CURRICULUM VITAE (CV)



Krishna R. SALIN, Ph.D., Associate Professor and Program Chair Aquaculture and Aquatic Resources Management (AARM)
School of Environment, Resources and Development (SERD)
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Pathumthani, Bangkok, Thailand. Tel: +66 2524 5452; 5489
Mobile: +66 95950 9741 Email: salinkr@ait.ac.th Web: www.aitaquaculture.org

Nationality: Indian

EDUCATION:

Institution	Position/Degree obtained
Queensland University of Technology, Brisbane, Australia. 2009	Endeavour Postdoctoral Fellow
Central Institute of Fisheries Education (Deemed University),	Dogton of Dhilosophy (Manipultum)
Mumbai, India. 1998-2003	Doctor of Philosophy (Mariculture)
College of Fisheries, Kerala Agricultural University, India. 1994-	Master of Fisheries Science
1996	(M.F.Sc. Aquaculture), I Rank
College of Fisheries, Kerala Agricultural University, India. 1989-	Bachelor of Fisheries Science
1994	(B.F.Sc.), I Rank

PROFESSIONAL POSITIONS:

2021 to date: President-elect, World Aquaculture Society, Asia-Pacific Chapter (WAS-APC).

2021 to date: **Honorary Director**, Network for the Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC)), Bangkok, Thailand.

2019 to 2021: Director, World Aquaculture Society, Asia-Pacific Chapter (WAS-APC).

2019 to date: Member of the Editorial Board, Indonesian Aquaculture Journal, MMAF, Indonesia.

2018 to date: Visiting Professor, Shanghai Ocean University, China.

2017 to date: **Program Chair**, Aquaculture and Aquatic Resources Management (AARM), AIT.

2015 to date: Visiting Faculty, Juárez Autonomous University of Tabasco (UJAT), Mexico.

2018 to date: **Associate Editor**, *Aquaculture and Fisheries* (Elsevier).

2014 to date: **Associate Editor**, *Fisheries and Aquatic Sciences* (Korean Society of Fisheries and Aquatic Sciences).

EMPLOYMENT:

Institutions	Position
Asian Institute of Technology, Thailand;	Associate Professor, Aquaculture and Aquatic
December 2017 to date	Resources Management (AARM)
Asian Institute of Technology, Thailand;	Assistant Professor, Aquaculture and Aquatic
July 2014 – December 2017	Resources Management (AARM)
Queensland University of Technology, Brisbane,	Visiting Fellow, Earth, Environment &
Australia; January – May 2013	Biological Sciences (EEBS), QUT
Kerala University of Fisheries and Ocean Studies,	Assistant Professor (Senior Scale), Dept. of
India; May 2011 – July 2014	Aquaculture and Biotechnology
Krishi Vigyan Kendra (KVK), Kerala Agricultural	Assistant Dustanan Assassitans (Carion Sasla)
University, India; October 2009 – May 2011	Assistant Professor, Aquaculture (Senior Scale)
Krishi Vigyan Kendra (KVK), Kerala Agricultural	A - i - t t D f A 1 t
University, India; October 2005 – October 2009	Assistant Professor, Aquaculture
Scampi City Hatcheries (P) Ltd., Nellore,	C- f1Di
Andhra Pradesh, India; Mar 2001 – Oct 2005	Co-founder and Director
Natures Way Hydrofauna, Fish and Prawn Hatchery,	Foundar and CEO
Alappuzha, Kerala, India; Sep 1996 – Oct 2005	Founder and CEO

PROFESSIONAL HONOURS/AWARDS:

