros beetle, *Oryctes rhinoceros. Proceedings of 22nd Kerala Science Congress Journal of Advanced Zoology*,, 28-31 of January 2010,KFRI, Peechi, p.852.
3. **A. P. Ajaykumar** and M. Gokuldas. Hyperlipaemic response of topically applied synthetic Neuropeptides in the Plant bug *Iphita limbata* Stål (Pyrrhocoridae: Heteroptera).Advances in Entomological Research (Adventor-2015), Department of Zoology, University of Calicut, Kerala on 19 &20 march-2015.p.

**Training Programmes attended**

1. Application in bioinformatics tools in biological research. Organized by department of Biotechnology, University of Calicut, 13-19 th December, 2007. (Sponsored by Department of Biotechnology)
2. Recent techniques in Arthropod research. Jointly organized by Centre for Arthropod Endocrine Research CABB and Rajiv GandhiCentre for Biotechnology (RGCB) from 17-31, March-2008, (Sponsored by CSIR)
3. National Seminar cum work-shop for developing e-contents in bioinformatics 8-9 august-2012. Organized by EMMRC, University of Calicut. (Sponsored by UGC)
4. Workshop on Distribution theory. Organized by Department of Statistics, University of Calicut, from 11-12 February-2008 (Sponsored by UGC).
5. National training programme on “Quarantine control and International standards for Phytosanitary measures” during 18-20 February-2015 at Kerala Forest research institute Peechi, Kerala (supported by Food and Agricultural Organization).
6. UGC sponsored national seminar cum workshop on Techniques in Biosciences, February 18-19, 2014. Organized by Department Botany KKTM college, Kodungallur, Kerala.
7. National workshop on “Methodology of Biological Research at Govt.Victoria College, Palakkad. 3 days from24-26 November 2015.
8. National workshop on Bioinformatics “ at SNGS College, Pattambi, Two days on 29 and 30th November 2016.
9. Two day National workshop on “Bioinformatics” at SNGS College, Pattambi, 06/12/2017 to 07/12/2017.
10. Two day National workshop on “Statistics for Biologists” at SNGS College, Pattambi, 16 & 17 December 2019.

**PAPERS PUBLISHED IN PROCEEDINGS/ABSTRACT BOOKS**

1. V. S. Binitha,A. Archana Prasad, **A. P. AjayKumar** and K. M. Bibin (2017): Malathion induced mortality and histological changes in the juvenile *Etroplussuratensis,* Proceedings of 29th Kerala Science Congress, January 28-30, Mar Thoma College, Thiruvalla, Pathanamthitta, Sponsored by KSCTE, Govt.  of Kerala.
2. V. S. Binitha,A. U. Anupriya and  **A. P. AjayKumar** (2017): Toxic effect of carbofuran  on Indian Major Carp, *Catla catla,* Proceedings of 7th National level Paper presentation competition, Biovision, January 30, Published by Department of Zoology, Mercy College, Palakkad.
3. V. S. Binitha,M. Aswani, Archana Prasad, P.S. Sruthy and **A. P AjayKumar** (2015): Toxic effect of Malathion on swimming and respiratory behaviours of Indian major carps *Catla catla, Labeo rohita* and *cirrhinus mrigala.* Proceedings of the National Seminar 15-16 December, Department of Zoology, Sree Neelakanta Government Sanskrit College, Pattambi.
4. P. D. Deepthi, T. S. Mini, V. S. Binithaand **A. P. Ajaykumar** (2014): Lambda-cyhalothrin induced biochemical changes in the liver and muscle tissues of *Oreochromismossambicus.* Proceedings of UGC Sponsored National Seminar Cum Workshop, February 18-19, Department of Botany, KKTM Govt. College, Kodungallur.

**RESEARCH PROJECTS**

* + - 1. Evaluation mosquito larvicidal and antimicrobial effects of leaf extract of *dendrophthoe falcate*. KSCSTE student project.2017
      2. Novel approach for the synthesis of reduced graphene Oxide using the defensive gland extract of the insect, *Luprops tristis*. KSCSTE student project.2020.
      3. Facile synthesis of graphene using the defensive secretion of the beetle, *luprops tristis*. KSCSTE student project.2020.

**ORIENTATION COURSE ATTENDED**

1. UGC-Sponsored Orientation Programme from 05-06-2014 to 02-07-2014, HRDC-ASC, University of Calicut

**REFRESHER COURSE ATTENDED**

1. Refresher course in Bioscience from 10.01.2018 to 30.01.2018, organized by UGC-HRDC-ASC, University of Calicut.

**Books published**

1. Insect Adipokinetic Neuropeptides, Lap Lambert Academic Publishing, Saarbrucken, Germany.2012.
2. Jane Goodall. Kerala Bhasha Institute, Kerala.2021.

**AFFILIATIONS**

* + - 1. American peptide society.
      2. European proteomic society
      3. Indian peptide society
      4. Indian Academy of Neurosciences