

CURRICULUM VITAE

Dr. Hari Sankar. H.S
Assistant Professor & Research Guide
Dept. of Biochemistry
T.K.M. College of Arts and Science
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Kerala
India



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OBJECTIVE

To contribute meaningfully to a reputed organization by applying my academic knowledge, research expertise, and teaching experience in Biochemistry. I aim to engage in continual learning and professional development to enhance institutional efficiency, productivity, and scientific advancement.

INTERESTS

- Teaching
- Research on Enzymology, Inhibitors, Kinetics and Natural products
- Organizing and attending seminars/workshops on various aspects of Biochemistry
- Presenting research papers and writing articles to share the knowledge and to interact between academicians and scientists in the field of Biochemistry and Fish Biochemistry
- Social service

EDUCATION

Period	Degree Secured	Name of the Institute	Class/Division	University
2007-14	Ph.D (Biochemistry)	Cochin University of Science and Technology, Kerala, India	'Highly commented' category	Cochin University of Science and Technology
2003-05	M.Sc. (Biochemistry)	K.S.R. College of Arts & Science, Tiruchengode	First class	Periyar University, Salem
1999-02	B.Sc. (Industrial Chemistry)	S.N College, Chathannoor, Kollam, Kerala	First class	University of Kerala

CURRENT PROFESSION

Guest lecturer in the Dept. of Biochemistry, T.K.M. College of Arts and Science, Kollam.

TEACHING EXPERIENCE

Sl. No.	Duration	Institute	Total duration
1	22-12-2021 to till dated	T.K.M College of Arts and Science, Kollam-691 005, Kerala, India	4.5 years
2	12-01-2021 to	T.K.M College of Arts and Science, Kollam-691 005, Kerala, India	
3	01.06.2017 to 31.05.2020	School of Industrial Fisheries, Cochin University of Science & Technology	
4	18.08.2015 to 31.03.2016	T.K.M College of Arts and Science, Kollam-691 005, Kerala, India	
5	08.08.2016 to 31.03.2017	T.K.M College of Arts and Science, Kollam-691 005, Kerala, India	

RESEARCH EXPERIENCE

Sl. No.	Duration	Position/Topic	Institute	Funding agency
1.	09.06.2025 onwards	Research Guide	Post Graduate & Research Department of Biochemistry, T.K.M. College of Arts and Science	University of Kerala
2.	01.06.2017 to 31.05.2020 (3 Years)	Post Doctoral Fellow/ Fish pheromones	School of Industrial Fisheries, Cochin University of Science and Technology	Cochin University of Science and Technology
3.	01.01.2010 to 31.03.2012 (2.3Years)	Junior Research Fellow/ Marine natural products	Inter University Center for Development of Marine Biotechnology, CUSAT	Govt. of Kerala
4.	22.01.2007 to 29.12.2014	Ph.D Research Fellow/ The major digestive enzymes from <i>Etroplus suratensis</i> and <i>Oreochromismossambicus</i> : Distribution and Characteristics	Dept. of Marine Biology, Microbiology and Biochemistry, School of Marine Sciences, Cochin University of Science and Technology	Cochin University of Science and Technology
Total years of experience			8 years (PDF- 3yrs+JRF-2yrs+Ph.D-3yrs)	

NPTEL- SWAYAM Online Certification

Course	Year	Duration	% Mark
Functional Genomics	2020 (Sept-Oct)	4 Weeks	84%

CERTIFICATE TRAININGS OBTAINED

International

Two weeks (from September 7-20, 2003) International training course on Biotechnological Tools for Plant Improvement sponsored by ICRO, UNESCO, EMBO and KSR Educational and Charitable Trust held at the Center for Biological Sciences, KSR College of ARTS and Science, Tiruchengode, Tamilnadu, India.

National

1. One week (from September 10-17, 2010) Training on GC-MS/HS, ICP, FTIR & TG-IR held at Perkin Elmer Technology Innovation Center (PETIC), Mumbai, India.
2. Six days (from 3rd to 8th December 2018) workshop on “Coastal and estuarine ecosystem conservation and management” (Environment Management Training – EMT 2018) conducted by Dept. of Botany, Maharaja’s College, Ernakulam and funded by KSCSTE.

DISSERTATIONS/THESES

Programme	Title of dissertation/thesis
PDF	Isolation, characterization and applications of pheromones from <i>Etroplus suratensis</i>
Ph.D	The major digestive enzymes from <i>Etroplus suratensis</i> and <i>Oreochromis mossambicus</i> : Distribution and Characteristics
M.Sc	Biochemical changes in chronic renal failure and kidney stones
B.Sc	Homeopathic medicine manufacturing- An overview

REVIEWER OF SCIENCE JOURNALS

1. Reviewer of **Natural Product Research, Taylor and Francis**
2. Reviewer of **Turkish Journal of Fisheries and Aquatic Sciences**
3. Reviewer of **Journal of Aquatic Biology and Fisheries, University of Kerala**

MEMBERSHIP IN PROFESSIONAL BODIES

Lifelong member of Society of Marine Biologists, School of Marine Science, Cochin University of Science and Technology, Cochin-16, Kerala, India.