- 2021 President-elect, World Aquaculture Society, Asia-Pacific Chapter (WAS-APC).
- 2021 **Honorary Director**, Network for the Development of Agricultural Cooperatives in Asia and the Pacific (NEDAC), an Intergovernmental Agency established by FAO, Bangkok, Thailand.
- 2020 Life Fellow of the Society of Fisheries Technologists India (SOFTI), India
- 2020 Elected as a Member of the EXCOM, and Chair of the Committee on Fisheries Cooperatives of NEDAC (Network for the Development of Agricultural Cooperatives in Asia and the Pacific), Bangkok, Thailand.
- 2019 **Elected** as the **Director**, World Aquaculture Society, Asia-Pacific Chapter (WAS-APC).
- 2019 Merit Award from the Asian Fisheries Society, 12th AFAF, Iloilo, Philippines.
- 2018 **Member of the Affiliation Committee** of World Aquaculture Society, USA.
- 2018 **Appreciation Certificate**, GAF7, 7th Global Symposium on Gender in Aquaculture and Fisheries, October 2018, Bangkok, Thailand.
- 2016 **Appreciation Certificate**, GAF6, 6th Global Symposium on Gender in Aquaculture and Fisheries, August 2016, Bangkok, Thailand.
- 2016 **Appreciation Certificate**, Asian Fisheries Society, Kuala Lumpur, Malaysia; 11th Asian Fisheries and Aquaculture Forum, August 2016, Bangkok, Thailand.
- 2012 **CREST Award**, Dept. of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India.
- 2011 **Dedicated Organizer**, Aquaculture without Frontiers (AwF), UK.
- 2009 **Australian Endeavour Awards**, Govt. of Australia, Dept. of Education, Employment and Workplace Relations (DEEWR), Australia.
- 2003 Best Young Scientist Award, for contributions in prawn research, Kochi, India.
- 1994- M.F.Sc (Master of Fisheries Science) I Rank, College of Fisheries, Kerala
 - '96 Agricultural University, Kochi, India.
- 1994 **Junior Research Fellowship**, Indian Council for Agricultural Research (ICAR), New Delhi.
- 1992 Jawaharlal Nehru Fund Award for top-ranking Agriculture Students, New Delhi, India.
- 1992 **Best Outgoing Student Award**, Fisheries Faculty Club, Kerala Agricultural University, Kochi, Kerala, India.
- 1989- **B.F.Sc (Bachelor of Fisheries Science) I Rank**, College of Fisheries, Kerala Agricultural University, Kochi, India.

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS:

- Director of the World Aquaculture Society, USA and the WAS Asia-Pacific Chapter.
- Member of Asian Fisheries Society, Manila, Philippines.
- Life Fellow of the Society of Fisheries Technologists (SOFTI), India

CONSULTING SERVICES/ INDUSTRY ENGAGEMENT:

- 1. June 2020 May 2021: Consultant/Principal Investigator

 Documentation of digital technologies in aquaculture: (2021–2022) Project sponsored by FAO.
- 2. June 2021 December 2021: Consultant/Principal Investigator Innovations and good practices on health management in aquaculture in the Asia-Pacific region: (2021). Project sponsored by FAO.
- 3. October 2020 December 2023: Consultant/Principal Investigator AIT-Grobest Research Partnership for the global shrimp research; Collaborative research project sponsored by Grobest Holdings, Hong Kong.
- 4. June 2020 June 2021: Consultant/Principal Investigator

Country reviews on aquaculture innovations in Asia, Project funded by FAO.

November 2019 – October 2021: Principal Investigator International Consultant for Capacity Development and Curriculum Development for Fisheries and Aquaculture Faculty of Yangon University, Myanmar, Project funded by GIZ, Germany.

6. December 2019 – April 2020: International Consultant Capacity Development Plan for Cambodian aquaculture (2020-'23), CapFish-Aquaculture

Program of the European Union, AESA/Ministry of Agriculture, Forestry and Fisheries, Cambodia.

7. December 2016 – December 2019: Consultant

Consultant to Msingi Aquaculture East Africa, Gatsby Foundation, UK (funded by DFID, UK) – Enhancing the technical capacity of aquaculture business and academic institutions in East Africa (countries covered: Kenya, Tanzania, Uganda, and Rwanda).

8. April 2010, to date: Hon. Advisor

Hon. Advisor to Ananda Group, India

Ananda Group of Companies, based in Bhimavaram, Andhra Pradesh is one of the largest integrated aquaculture company in India (<u>www.anandagroup.com</u>).

9. **May 2014**, to date

Hon. Technical Consultant to the WTBT Indo-German Organic Shrimp Project - The West Bengal Traditional Black Tiger (WTBT) Organic Shrimp Project, supported by *Hofer KG* (Austria) and *Blue Sensus*, Germany.

10. **2016**, to present: **Hon. Technical Consultant**

Hon. Consultant to TAR BIOFLOCTECH, Kingfishgroup Co. Ltd., Chiangmai, Thailand, a tilapia biofloc aquaculture company in Thailand.

11. December 1998 - October 2005

Technical Consultant to *Maharaja Aquatics*, Nellore, Andhra Pradesh, and their Group Companies in India; involved in the production, marketing, and research on commercial hatchery production of prawn and shrimp.

