CURRICULUM VITAE

Personal Details

Father Name: L. Syed Gani.

Date of Birth: 13th February 1982.

Marital status: Married.



Dr. G. Taju

Objective: To seek a responsible and challenging position in the organization where my knowledge and experience can be shared and enriched.

Present Position:

Assistant Professor,

PG & Research Department of Zoology, C. Abdul Hakeem College (Autonomous), Melvisharam – 632 509, Ranipet Dist., Tamil Nadu, India.

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Residence Address:

No. 147, Mosque Street, Malaimanjanur Post, Thandarampettu Taluk, Thiruvannamalai District, Tamilnadu – 606708. India.

Academic Education:

Examination Passed	Subjects	Name of the Institution / University	Percentage (%)
Ph.D.	Zoology	C. Abdul Hakeem College, Melvisharam.	Highly Commended
M.Sc.	Zoology	Alagappa University	69.0
PGDCA	Computer Application	TCDS – Computer Education, Tiruvannamalai.	86.2

Position and Honors:

- June. 2017 to April 2018 Senior Research Fellow (DBT-National fish cell lines Repository), Department of Zoology, C. Abdul Hakeem College, Vellore, India.
- June. 2016 to April. 2017 Senior Research Fellow (ICAR-NSPAAD), Department of Zoology, C. Abdul Hakeem College, Vellore India.
- April. 2014 to May. 2016 Senior Research Fellow (DBT-SBIRI) in Department of Biotechnology (DBT) sponsored project entitled "Control of white spot syndrome virus (WSSV) of shrimp using Nano-formulated dsRNA".
- April. 2013 to March. 2014 Senior Research Fellow (SRF) in Department of Biotechnology (DBT) sponsored project entitled "Expression of immune related genes and development of resistance against white spot syndrome virus (WSSV) in shrimp by immunostimulants via oral administration".
- March. 2009 to Dec. 2011 Senior Research Fellow (SRF) in Department of Biotechnology (DBT) sponsored project entitled "Application of established fish cell lines for evaluating the toxicity of industrial effluents".
- Feb. 2008 to Feb. 2009 Junior Research Fellow (JRF) in Department of Biotechnology (DBT) sponsored project entitled "Application of established fish cell lines for evaluating the toxicity of industrial effluents".

Title of the Ph.D. Work

Thesis Title: Application of Fish Cell Lines for Toxicological Studies: an Alternative to Fish Supervisor: Dr. A. Sait Sahul Hameed, D.Sc., WOAH Expert,

Director, Aquatic Animal Health Laboratory, PG & Research Department of Zoology, C.Abdul Hakeem College, Melvisharam, Tamil Nadu – 632 509. India.

Research Experience

More than Ten-year Research experience in Molecular Biology, Immunology, Microbiology, Fish Cell culture, Computational Biology, Environmental Science, Toxicology and Nanobiotechnology. As a reviewer of various journals such as Aquaculture, Aquatic toxicology, Aquaculture International, Journal of Nanoparticles Research, Toxicology In Vitro etc.

Projects:

- 1. Department of Biotechnology, Govt. of India, sponsored research project entitled "Cell and Development Biology of Marine Organisms" under the Marine Bioresource and Biotechnology Network Programme 2022 to 2025; 326 lakhs (Co-PI).
- 2. Department of Biotechnology, Govt. of India, sponsored research project entitled "Development of vaccines against Tilapia Lake virus (TiLV) and Cyprinid herpesvirus-2 of fish in Indian aquaculture system" Rs. 63.5 Lakhs, 2021-2024 (Co-PI).

Professional Experience:

- ✓ Cell Biology: Development and characterization of cell lines; Cryopreservation and retrieving of established cell lines, Surveillance of viruses, Virus infectivity and Titre studies (TCID₅₀), Viral purification by Ultracentrifugation, Gene-expression studies, Toxicology, Genotoxicology, immunoconfocal microscopy, FACS, Karyotyping and cell growth kinetics.
- ✓ **Immunostimulants:** Development of various Recombinant and Herbal immunostimulants to control WSSV, WTD and fish Nodavirus.
- ✓ Experience in handling of all the bacterial and viral pathogens of fish and shrimp in the Indian aquaculture systems.
- ✓ Trained advanced Cell culture, molecular biology and immunological techniques to post graduate and Ph.D. scholar from various institution. (CAHCET, CIBA, RGCA, Agharkar Research Institute, Guwahati and VIT University).

Achievements:

- ✓ Development, characterization and application of fish cell lines from various tissues of Catla catla, Labeo rohita, Etroplus suratensis, Channa striatus, Rainbow trout, Tilapia and Zebrafish.
- ✓ Developed Multiplex PCR kit for the detection of shrimp DNA virus (WSSV, MBV, HPV and IHHNV) in a single reaction.
- ✓ Developed Multiplex RT-PCR kit for the detection of shrimp RNA virus (IMNV, YHV, TSV and GAV) in a single reaction.
- ✓ Developed Multiplex RT-PCR kit for the detection of prawn RNA virus (*Mr*NV and XSV) in a single reaction.
- ✓ Developed molecular vaccines (Recombinant and DNA vaccines) for fish nodavirus.
- ✓ Developed biodegradable carrier molecule (CS/TPP nanoparticles) for vaccine delivery in fish and shrimp.
- ✓ Development of field level nanoparticle-based Immunodiagnostics (LFIA) for viral pathogens of shrimp (WSSV & IMNV), prawn (WTD) and fish (Nodavirus).