RESEARCH PROJECTS SUPERVISED

1. “Detremination of Anticoagulant Activity and Erythrocyte Membrane Stability of Plant *Melastoma Malabathricum* ” at UG level during 2015-16 at TKM College of Arts and Science, Kollam, Kerala
2. “Screening of Alpha Amylase Inhibitor from *Phyllanthus emblica* Fruit” at UG level during 2015-16 at TKM College of Arts and Science, Kollam, Kerala
3. “Effect of *Carica papaya* leaf and seed extract on erythrocyte membrane stability activity” at UG level during 2016-17 at TKM College of Arts and Science, Kollam, Kerala
4. “Quantification of major biochemical constituents in selected tuber crops” at UG level during 2020-21 at TKM College of Arts and Science, Kollam, Kerala

DETAILS OF BOOKS/ BOOK CHAPTERS PUBLISHED

(a) **Books**

Digestive enzymes in *E. suratensis* (Pearlspot) & *O. mossambicus* (Tilapia)., (2017) [Hari Sankar](#), [Babu Philip](#)., Editor: Hiteesha Bachoo., ISBN10:-3330050098, ISBN13:- 978-3-330-05009-9., Language: **English., Publishing house: [LAP LAMBERT Academic Publishing](#)., Germany, Website: <https://www.lap-publishing.com/> Number of pages: 329.**

(b) **Book Chapters**

Hari Sankar. H.S., Babu Philip and Harikrishnan. M (2021). Biochemical Characteristics of Pepsins from two Cichlids, *Etroplus suratensis* and *Oreochromis mossambicus*. In: Impact of Climate Change on Hydrological Cycle, Ecosystem, Fisheries and Food Security (Madhusoodana Kurup, B., Boopendranath, M. R., Harikrishnan, M. and Shibu, A. V., Eds), pp.497-508, Narendra Publishing House, Delhi, India. ISBN: 9789390309115

DETAILS OF PAPERS PUBLISHED

Details	No.
1. Total number of papers in peer reviewed and indexed international Journals	13
-Papers with impact factor above 5	1
-Papers with impact factor between 2 and 5	3
-Papers with impact factor between 1 and 2	1
-Papers with impact factor between 0.5 and 1	2
2. Papers/Short communications in recognized National journals/ periodicals having ISBN/ISSN number	3

3. Full papers/extended abstracts in International Conference proceedings	5
4. Full papers/extended abstracts in National Conference proceedings	3

PUBLICATIONS OF RESEARCH PAPERS

1. IN PEER REVIEWED INTERNATIONAL JOURNALS

1. Thermal and pH stability of lipases from *Etroplus suratensis* (Pearl spot) and *Oreochromis mossambicus* (Tilapia): A comparative study., **(2020), Hari Sankar. H. S** and Babu Philip., TKM Arts College International Journal for Multidisciplinary Research (TIJMR). Vol. 2 No.1. June, 2020, Pp 1-11.
2. Reproductive Biology of Malabar Pufferfish *Carinotetraodon travancoricus* (Tetraodontidae)., **(2019).** K.M. Anupama., **H.S. Hari Sankar.**, M. Rithin Raj., M. Harikrishnan., Journal of Ichthyology. 59 (4), 545–554. Impact Factor-0.47. Corresponding Author. <https://doi.org/10.1134/S0032945219040027>
3. Oxidative stress and antioxidant defense responses of *Etroplus suratensis* to acute temperature fluctuations., **(2017).** Susan Joy; Aneesa P.A; Jisha Jose; **Harisankar H. S**; Prabhakaran M.P; Sajeevan T. P; Babu Philip. Journal of Thermal Biology. 70, 20–26. Impact factor-2.361., UGC Journal List SI No:1192., Journal No:11380
4. Effect of probiotics on digestive enzyme activities and growth of cichlids, *Etroplus suratensis* (Pearl spot) and *Oreochromis mossambicus* (Tilapia)., **(2016).** **H. SANKAR**, B. PHILIP, R. PHILIP & I.S.B. SINGH., Aquaculture Nutrition. 23(4), 852-864. Impact factor-2.231., UGC Journal List SI No:1233., Journal No:8117. Corresponding Author.
5. DPPH scavenging property of active principles from soft coral *sarcophyton flexuosum* tixier-durivault., **(2015).** K. Byju, V. Anuradha, Emilda Rosmine, **H. S. Hari Sankar**, Anu Gopinath, K. J. Prashob Peter, T. R. Gireesh Kumar, G. Vasundhara, N. C. K umar and S. M. Nair, Pharmaceutical Chemistry Journal, Vol. 49, No. 3, 178-182. Impact Factor-0.565., UGC Journal List SI No:173., Journal No:30526. <https://doi.org/10.1007/s11094-015-1249-1>
6. Evaluation of biochemical and nutritional potential of seaweeds from Lakshadweep Archipelago. **(2015).** Anuradha, V., Byju, K., Jacob, K., Gopinath, A., Prashob Peter, K.J., Gireesh Kumar, T.R., Vasundhara, G., Rosamine, E., **Hari Sankar, H.S.**, Kumar, N.C. and Nair, S.M., *Journal of Aquatic*