12. **2003**

Technical Consultant to Kerala Agricultural University, India on a project for setting up of a commercial freshwater prawn hatchery for the Govt. of Karnataka, at Kumta, Karnataka, India.

SPECIFIC EXPERIENCE IN AQUACULTURE INNOVATION AND OUTREACH

- Part of the technical team in standardizing a commercially feasible hatchery technology for prawns in India, since 1990.
- Experienced in commercial farming and hatchery production of finfish and shellfish in various provinces of India and Thailand; Had served as a consultant to prawn hatcheries in Andhra Pradesh, and Tamil Nadu, India.
- Honorary Technical Advisor to India's biggest integrated aquaculture company, Ananda Group based in Bhimavaram, Andhra Pradesh.
- Industry experience: Founder and CEO of a prawn hatchery in Kerala (1996); Co-Founder and CEO of one of the biggest freshwater prawn hatcheries in in Nellore, Andhra Pradesh (2001), India.
- Postdoctoral research experience on prawn genomics at QUT, Brisbane, Australia.
- Established a robust network of agriculture and aquaculture businesses and academic/research organizations worldwide.

- Updated knowledge and experience working with several global deep-tech companies and platforms in agri-aquaculture.
- Deep understanding of the global markets and trade in agri-aqua commodities and regional trends.
- Association with NEDAC, an international network of agricultural cooperatives set up by FAO, ICA and ILO.
- Leads a research team at AIT engaged in innovative aquaculture research and technology development.

TECHNICAL REPORTS PREPARED

- 1. Innovations Towards Reduction of Antimicrobial Use and Mitigation of Antimicrobial Resistance (2022): Report submitted to the FAO.
- 2. **Aquaculture Innovations in Selected Asian Countries** (2021): Report submitted to the FAO.
- 3. *Curriculum Support to Yangon University, Myanmar* (2021): Report submitted to the GIZ.
- 4. Capacity Development Plan for Cambodian Aquaculture (2020 2023): MAFF, Cambodia.
- 5. *Curriculum for Commercial Aquaculture in East Africa (2019)*; DFID/Msingi East Africa.
- 6. Technical Capacity Assessment of Aquaculture Industry in East Africa (2017), DFID, UK.

INVITED REVIEWER

Aquaculture, Elsevier; Aquaculture Research, Wiley Blackwell; Reviews in Aquaculture, Wiley Blackwell; Aquaculture Reports, Elsevier; Aquaculture International, Springer; Aquaculture Environment Interactions — Inter-Research; Caryologia — International Journal of Cytology, Cytosystematics and Cytogenetics — University of Florence, Italy; Mitochondrial DNA — Informa Healthcare, Taylor & Francis; Reviews in Aquaculture, Wiley Blackwell; Reviews in Fisheries Science and Aquaculture — Taylor & Francis; Journal of World Aquaculture Society, Wiley-Blackwell; Gene Reports, Elsevier; Journal of Applied Aquaculture, Taylor & Francis; Aquatic Conservation: Marine and Freshwater Ecosystems - Wiley Blackwell; Fishery Technology - ICAR, India.

PROFESSIONAL EXPERIENCE AND INVITATIONS:

- 2021 President-elect, World Aquaculture Society Asia Pacific Chapter (WAS-APC).
- 2021 Chair, Doctoral Progress Review Committee (DPRC), AIT.
- Invited Speaker, Webinar: Pushing the frontier of aquaculture development with innovation, Adaptability versus flexibility: New paradigms of aquaculture innovations in Asia, 25 March 2021. FAO.
- Invited Speaker, Webinar on Sustainable Blue economy, Understanding and integrating SDG14 goals in the blue economy framework: Challenges, progress and next steps for Asia-Pacific, 2 February 2021. AIT/TERI/CAS.
- Organizer, Entrepreneurship Development in Seaweed Business for Cooperatives, 28 January 2021. NEDAC.
- 2021 **Invited Speaker, Webinar on Sustainable Aquaculture Systems**Coorganised with Anhui Academy of Agricultural Sciences, China, 13 January 2021.
- Plenary Speaker, SMART P3BLUEECO-2021, Shastri Indo-Canadian Institute-Golden Jubilee Conference, New paradigms for sustainable aquaculture the age of innovations, 12 March 2021. Kerala University, Kerala, India.
- 2020 Invited Speaker, Smart Aquaculture and Productivity Webinar, Smart Aquaculture Technologies Enhancing Productivity and Quality, 30 November 2020, World Institute of Productivity, Jakarta, Indonesia
- 2020 **Conference Co-Chair, ICFA 2020**, International Virtual Conference on Fisheries and Aquaculture, from 26 27 November 2020, TIIKM, Colombo, Sri Lanka