Technical Experience

- ✓ Virus Propagation and Purification of virus using our established cell lines and infected animals.
- ✓ Plasmid DNA, Genomic DNA and mRNA extraction; Restriction analysis of plasmid and genomic DNA.
- ✓ Primer Designing, PCR, Reverse Transcription PCR, Real time PCR.
- ✓ Construction of libraries in plasmid vectors, DNA based screening; Use of nonradioactive probes for screening; All types of PCR, Cloning, sub cloning and expression in different *E. coli* hosts; Site-directed mutagenesis N-terminal sequencing.
- ✓ Biochemical analysis of enzymes, nucleic acids, proteins and lipids
- ✓ Agarose and polyacrylamide gel electrophoresis.

- ✓ SDS-PAGE, Raising polyclonal antibodies; Western, Dot blotting; ELISA, Biological assays and analytical techniques, Latex agglutination.
- ✓ Immunohistochemistry.
- ✓ Fermentation techniques.
- ✓ Handling of experimental animals.
- ✓ Histology and fluorescent microscopy.
- ✓ Computer applications in research.
- ✓ Computer Aided Drug Design (CADD).

Publications list (Authors, Year, Title of Paper, Journal details, Pages etc.)

Total Publications: 45 International: 45

Total Impact Factor: 184.406. Impact Factor range: 2.1 to 8.9

h index: 19. i10 index: 34.

Total Citation: 1045.

- 1. Mohamed Ashfaque, P., Nafeez Ahmed, A., Mohammed Safiullah, S., **Taju, G.,** Abdul Majeed, S., Sahul Hameed, A.S., Anver Basha, K (2022). Toxicological assessment of functional polymer with single-walled carbon nanotubes in zebrafish embryos and its gill cell line. Chemosphere 303(1), 134891. (**Impact Factor: 8.943**).
- 2. Badhusha, A., Nafeez Ahmed, A., Suryakodi, S., Abdul Wazith, M.J., Mithra, S., Kanimozhi, K., Abdul Majeed, S., **Taju, G.,** Sahul Hameed, A.S (2022). First report on the occurrence of cyprinid herpesvirus 3 (CyHV-3) in koi carp (*Cyprinus carpio koi*) in India. Journal of fish diseases, 45(8), 1087-1098. (**Impact Factor: 2.580**).
- 3. Suryakodi, S., Nafeez Ahmed, A., Badhusha, A., Santhosh Kumar, S., Sivakumar, S., Abdul Majeed, S., Taju, G., Rahamathulla, S., Sahul Hameed, A.S (2022). First report on the occurrence of white spot syndrome virus (WSSV), infectious myonecrosis virus (IMNV) and *Enterocytozoon hepatopenaei* (EHP) in *Penaeus vannamei* reared in freshwater systems. Journal of fish diseases 45(5), 699-706. (Impact Factor: 2.580).
- 4. Nafeez Ahmed, A., Abdul Majeed, S., **Taju, G.,** Vimal, S., Suryakodi, S., Badhusha, A., Abdul Nazar, A.K., Ramesh Kumar, P., Paknikar, K.M., Jyutika, M.R., Sahul Hameed, A.S. (2021). Development and characterization of five novel cell lines from snubnose pompano, *Trachinotus blochii* (Lacepede, 1801) and their application in gene expression and virological studies. Journal of fish diseases 45(1), 121-139. (Impact Factor: 2.580).
- 5. Shabana, M. S., **Taju, G.,** Majeed, A., Nafeez Ahmed, A., Karthika, M., Ramasubramanian, V., Sahul Hameed, A.S. (2021). Preparation and evaluation of mesoporous silica nanoparticles loaded quercetin against bacterial infections in Oreochromis niloticus. Aquaculture Reports, 21, 100808. (**Impact Factor: 3.385**)
- 6. Santhoshkumar, S., Sivakumar, S., Abdul Majeed, S., Vimal, S., **Taju, G.,** Sahul Hameed, A.S. (2021). *In vitro* propagation of infectious myonecrosis virus (IMNV) in C6/36 mosquito cell line. Journal of fish diseases, 44(7), 987-992. (**IF: 2.580**).