Food Product Technology, 24(7), pp.639-647. Impact Factor-1.020. UGC Journal List SI No: ., Journal No:21467 <https://doi.org/10.1080/10498850.2013.798390>

7. Functional Zonation of Different Digestive Enzymes in *Etroplus Suratensis* and *Oreochromis Mossambicus*., (2014). **Hari Sankar. H.S**, Jisha Jose, Remya Varadarajan, Smitha. V. Bhanu, Susan Joy, Babu Philip., International Journal of Scientific and Research Publications, Volume 4, Issue 5. Impact Factor- Nil. UGC Journal List SI No:Nil. Corresponding Author.
8. Preparation of poly (isophthalamide-graft-methacrylamide) and its utilization in the modification of cellulose acetate ultrafiltration membranes., (2014). Jayalakshmi. A, Rajesh. S, Senthilkumar. S, **Hari Sankar. H. S** and Mohan. D. *Journal of Industrial and Engineering Chemistry*. 20 (1), 133–144. DOI:<http://dx.doi.org/10.1016/j.jiec.2013.04.015>., Impact Factor-5.300. UGC Journal List SI No:3849 ., Journal No:28616
9. Sublethal effects of phenolic compounds on biochemical, histological and ionoregulatory parameters in a tropical teleost fish *Oreochromis mossambicus* (Peters)., (2014). Remya Varadarajan, **Hari Sankar H .S**, Jisha Jose and Babu Philip., International Journal of Scientific and Research Publications, Volume 4, Issue 3., Impact Factor- Nil. UGC Journal List SI No: Nil
10. Cadmium ion induced changes in the protein catabolism of *Oreochromis mossambicus*., (2013) Jisha Jose, **Hari Sankar. H.S**, Smitha . V. Bhanu, Aniladevi kunjamma K.P, Remya Varadarajan, Babu Philip., International Journal of Scientific and Research Publications, Volume 3, Issue 8., Impact Factor- Nil. UGC Journal List SI No:Nil
11. Metabolites and bioactivities of Rhizophoraceae mangroves., (2013). Murukesh Nebula., **H.S. Hari Sankar** and N. Chandramohanakumar., *Natural Products and Bioprospecting*., **3** (5), 207–232., Impact Factor – Open Access. UGC Journal List SI No: 825., Journal No:45511 <https://doi.org/10.1007/s13659-013-0012-0>
12. Effect of Ethanol on Membrane Stability in *Oreochromis Mossambicus* (Peters)., (2013). Smitha V. Bhanu, **Hari Sankar H.S** and Babu Philip., *International Journal of Agriculture, Environment and Biotechnology*: 6: 729-736 (Special Issue)., UGC Journal List SI No:181 ., Journal No:2532
13. Performance Evaluation of Poly(amide-imide) Incorporated Cellulose Acetate Ultrafiltration Membranes in the Separation of Proteins and Its Fouling Propensity by AFM Imaging., (2011). Sahadevan Rajesh, Ayyavoo Jayalakshmi, Sundararaj Senthilkumar, **H. S. Hari**

Sankar, and Doraisamy R. Mohan., Industrial & Engineering Chemistry Research, 50 (24), 14016–14029. Impact Factor – 3.573. UGC Journal List SI No:1356 ., Journal No:20949

2. IN PEER REVIEWED NATIONAL JOURNALS

1. Remya Varadarajan, Jisha Jose, **Hari Sankar, H.S** and Babu Philip. (2013). Haematological and ionic alterations in *Oreochromis mossambicus* (Peters) induced by phenolic compounds. *Journal of Aquatic Biology & Fisheries*. Vol.1. pp 96-102., UGC Journal List SI No:344 ., Journal No:64173
2. Sulfath, P.P., **Hari Sankar, H. S** and Bijoy Nandan., (2013). Effect of organochlorine pesticide, lindane on the antioxidant activity of *Oreochromis mossambicus* (Peters). *Journal of Aquatic Biology & Fisheries*. Vol.1. pp 103-111., UGC Journal List SI No:344 ., Journal No:64173.
3. Rajesh. K.M., **Hari Sankar.H .S.**, Anitha. P.K., Laxmipriya. S and Sugunan. S. (2014). Synthesis and characterization of N and N, S co-doped nano-titania photocatalyst and its antibacterial study on *Escherichia coli.*, Indian Journal of Applied Research. 4 (12)., UGC Journal List SI No: Nil