- **Course Director,** *i-FLOCs* 2020, Virtual Aquaculture Workshop on Biofloc Technology in Aquaculture, 23 25 November 2020, AIT, Bangkok, Thailand
- 2020 Invited Speaker, Vaibhav Summit Webinar, Atmanirbhar Aquaculture: Self-sufficiency by Embracing Innovative Technologies, 16 October 2020, Govt. of India, New Delhi, India
- **Invited Speaker, ASEAN-FEN Webinar**, New-age Innovations in Aquaculture, 10 October 2020, Kuala Lumpur, Malaysia
- **Moderator** of the **WAS-APC Webinar** on Aquaculture Health and Disease Management, held on 30 September 2020
- **Keynote Speaker, Junagadh Agricultural University Webinar**, *Integrated Multitrophic Aquaculture A Sustainable Production Model*, 22 September 2020, Veraval, India
- **Keynote Speaker**, Satyabhama Institute of Science and Technology Webinar, *Biofloc Technology in Aquaculture Benefits and Management of Diseases*, 15 Sep 2020, Chennai, India
- **Keynote Speaker, NEDAC Webinar**, *Aquaculture Value Chains*, 17 July 2020, Bangkok, Thailand
- 2020 Training to officials of Dept. of Fisheries, Kerala, India on Biofloc technology. 2 and 7 July 2020.
- **Keynote Speaker, World Education Forum/BEST University Webinar**, Technology Adoption in Education during Covid times A Global Perspective, 27 June 2020, Hyderabad, India
- 2020 Member, Research Ethics Review Committee, AIT
- 2020 Invited Speaker, Junagadh Agricultural University Webinar, Career Paths in Fisheries and Aquaculture Embracing Innovation and Technology, 26 June 2020, Veraval, India
- **Invited Speaker**, Kerala University of Fisheries and Ocean Studies Webinar for students *Application of Biofloc Technology in Aquaculture*; 24 June 2020
- **Moderator** of the **WAS-APC Webinar** on Arising Aquaculture Opportunities amidst Covid19, held on 19 June 2020
- **Member of the Program Committee, GAF8 2021**, for the 8th Global Conference on Gender in Aquaculture & Fisheries, 6-9 April 2021, Kochi, India
- **Keynote Speaker and Mentor, PSS2020**, Professional Students Summit, 15 February 2020, Kochi, India.
- **Keynote Speaker, MECOS-3**, International Symposium 7 10 January 2020, Kochi, India.
- 2020 Training to officials from the Ministry of Fisheries, Oman on Biofloc technology. CIFT, Kochi, India. 10 January 2020.
- 2019 Editorial Consultant, Journal Fishery Technology, SOFTI, India.
- **Conference Co-Chair, Giant Prawn 2019**, International Conference to be held from 15 18 November 2019, Shanghai, China.
- **Keynote Speaker, Aqua-Aquaria 2019**, 30 31 August, Hyderabad, India.
- 2019 Keynote Speaker, ICFA 2019, 22-23 August, Bangkok, Thailand
- **Keynote Speaker, BRACQON 2019**, Global Brackishwater Conference, Chennai, India.
- **Conference Chair, Asian Aquaculture 2018**, International Conference held from 3 6 December 2018, Bangkok, Thailand.
- 2018 Course Director of the international training program on *Integrated Multi-trophic Aquaculture*, held from 1 2 December 2018, AIT Thailand.
- 2018 Course Director of the international training program on *Management of Parasitic Diseases Aquaculture*, held from 26 30 November 2018, AIT Thailand.
- **Invited Speaker,** International Symposium on Aquaculture and Fisheries Education (ISAFE-3), Asian Fisheries Society, Mumbai, India.
- **ERASMUS+** Sustainable Seafood and Nutrition Security (SSNS) project co-funded by the European Commission.
- 2017 Invited Speaker, 11 Asian Fisheries Forum, Asian Fisheries Society, Kochi, India.
- **Invited Speaker,** Institute of Hydrobiology (CAS), Wuhan, China on *Sustainable* aquaculture technology in Thailand a green future for blue revolution, 20 February 2017.
- 2017 Course Director of the international training programs on *Sustainable Asian Aquaculture series 1: Biofloc, Aquamimicry, and Biological Farming*, held from 21 25 August 2017, AIT Thailand.