- 7. Thamizhvanan, S., Nafeez Ahmed A., Vinoth Kumar, D., Vimal, S., Abdul Majeed, S., **Taju, G.**, Hauton, C., Sahul Hameed, A.S. (2021). Silencing of Prophenoloxidase (proPO) gene in freshwater prawn, *Macrobrachium rosenbergii* makes susceptible to white spot syndrome virus (WSSV). Journal of Fish Diseases, 44(5), 573-584. (IF: 2.580).
- 8. Suryakodi, S., AbdulMajeed, S., **Taju, G**., Vimal S., Sivakumar, S., Nafeez Ahmed, A., Feroz Ahmad Shah., Saqib Ahmad Bhat., Dandadhar Sarma., Ajima Begum., Sahul Hameed, A.S. (2021). Development and characterization of novel cell lines from kidney and eye of rainbow trout, *Oncorhynchus mykiss* for virological studies. Aquaculture 532(15). (**Impact Factor: 5.135**).
- 9. Nanthini, R., Abdul Majeed, S., Vimal, S., **Taju, G.**, Sivakumar, S., Santhosh Kumar, S., Devika Pillai, Sneha, K.G., Rakesh, C.G., Sahul Hameed, A.S. (2019). In vitro propagation of tilapia lake virus in cell lines developed from *Oreochromis mossambicus*. Journal of Fish Diseases 42 (11), 1543-1552. (**Impact Factor: 2.580**).
- 10. Thamizhvanan, S., Sivakumar, S., Santhosh kumar, S., Vinoth Kumar, D., Suryakodi, S., Balaji, K., Rajkumar, T., Vimal, S. Abdul Majeed, S., Taju, G., Sahul Hameed, A. S. (2019). Multiple infections caused by white spot syndrome virus (WSSV) and Enterocytozoon hepatopenaei (EHP) in pond reared Penaeus vannamei in India and multiplex PCR for their simultaneous detection. Journal of Fish Diseases 42(3), 447-454. (IF: 2.580).
- 11. Nathiga Nambi, K.S., Abdul Majeed, S., **Taju, G.,** Sivakumar, S., Sahul Hameed, A.S. (2019). Zebrafish fin-derived fibroblast cell line: as model for *in vitro* wound healing. Journal of Fish Diseases, 42 (2), 573-584. (**Impact Factor: 2.580**).
- 12. **Taju**, G., Vinoth Kumar, D., Abdul Majeed, S., Vimal, S., Tamizhvanan, S., Santhosh Kumar, S., Sivakumar, S., Nazeer Basha, A., Haribabu, P., Kannabiran, K., Sahul Hameed, A.S. (2018). Delivery of viral recombinant VP28 protein using chitosan tripolyphosphate nanoparticles to protect the whiteleg shrimp, *Litopenaeus vannamei* from white spot syndrome virus infection. International Journal of Biological Macromolecules 107(A), 1131-1141. (Impact Factor: 8.025).
- 13. Sivakumar, S., Vimal, S., Abdul Majeed, S., Santhosh Kumar, S., **Taju, G.,** Madan, N., Rajkumar, T., Thamizhvanan, S., Shamsudheen, K.V., Vinod, S., Sridhar, S., Sahul Hameed, A.S. (2018). A new strain of White spot syndrome virus (WSSV) affecting *Litopenaeus vannamei* in Indian shrimp farms. Journal of fish diseases 41(7), 1129-1146 (Impact Factor: 2.580).
- 14. Manimaran, M., Rajkumar, T., Vimal, S., Taju, G., Abdul Majeed, S., Sahul Hameed, A.S., Kannabiran, K. (2018). Antiviral activity of 9(10H)-Acridanone extracted from marine Streptomyces fradiae strain VITMK2 in Litopenaeus vannamei infected with white spot syndrome virus. Aquaculture, 488, 66-73 (Impact Factor: 5.135).

- 15. **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sahul Hameed, A.S. (2017). Application of fish cell lines for evaluating the chromium induced cytotoxicity, genotoxicity and oxidative stress. Chemosphere 184, 1-12. (**Impact Factor: 8.943**).
- 16. **Taju G.,** Madan N., Abdul Majeed S., Rajkumar T., Farook M.A., Vimal S., Nazeer Basha A., Sahul Hameed A.S (2017). Distribution of recombinant VP28 protein in tissues and its immunomodulatory effect against white spot syndrome virus in whiteleg shrimp, *Litopenaeus vannamei* (Boone, 1931). Aquaculture International 25(5), 1761-1776. (Impact Factor: 2.953).
- 17. Rajkumar T., **Taju G.,** Abdul Majeed S., Sinwan Sajid M., Santhosh Kumar S., Sivakumar S., Thamizhvanan S., Vimal S., Sahul Hameed A.S., 2017. Ontogenetic changes in the expression of immune related genes in response to immunostimulants and resistance against white spot syndrome virus in *Litopenaeus vannamei*. Developmental and Comparative Immunology 76, 132-142. (**Impact Factor: 3.605**).
- 18. Nathiga Nambi, K.S., Abdul Majeed, S., **Taju**, **G.**, Sridhar Sivasubbu, Sarath Babu, V., Sahul Hameed, A.S. (2017). Effects of nicotine on zebrafish: a comparative response between a newly established gill cell line and whole gills. Comparative Biochemistry and Physiology Part C. 195, 68-77. (**Impact Factor: 4.52**).
- 19. Prabir Kumar, K., Jyutika M.R., Vimal, S., **Taju, G.**, SahulHameed, A.S., Paknikar, K.M. (2017). Field-usable Lateral Flow Immunoassay for the rapid detection of White Spot Syndrome Virus (WSSV). PLoS ONE. DOI:10.1371/journal.pone.0169012. (Impact Factor: 3.24).
- 20. Santhoshkumar, S., Sivakumar, S., Vimal, S., Abdul Majeed, S., **Taju, G.,** Haribabu, P., Uma, A., Sahul Hameed, A.S. (2016). Biochemical changes and tissue distribution of Enterocytozoon hepatopenaei (EHP) in naturally and experimentally EHP-infected whiteleg shrimp, *Litopenaeus vannamei* (Boone, 1931), in India. Journal of fish diseases 40(4), 529-539. (Impact Factor: 2.580).
- 21. Mohamed A Farook, Sugumar Vimal, Nithiyanandam Madan, **Gani Taju**, Seepoo Abdul Majeed, Kalaiselvi S N Nambi, Gnanavel Balasubramanian, Azeez S Sahul Hameed. 2015. Immunomodulatory effect of *Cynodon dactylon* against white tail disease of giant freshwater prawn, *Macrobrachium rosenbergii* (de Man, 1879). Aquaculture Research 47(11), 3421-3431. (Impact Factor: 2.184).
- 22. Kalaiselvi S. Nathiga Nambi, Seepoo Abdul Majeed, **Gani Taju**, Sridhar Sivasubbu, Nithiyanandam Sundar Raj, Nithiyanandam Madan, Azeez Sait Sahul Hameed. 2015. Development and Use of Retinal Pigmented Epithelial Cell Line from Zebrafish (*Danio rerio*). Zebrafish 12(1), 21-32. (**Impact Factor: 2.229**).
- 23. **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sahul Hameed, A.S. (2014). *In vitro* cytotoxic, genotoxic and oxidative stress of Cypermethrin on five fish cell lines. Pesticides Biochemistry and Physiology 113, 15-24. (**Impact Factor: 4.966**).