SEMINARS/ CONFERENCE PROCEEDINGS

INTERNATIONAL

1. Characterization and analysis of pepsins from *Etroplus Suratensis* and *Oreochromis mossambicus*: A preliminary investigation on their industrial applications., **Hari Sankar. H. S***, Babu Philip and M. Harikrishnan. International Conference on ‘Impact of Climate Change on Hydrological Cycle, Ecosystem, Fisheries and Food Security’ (ClimFishCon 2020). February 11-14, **2020**. Organized by Government of Kerala and School of Industrial Fisheries, CUSAT at Cochin, India.
2. Identification of proteogenic amino acids with pheromonal action in urine of *Etroplus suratensis.*, **Hari Sankar. H. S*** and Harikrishnan. M. International Conference on Frontiers in Marine Science Challenges and Prospects (MARICON 2019) December 16-20, **2019**. Organized by School of Marine Sciences, CUSAT, Cochin, India.
3. Preliminary Investigations on Behavioral Responses of Mature *Etroplus suratensis* to Urinary Chemical Cues., **Hari Sankar. H. S*** and M. Harikrishnan. World Brackishwater Aquaculture Conference(BRAQCON). January 22-25, **2019**. Organized by Society of Coastal Aquaculture and Fisheries (SCAFi) and ICAR- Central Institute of Brackishwater Aquaculture (ICAR-CIBA)at Chennai, India.

4. Comparative analysis of thermal and pH stability of *Etroplus suratensis* and *Oreochromis mossambicus* intestinal lipase., **Hari Sankar. H.S.**, Prabhakaran. M.P., Preetham E and Babu Philip. International Conference “Towards a Sustainable Blue Economy: Production, Strategies and Policies. February 4-6, **2016**. Organized by: Kerala University of Fisheries & Ocean Studies and NANCEN Environmental Research Center (India)
5. Effect of ethanol on membrane stability in *Oreochromis mossambicus* (Peters) (*In vitro* and *In vivo* conditions)., Smitha V Bhanu., **Haris Sankar. H. S.**, Babu Philip. Third International Seminar on Sustainable Utilization of Tropical Plant Biomass through Biotechnology ‘SUPBT 2012’. December 13- 15, **2012**. Organized by: Department of Biotechnology and Research, KVM College of Engineering and Information Technology., Cherthala, Alappuzha, Kerala, India.

NATIONAL

1. *Oreochromis mossambicus* (Tilapia) Lipase as an Industrial Enzyme: Thermal and pH Stability., **Hari Sankar. H. S** and Babu Philip., National symposium on The Innovative Trends in Chemical Education and Research: Hurdles and Successive Progress (ITCER-2017)., March 22-24, **2017**. Organized by: Post Graduate & Research Department of Chemistry., Sree Narayana College, Kollam, Kerala, India. ISBN: 978-93-5268-268-3
2. Tilapia alpha amylase as model enzyme for clinical research: Screening by kinetics of amylase inhibitors from mangroves., **Hari Sankar. H.S** and Babu Philip., 28th Kerala Science Congress. 28th-30th January **2016**. Organized by Govt. of Kerala, KSCSTE, CWRDM and University of Calicut.
3. Inhibition of intestinal amylase of *Oreochromis mossambicus* by *Sonneratia caseolaris* seed- A Kinetic Study., **Hari Sankar.H.S**, Nebula Murukesh, Babu Philip, N. Chandramohanakumar, Muraleedharan Nair and A.V. Saramma., National Conference On Explorations Of Natural Bioactive Compounds From The Marine Resources- BIOACTIVA’11, 10th & 11th February **2011**., Organised by Department Of Marine Science, Bharathidasan University, Thiruchirappalli, Tamilnadu.

BIODATA

Name	:	Hari Sankar. H. S
Date of birth & Age	:	22.02.1982, 39 years
Father's Name	:	S. Haridasan Pillai
Marital status	:	Married
Health	:	Excellent
Blood Group	:	O ^{+ve}
Nationality	:	Indian
Religion	:	Hindu
Cast	:	Nair
Languages known		
Read, write and speak	:	Malayalam, English,
Read and Speak only	:	Hindi
Speak only	:	Tamil
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REFERENCES

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DECLARATION

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

Varkala

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