- 2017 **General Convener and Co-Organizer** of **GIANT PRAWN 2017**, International Conference on Giant Freshwater Prawns held from 20 24 March 2017, AIT Thailand.
- 2017 **Keynote Speaker,** International Aquamimicry Sustainable Shrimp Farming Workshop 2, 8 11 January 2017, Hua Hin, Bangkok, Thailand.
- 2016 Keynote Speaker, 8th ASEAN Sustainable Aquaculture Workshop organized by National Taiwan Ocean University (NTOU) from 27 November to 5 December 2016.
- 2016 **Member of the Scientific Committee,** 3rd International Conference on Fisheries and Aquaculture (ICFA 2016), 24 to 25 August, Negombo, Sri Lanka. IITKM, Sri Lanka.
- 2016 **Keynote Speaker**, International Conference on Aquatic Exotics, 28 30 March 2016, University of Kerala, Thiruvananthapuram, India.
- 2015 **Keynote speaker,** *AQUADACA 2015 Simposio Internacional de Acuacultura*, 30 Nov 2 Dec 2015, UJAT, Tabasco, Mexico.
- 2015 **Co-PI, ERASMUS+ GeoServices-4-Sustainability (GeoS4S)** project co-funded by the European Commission.
- 2015 Invited Speaker, Seventh Aqua Feed Forum, 22-24 October, Can Tho University, Vietnam.
- 2015 Course Director of the international *Smart Shrimp Farming Workshop*, 20 22 January 2016, jointly with World Aquaculture Society, AIT Thailand.
- 2015 Course Director of the international training program on *Recirculating Aquaculture Systems: Design, operation, and management*, 15 19 January 2016, AIT Thailand.
- 2015 Course Director of two international training programs on *Innovative Biofloc Technologies for Disease Prevention and Control in Shrimp* Farming, held from 6 10 July and 12 16 October 2015, AIT Thailand.
- 2015 Invited Speaker, Zhejiang Institute of Freshwater Research, Zhejiang, China
- 2015 How to hack Aquaculture: Special feature, Sci Dev.net. http://www.scidev.net/global/technology/multimedia/hack-aquaculture-tilapia-WSN.html
- 2015 Invited Speaker, Profit on Aquaculture 2015, 13/4/2015, Ananda Group, India.
- 2015 **Invited to the** *Global Conference on Inland Fisheries*, 26-28 January, FAO of the UN and Michigan State University, Rome, Italy.
- 2014 **Invited Speaker,** Sustainable Aquaculture Workshop, 3-11 November National Taiwan Ocean University, Taipei, Taiwan.
- 2014 A date with Prawns: Interview, SBS Radio, Australia, March 2014.
- Visiting Fellow, Earth, Environment & Biological Sciences (EEBS), Queensland University of Technology (QUT), Brisbane, Australia (*Identification of critical gene loci and novel mutations that affect economically important traits including individual growth rate in cultured Giant freshwater prawn stocks*).
- 2011 Member of the National Committee for drafting Traceability Standards (ISO/TC-234) for shellfish including Crustaceans and Molluscs, Ministry of Commerce, Govt. of India.
- 2011 **Member of the Curriculum Committee** for Aquaculture and Ornamental Fish Culture for the **National Institute of Open Schooling**, New Delhi.
- 2011 **Appreciation Certificate** from **World Aquaculture Society**, USA for the successful organization of APA 2011.
- 2011 **Dedicated Organizer**, Appreciation Certificate from **Aquaculture without Frontiers** (AwF), UK.
- 2011 **Programme Committee**, Asian Pacific Aquaculture 2011 (APA 2011) World Aquaculture Society, Kochi, India.
- 2011 **Session Chair, Freshwater Prawns, Brazilian** *Macrobrachium*, World Aquaculture 2011, Natal, Brazil.
- 2011 **Session Chair, Freshwater Prawns**, Asian Pacific Aquaculture (APA 2011), World Aquaculture Society, Kochi, India
- 2011 Invited paper Giant Prawn 2011, Kochi, India
- 2010 Invited contributing author to 2nd Edition: New, M.B., Valenti, W.C., Tidwell, J.H., D'Abramo, L.R., and Kutty, M.N. (Eds.) 'Freshwater Prawn Culture: The Farming of Macrobrachium rosenbergii', Blackwell Science, UK.