- 24. **Taju, G.,** Madan, N., Abdul Majeed, S., Raj Kumar, T., Thamizvanan, S., Otta, S.K., Sahul Hameed, A.S. (2014). Immune responses of white leg shrimp, *Litopenaeus vannamei* (Boone, 1931) to bacterially expressed dsRNA specific to VP28 gene of white spot syndrome virus. Journal of fish diseases 38(5), 451-465. (**Impact Factor: 2.580**).
- 25. **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sahul Hameed, A.S. (2014). *In vitro* assay for the toxicity of silver nanoparticles using heart and gill cell lines of *Catla catla* and gill cell line of *Labeo rohita*. Comparative Biochemistry and Physiology Part C, 161, 41-52. (**Impact Factor: 4.52**).
- 26. Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Sahul Hameed, A.S. (2014). Isolation, propagation, characterization, cryopreservation and application of novel cardiovascular endothelial cell line from *Channa striatus* (Bloch, 1793). Cell Biochemistry and Biophysics 71(2), 601-616. (**Impact Factor: 2.989**).
- 27. Vimal, S., Farook, M.A., Madan, N., Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Sundar raj, N., Venu, S., Subburaj, R., Thirunavukkarasu, A.R., Sahul Hameed, A.S. (2014). Development, distribution and expression of a DNA vaccine against nodavirus in Asian Seabass, *Lates calcarifier* (Bloch, 1790). Aquaculture Research 47(4), 1209-1220. (**Impact Factor: 2.184**).
- 28. Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Vimal, S., Venkatesan, C., Sahul Hameed, A.S. (2014). Cytotoxicity, genotoxicity and oxidative stress of malachite green on kidney and gill cell lines of freshwater air breathing fish *Channa striata* (Bloch, 1793). Environmental Science and Pollution Research 23(21), 13539-13550. (**IF: 5.190**).
- 29. Farook, M.A., Sundar Raj, N., Madan, N., Vimal, S., Abdul Majeed, S., **Taju, G.,** Rajkumar, T., Santhoshkumar, S., Sivakumar, S., Sahul Hameed, A.S. (2014). Immunomodulatory effect of recombinant *Macrobrachium rosenbergii* nodavirus capsid protein (r-MCP) against white tail disease of giant freshwater prawn, *Macrobrachium rosenbergii* (de Man, 1879). Aquaculture 433, 395-403. (**Impact Factor: 5.135**).
- 30. Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Sarath Babu, V., Farook, M.A., Sahul Hameed, A.S. (2014). Development and characterization of a new gill cell line from air breathing fish *Channa striatus* (Bloch 1793) and its application in toxicology: Direct comparison to the acute fish toxicity. Chemosphere 96, 89-98. (**Impact Factor: 8.943**).
- 31. **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sahul Hameed, A.S. (2013). Development and characterization of cell line from the gill tissue of *Catla catla* (Hamilton, 1822) for toxicological studies. Chemosphere, 90, 2172-2180. (**Impact Factor: 8.943**).
- 32. Abdul Majeed S., Nambi K.S.N., **Taju G.**, Sahul Hameed A.S., (2013a). Development, characterization and application of a new fibroblastic-like cell line from kidney of a freshwater air breathing fish *Channa striatus* (Bloch, 1793). Acta Tropica. 127, 25–32. (Impact Factor: 3.222).
- 33. Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Sundar Raj, N., Madan, N., Sahul Hameed, A.S. (2013). Establishment and characterization of permanent cell line from gill tissue of

- Labeo rohita (Hamilton) and its application in gene expression and toxicology. Cell Biology and Toxicology, 29, 59-73. (Impact Factor: 6.819).
- 34. Vimal, S., Abdul Majeed, S., Nambi, K.S.N., Madan, N., Farook, M.A., Venkatesan, C., **Taju,G.,** Venu, S., Thirunavukkarasu, A.R., Sahul Hameed, A.S. (2013). Delivery of DNA vaccine using Chitosan-Tripolyphosphate (CS/TPP) nanoparticles in Asian seabass (*Lates calcarifer*) for protection against betanodavirus infection. Aquaculture 420–421 (2014) 240–246. (**Impact Factor: 5.135**).
- 35. Farook, M.A., Madan, N., **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sundar Raj, N., Vimal, S., Sahul Hameed, A.S. (2013). Production of recombinant capsid protein of *Macrobrachium rosenbergii* nodavirus (r-MCP43) of *Macrobrachium rosenbergii* for immunological diagnostic methods. Journal of Fish Diseases 37(8), 703-710. (**Impact Factor: 2.580**).
- 36. Madan, N., Nambi, K.S.N., Abdul Majeed, S., **Taju, G.,** Sundar Raj, N., Farook, M.A., Vimal, S., Sahul Hameed, A.S. (2013). *In Vitro* Propagation of Hepatopancreatic Parvolike Virus (HPV) of Shrimp in C6/36 (*Aedes albopictus*) cell line. Journal of Invertebrate Pathology, 112, 229-235. (**Impact Factor: 2.795**).
- 37. Sarath Babu, V., Abdul Majeed, S., Nambi, K.S.N., **Taju, G.,** Madan, N., Sundar Raj, N., Sahul Hameed A.S. (2013). Comparative nodaviral replication efficiency in ten Indian fish cell lines. Archives of Virology 158(6), 1367-75. (**Impact Factor: 2.685**).
- 38. **Taju, G.,** Abdul Majeed, S., Nambi, K.S.N., Sarath Babu, V., Vimal, S., Kamatchiammal, S., Sahul Hameed, A.S. (2012). Comparison *in vitro* and *in vivo* acute assays in *Etroplus suratensis* (Bloch, 1790) and its three cell lines in relation to tannery effluent. Chemosphere, 87, 55–61. (**Impact Factor: 8.943**).
- 39. Sarath babu, V., Chandra, V., Nambi, K.S. N., Majeed, S.A., **Taju, G.,** Patole, M.S. and Hameed, A.S.S. (2012). Development and characterization of novel cell lines from *Etroplus suratensis* and their applications in virology, toxicology and gene expression. Journal of Fish Biology, 80, 312–334. (**Impact Factor: 2.504**).
- 40. Nathiga Nambi, K.S., Abdul Majeed, S., Sundar Raj, N., **Taju, G.,** Madan, N., Vimal, S. Sahul Hameed, A.S. (2012). *In vitro* white spot syndrome virus (WSSV) replication in explants of heart of freshwater crab, *Paratelphusa hydrodomous*. Journal of Virological Methods, 183, 186–195. (Impact Factor: 2.623).
- 41. Vimal, S., **Taju, G.,** Nathiga Nambi, K.S., Abdul Majeed, S., Sarath Babu, V., Ravi, M. Sahul Hameed, A.S. (2012). Synthesis and characterization of CS/TPP nanoparticles for oral delivery of gene in fish. Aquaculture, 358–359, 14–22. (**Impact Factor: 5.135**).
- 42. Sundar raj, N., Nambi, K.S.N., Abdul Majeed, S., **Taju, G.,** Vimal, S., Farook, M.A. and Sahul Hameed, A.S. (2012). High efficacy of WSSV replication in tissues of freshwater rice-field crab, *Paratelphusa hydrodomous* (Herbst). Journal of Fish Disease, 35(12), 917-925. (**Impact Factor: 2.580**).

- 43. Sahul Hameed, A.S., Ravi, M., Farook, M.A., **Taju, G.,** Hernandez-Herrera, R.I. and Bonami, J.R. (2011). Screening the post-larvae of *Macrobrachium rosenbergii* for early detection of macrobrachium rosenbergii nodavirus (*Mr*NV) and extra small virus (XSV) by RT–PCR and immunological techniques. Aquaculture, 317(1-4), 42-47. (**Impact Factor: 5.135**).
- 44. Ravi, M., Nazeer Basha, A. **Taju, G.**, Ram Kumar, M. and Sahul Hameed, A.S. (2010). Clearance of *Macrobrachium rosenbergii* nodavirus (*Mr*NV) and extra small virus (XSV) and immunological changes in experimentally injected *Macrobrachium rosenbergii*. Fish & Shellfish Immunology, 28: (3), 2010, 428-433. (**Impact Factor: 4.622**).

45. Sequence(S) Deposited at GenBank, NCBI

GenBank Accession No.	Authors	Name of the Gene	Year of Submission
KC297218.1	Taju,G., Abdul Majeed,S.,	Catla catla	2013
	Nambi,K.S. and Sahul	Mitochondrial	
	Hameed, A.S.	ribosomal RNA	
NM_001081689.1	Nathiga Nambi KS, Abdul Majeed	Danio rerio carbonic	2017
	S, Taju G. , Sivasubbu S, Sarath	anhydrase XVa	
	Babu V, Sahul Hameed AS.	(ca15a), mRNA	
MT080174.1	Sahul Hameed, A., Vinoth	Cyprinid herpesvirus	2020
	Kumar,D., Vimal,S., Abdul	2 isolate CHV2-	
	Majeed,S., Taju,G ., Santhosh	AAHL-01 major	
	Kumar,S., Sivakumar,S. and	capsid protein gene,	
	Thamizhvanan,S.	partial cds	
OK157447.1	Nafeez Ahmed, A., Abdul	Trachinotus blochii	2021
	Majeed,S., Taju,G. and Sahul	isolate mitochondrial	
	Hameed,A.	cytochrome oxidase	
		subunit 1 gene	
OM811978.1	Taju,G., Badhusha,A., Nafeez	Cyprinid herpesvirus	2022
	Ahmed, A., Suryakodi, S., Abdul	3 isolate KHV	
	Majeed,S., Abdul Wazith,M. and	thymidine kinase	
	Sahul Hameed,A.	(TK) gene, partial	
		cds	

Workshop attended

Regional Workshop on "Recent trends Techniques of Medical Laboratory & Biotechnology" held from 19^{th} to 30^{th} December 2005 at Loyola College, Chennai – 600034, Tamil nadu, India.

Workshop organized:

- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 10th to 16th September 2017 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch I).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 5th to 10th October 2017 C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch II).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Molecular Diagnostic Techniques" held from 12th to 17th February 2018 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch I).
- ✓ DBT Sponsored Second National Workshop on "Hands-on Training on Molecular Diagnostic Techniques" held from 26th February to 3rd March 2018 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch II).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 12th to 17th November 2018 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch III).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 26th November to 1st December 2018 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch IV).
- ✓ DBT Sponsored Second National Workshop on "Hands-on Training on Molecular Diagnostic Techniques" held from 24th April to 27th April 2019 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch III).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 09th to 14th December 2019 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch V).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 16th November to 21st December 2019 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch VI).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 18th January to 23rd January 2021 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch VII).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 25th January to 30rd January 2021 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch VIII).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 22th March to 27rd March 2021 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch IX).

- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 28th March to 2rd April 2022 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch X).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 9th May to 14rd May 2022 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch XI).
- ✓ DBT Sponsored National Workshop on "Hands-on Training on Fish Cell Culture Techniques: Development and Applications" held from 4th July to 9th July 2022 at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India (Batch XII).

Conference / Symposium Organized

✓ UGC Autonomous Funded One Day National Seminar on "Biodiversity Conservation: Current Trends and Future Challenges (BCFC-2020)" Held on 25th February 2020 at PG & Research Department of Zoology, C. Abdul Hakeem College (Autonomous), Melvisharam, Ranipet, India.

Conference / Symposium Attended

- 1. State level seminar on "Free radical, lipid peroxidation and disease" held on 17th August (2002), organized by Department of Biochemistry, Theivanai Ammal College for Women, Villupuram, Tamil Nadu, India.
- 2. "Recent approaches in Atherosclerosis research" held on 16-17th December (2006), organized by the Department of Biochemistry, University of Madras, Chennai.
- 3. Winter symposium "Endocrinology, diabetes and metabolism" held 11-13th January (2007), organized by Christian Medical College, Vellore, India.
- 4. 5th Winter Symposium "Endocrinology, Diabetes and Metabolism" held on 11th, 12th, 13th, 2007 at Christian Medical College, Vellore, India.
- 5. "Recent advancements in Polymer Chemistry and Nanotechnology" held on 12-13th September (2008), organized by the Department of Chemistry, DKM College for Women (Autonomous), Affiliated to Thiruvallular University, Vellore 632 001, Tamil Nadu, India.
- 6. State level symposium on "Biotechnological Perspectives of Ornamental fish culture" held on Feb 8, 2012, organized by Department of Animal Biotechnology, Islamish College (Autonomous), Vaniyambadi 632752, Tamil Nadu, India.
- 7. "National Conference on Interplay of Biotechnological and Chemical Sciences (NCIBCS)" held on 6-9th January (2010), Thiruvallular University, Vellore, Tamil Nadu, India.
- 8. "National level Seminar on Marine Microbes" 10th February (2012), organized by Department of Microbiology, DKM college for women (Autonomous), Vellore 632 001, Tamil Nadu, India.

- 9. National level conference on "Emerging Trends in Bioscience" 25th January 2012, organized by Department of Biotechnology & Biochemistry, Marudhar Kesari Jain College for Women, Vaniyambadi 635751, Vellore, India.
- 10. UGC Sponsored Seminal on "Curriculum Development in Higher Education" held on 26th February 2015 in C. Abdul Hakeem College, Melvisharam, Vellore, India.
- 11. National symposium on "Entrepreneurship Development for Life Sciences (ED Bioz 13)" 23th January 2013, organized by P.G. & Research Department of Biochemistry, Adhiparasakthi College of Arts and Science, Kalavai 632506, Vellore, India.
- 12. UGC Sponsored National Seminar on "Recent Research Trends in Chemistry" at 25th & 26th September 2014 in C. Abdul Hakeem College (Autonomous), India.
- 13. UGC Sponsored One day Seminar on "Recent Trends in Research" at 31st March 2015 held at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India.
- 14. In Commemoration of the Golden Jubilee Celebration one day National Seminar (Under UGC) on "Recent Trends in Biological Research" held at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India on 8th March 2016.
- 15. Internal Quality Assurance Cell (IQAC) and Organization of Muslim Educational Institutions & Associations of Tamil Nadu (OMEIAT) sponsored International Seminar on "Science of Learning and Teaching" held at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India on 8th October 2016.
- 16. One day State Level Seminar on "Challenges in Aquaculture and Marine Biotechnology" Organized by PG & Research Department of Zoology, C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India, on 24th January 2017.
- 17. UGC Autonomous Funded One Day State Level Seminar on "Challenges in Green and Environmental Chemistry (CGEC-17)" held at C. Abdul Hakeem College (Autonomous), Melvisharam, Vellore, India on 15th February 2017.
- 18. International Symposium on Aquatic Animal Health and Epidemiology for Sustainable Asian Aquaculture" held at the ICAR-National Bureau of Fish Genetic Resources (NBFGR), Lucknow, India during April 20-21, 2017.
- 19. DBT, UK BBSRC & Aid Sponsored "International Seminar on Diseases of Aquatic Animals" on Tuesday 22nd August 2017, organized by P.G. & Research Department of Zoology, C. Abdul Hakeem College, Melvisharam 632506, Vellore, India.

Conference / Symposium Proceedings

1. K. Prabir Kumar, J.M. Rajwade, S. Vimal, **G. Taju**, A.S. Sahul Hameed, K.M. Paknikar (2017). Rapid Detection of White Spot Syndrome Virus (WSSV) of Shrimp by Field-Usable Lateral Flow Immunoassay. International Symposium on Aquatic Animal Health and Epidemiology for Sustainable Asian Aquaculture ISAAHE-048.

- 2. A.S. Sahul Hameed, S. Santhosh Kumar, **G. Taju**, S. Abdul Majeed (2017). Surveillance if fish and shellfish diseases in selected districts of Tamil Nadu, Andhra Pradesh, West Bengal and Pondicherry. ISAAHE-002.
- 3. S. Santhosh Kumar, S. Abdul Majeed, S. Vimal, N. Madan, **G. Taju**, D. Vinoth Kumar, T. Rajkumar, S. Thamizhvanan and A.S. Sahul Hameed (2017). Occurrence of multiple infection caused by White Spot Syndrome Virus (WSSV) and *Enterocytozoon hepatopenaei* (EHP) in pond reared *Litopenaeus vannamei*, and standardization of a multiplex PCR protocol for their simultaneous detection. ISAAHE-032.
- 4. S. Abdul Majeed, K.S.N. Nambi, **G. Taju**, S. Sivakumar, A.S. Sahul Hameed (2017). Establishment of a novel cardiovascular endothelial cell line from *Channa striatus* (Bloch, 1793) for virological and toxicological studies. ISAAHE-078.
- 5. **G. Taju** (2016). Application of Fish cell lines for evaluating the toxicity of distillery effluent. National Seminar on "Current Scenario and Future Perspectives of Molecular Biology in Environmental and Medicine", held on 14 15th December 2016, organized by Department of Biotechnology, Islamiah College (Autonomous), Vaniyambadi, Tamil Nadu, India.
- 6. S. Vimal, Rajesh, **G. Taju**, K.S.N. Nambi, S.A. Majeed, N. Sundar and A.S. Sahul Hameed (2012). Synthesis and characterization of CS/TPP nanoparticles for oral delivery of gene in shrimp. Indo-UK Conference Shrimp Aquaculture & Innovative Solutions.
- 7. N. Sundar Raj, K.S.N. Nambi, S. Abdul Majeed, **G. Taju,** S. Vimal, M.A. Farook, N. Madan and A.S. Sahul Hameed (2012). Freshwater crab, *Paratelphusa hydrodomous*: an alternative host for replication of white spot syndrome virus (WSSV) of shrimp. Indo-UK Conference Shrimp Aquaculture & Innovative Solutions.
- 8. Sarath Babu, Nathiga Nambi, Abdul Majeed, **Taju Gani**, Ravi Mani, Vimal Sugumar, Sundarraj and Sahul Hameed (2011). Investigation of the propagation efficiency of fish cell lines to fish nodavirus. 8th Symposium on Diseases in Asian Aquaculture.
- 9. Vimal Sugumar, **Taju**, Nathiga Nambi, Abdul Majeed, Sarath Babu, Ravi and Sahul Hameed (2011). CS/TPP nanoparticles: preparation, characterization and application as oral gene delivery. 8th Symposium on Diseases in Asian Aquaculture.
- 10. G. Taju and A.S. Sahul Hameed, (2010). Synthesis and characterization of Calcium phosphate nanoparticles for gene delivery. State level Seminar on "Recent Trends in Biochemistry" (with special reference to Nanotechnology & Oncology), held on 16th September (2010), organized by Department of Biochemistry, Sacred Heart College (Autonomous), Thirupattur, Tamil Nadu, India.

List of Webinar attended / Presented / Organized (online mode)

Webinar planning & Advisory committee

1. Nation-wide webinar on "Statistics – A magical tool for Biologists" organised by PG & Research Department of Zoology, C. Abdul Hakeem College (Autonomous), Melvisharam, Ranipet, India, held on 29.01.2021.

Webinar Presented

- 1. S. Suryakodi, S. Abdul Majeed, **G. Taju**, A. Nafeez Ahmad, A.S. Sahul Hameed (2021) Antiviral properties of metal oxide nanoparticles against fish viral pathogens using rainbow trout cell lines. International Conference on Advances in Chemistry and Materials (ICCM-21), held on 21-22 July 2021.
- 2. A. Nafeez Ahmad, S. Abdul Majeed, **G. Taju**, S. Suryakodi, A.S. Sahul Hameed (2021) Applications of fish cell line for viral neutralization and gene expression studies. International Conference on Advances in Chemistry and Materials (ICCM-21), held on 21-22 July 2021.
- S. Suryakodi, S. Abdul Majeed, A. Nafeez Ahmad, G. Taju, A.S. Sahul Hameed (2021)
 Application of rainbow trout cell lines in virological studies and fish virus surveillance.

 National virtual conference on Mariculture in India-Recent advancement, held on 16th
 June 2021.
- 4. A. Nafeez Ahmad, S. Suryakodi, S. Abdul Majeed, **G. Taju**, A.S. Sahul Hameed (2021) Application of fish cell lines for gene expression studies. National virtual conference on Mariculture in India-Recent advancement, held on 16th June 2021.

Webinar attended (online mode):

- 1. International Webinar on "Fish Vaccination: Theory, Innovations and Application", held virtually on 4 August 2021 in Bangkok, Thailand, Organized by Fish health Section, Asian Fisheries Society associated with Network of Aquaculture Centres in Asia-Pacific.
- 2. National virtual conference on "Mariculture in India-Recent Advancement", organized by AMET university, held on 16th June 2021.
- 3. International Webinar on "Ecosystem Restoration Through Sustainable Biodiversity" organized by Zoology and Biotechnology Department, Govt. Girls P.G. College, Ujjain (M.P.), on 5th June 2021.
- 4. International Webinar on "Advanced Materials for Biomedical, Energy & Environmental Applications" organized by the Department of Chemistry (UA), PSG College of Arts & Science, Coimbatore, held on 16.06.2020.
- 5. International webinar series Faculty Development Programme on "Contemporary and Advanced Research in Life Science" hosted by Department of Microbiology, Karpagam Academy of Higher Education, Coimbatore, from 04-06-2020 to 05-06-2020.

- 6. International Webinar on "Entrepreneurship Skill Development in KOI Fish Culture" organized by IQAC, PG & Research Department of Zoology, H.H. The Rajah's College, Puthukottai on 29th may 2021.
- 7. International Webinar on "Biodiversity" organized by PG & Research Department of Zoology, The American College, Madurai on 22 may 2020.
- 8. National Webinar on "Challenges, Opportunities and the Future of Indian Fisheries Post COVID-19 Era" organized by College of Fisheries Science, JAU, Veraval, from 28 to 30 May, 2020 under the Institutional Development Plan (IDP) of NAHEP, ICAR sponsored by the World Bank.
- 9. National Webinar on "COVID-19: Medical aspects and advisory" organized by Government Arts College, Melur, Madurai, held on 31 May 2020.

Workshop attended (Online mode):

- 1. International Workshop on "Recent Trends in Scholarly Publishing and Researcher Tools & Techniques" conducted by PG & Research Department of Zoology, Pachaiyappa's College, Chennai-600030 on 22.07.2021 and 23.07.2021.
- 2. Seven Day E-Workshop on "Entrepreneurial Skill Development and Career Opportunities in Biological Sciences" organized by Zoology and Biotechnology Department, from 24th June -30th June 2021.
- 3. Six days Virtual symposium on "The Recent Trends in Aquaculture Industries" jointly offered by Col. Dr. Jeppiaar Research Park, Centre for Ocean Research (COR) and Sathyabama University Technology Business Incubator (SU-TBI) in association with Ministry of Earth Sciences Earth Science Technology Cell MoES ESTC) from 20th to 25th July 2020.
- 4. Five days skill development webinar on "Ornamental Fish culture and Breeding" organized by Department of Biotechnology, School of Bio and Chemical Engineering, Sathyabama Institute of Science and Technology, Chennai-600119. Tamil Nadu, India from 15-19, June 2020.
- 5. National level One-week online training on "Sci Lab Computational Software" organized by Government Degree College for Women (A), Begumpet, Hyderabad, Telangana State, in collaboration with Spoken Tutorial Project, IIT Bombay from 8th June 2020 to 13th June 2020.

List of Faculty Development Programme attended (online mode):

1. One-week online Faculty Development Programme on "Tools and Techniques in Characterization of Compounds" organized jointly by CSIR-Central Electrochemical Research Institute, Karaikudi and Dr. Umayal Ramanathan College for Women, Karaikudi during January 17-21, 2022.

- 2. Five days online Faculty Development Programme on "Advancing Towards Sustainable Teaching and Learning Pedagogy" under DBT Star College Scheme, organized by Kongu Arts and Science College (Autonomous), Erode, from 02.08.2021 to 06.08.2021.
- 3. One-week online international Faculty Development Programme on "Facets of Teaching" organized by Centre for National & International Academic Collaborations, Tamil Nadu Teachers Education University, Chennai in association with Lakshmi College of Education, Gandhigram, Dindigul, from 14.06.2021 to 20.06.2021.
- 4. Two weeks online Faculty Development Programme on "Pedagogy and Research methods" organized by HRDC & IQAC, AMET University, from 24.05.2021 to 06.06.2021.
- 5. Five days online Faculty Development Programme on "Marine Biotechnology" organized by Col. Dr. Jeppiaar Research Park, Centre for Ocean Research in association with Ministry of Earth Sciences Earth Science Technology Cell MoES ESTC) from 21st to 25th September 2020.
- 6. Seven days Online Faculty Development Programme on "Moodle Learning Management System" organized by the PG and Research Department of Chemistry, Auxilium College (Autonomous), Vellore in association with the Spoken Tutorial Project, IIT Bombay funded by the National Mission on Education through ICT, MHRD, Govt. of India from 08-06-2020 to 14-06-2020.
- 7. One-week online Faculty Development Programme on "Teach the Teacher" organized by The Headway Academy, from 14.06.2020 to 20.06.2020.
- 8. Three days online Faculty Development Programme on "ONLINE TEACHING VIA GOOGLE LMS During COVID-19 PANDEMIC" organized by IQAC, C. Abdul Hakeem College (Autonomous), Melvisharam, from 28 30th May 2020.

List of Orientation / Refresher / Short Term Course Attended

- 1. Attended Online Refresher Course in "Research methodology (Interdisciplinary)" at Teaching Learning Centre, Ramanujan College, New Delhi, under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), from 20-07-2021 to 03-08-2021 (14 days).
- 2. **Mendeley Training Certification of Achievement**: Dr. Taju G, has completed a Mendeley training course with a certified Mendeley Advisor. They practice good reference management skills and can use Mendeley effectively, organized by Elsevier on 23rd July 2021.
- 3. UGC Autonomous funded One-week **Short Term Course** / Faculty Development Programme on "Outcome Based Education Curriculum Design & Development" organized by IQAC, C. Abdul Hakeem College (Autonomous), Melvisharam, from 10 to 15th February, 2021.

- 4. 20 days Certification Course on "Computer Aided Drug Design (CADD)" organized by Biotechnika Info Labs Pvt. Ltd, Bangalore, from 11th to 31st December 2020.
- 5. Attended the **Orientation Programme**, Batch 42 conducted by the UGC Human Resource Development Centre, Maulana Azad National Urdu University (MANUU), Hyderabad, from 14.11.2019 04.12.2019.
- 6. **Course** on "Laboratory Management System and Internal Audit as per ISO/IEC 17025:2017" from 9th to 12th October, 2018 at Centre for Electronics Test Engineering, STQCDte, Noida.

Computer Skills

- ✓ Protein gel image quantification analysis, DNA sequence analysis using ClustalW, Gen Bank, Sequence aliments, FASTA, BLAST and other bioinformatics tools.
- ✓ PDB and protein structure prediction (Rasmol).
- ✓ Computer Aided Drug Designing (CADD)
- ✓ Operating Systems: Windows (all versions).
- ✓ MS-Office and all desktop applications.
- ✓ Statistics software (SPSS, GraphPad Prism, etc.,).

Sports events:

- ✓ Kabadi (Winner) "Intercollege Games and sports meet 2002 2003" organized by Shanmuga Industries Arts and Science College, Tiruvannamalai, Tamil nadu, India.
- ✓ Cricket (Runner) "Intercollege Games and sports meet 2005" organized by King Nandhivarman College of Arts and Science, Thellar, Tiruvannamalai, Tamil nadu, India.
- ✓ Valley Ball (Runner) "Intercollege Games and sports meet 2005" organized by King Nandhivarman College of Arts and Science, Thellar, Tiruvannamalai, Tamil nadu, India.

References

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Declaration

I hereby declare that all the information furnished above is true to the best of my knowledge and belief.

Signature

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(G. TAJU)