- 2010 **Hon. Advisor,** Ananda Group of Companies, Bhimavaram, Andhra Pradesh, the largest integrated aquaculture company in India (since April 2010).
- 2010 **Postdoctoral Research Fellow,** Molecular Genetics Laboratory, QUT, Brisbane, Australia (Outlining patterns of genetic diversity within and among the stocks of Giant freshwater prawn in India and Sri Lanka).
- 2008- Member of the Expert Committee Two Task Forces on Inland Fisheries &
 - '11 Aquaculture, and Drafting Leasing Policy, Govt. of Kerala, India.

ONGOING PROJECTS:

- 1. **Documentation of digital technologies in aquaculture:** (2021–2022) Project sponsored by FAO. US\$ 30,000, sponsored by FAO.
- 2. **Documentation of innovations in aquaculture health management:** (2021) Project sponsored by FAO. US\$ 36,000, sponsored by FAO.
- 3. Capacity Development for Agricultural Cooperatives in the Asian-Pacific region: (2021 2022) US\$ 45,000, sponsored by NEDAC Bangkok (Principal Investigator).
- 4. *AIT-Grobest Research Partnership for the global shrimp research* (2020 2023) US\$ 120,000, sponsored by Grobest Holdings, Hong Kong.
- 5. *Capacity Development for Indian Aquaculture-II:* (2019 2021) US\$ 120,000, sponsored by NFDB, India.

COMPLETED PROJECTS:

- 1. Support to aquaculture curriculum development, capacity development, national and international networking plus system improvements at Yangon University, Myanmar (2019 2021) US\$ 116,402, funded by GIZ, Germany.
- 2. **Documenting aquaculture innovations in selected Asian countries** (2020 2021) US\$ 28,000, funded by FAO.
- 3. *Capacity development for Fisheries and Aquaculture institutions in East Africa* (2018 2019), Co-funded by DFID, UK through Msingi East Africa Ltd US\$ 49,875.
- 4. *Aquaculture Internship for China* (2019); Shanghai Ocean University, China US\$ 49,500.
- 5. *Capacity Development for Indian Aquaculture-I* (2019); National Fisheries Development Board (NFDB), India US\$ 27,000.
- 6. **Sustainable Asian Aquaculture** (2018 2019) US\$ ~84760.
- 7. *Gender in Aquaculture and Fisheries* (2018 2019) US\$ 45,395
- 8. *Integrated Coastal Management (ICM)* (2018 2019), funded by IUCN, Mangroves for Future US\$ ~62,000
- 9. Integrated Multitrophic Aquaculture (IMTA) (2018 2019) US\$ ~19,000.
- 10. *ERASMUS+, GeoServices-4-Sustainability (GeoS4S)*; co-funded by the European Commission (2015-2018): 74,976 Euro.
- 11. **Sustainable Aquaculture Technology Development for East Africa** (2017) US\$ ~18,000, funded by DFID, the UK, through Msingi East Africa Ltd.
- 12. *Evaluation of growth performance and immunity of white shrimp against common pathogens*, sponsored by Kemin Industries South Asia (P) Ltd (2017 2018): US\$ 38,553 (THB 1,282,500).
- 13. Waking up a sleeping giant an assessment of the technical capacity of aquaculture business in East Africa, sponsored by Gatsby Foundation, UK (2016 2017): US\$ 39,079 (THB 1,300,000).

- 14. *Innovative Aquaculture Technologies for the conservation of water and safe discharge of effluents* D.S.T, Govt. of India (2014-2017): US\$ ~192,188.
- 15. *Smart aquaculture systems for Thailand partnering with VerifiK8* (2016 2017), sponsored by FairAgora Asia, Thailand: US\$ 5411 (THB 180,000).
- 16. *GIANT PRAWN 2017* (2016 2017), AIT, Thailand: US\$ 60,517 (THB 2,013,179).
- 17. Shrimp Biofloc Farming Technology (2015-2016), AIT Thailand: US\$ 113,026.
- 18. *Recirculating Aquaculture Systems (RAS) and Aquaponics* (2015-2017), AIT Thailand: US\$ 41,687.
- 19. *AARM Lab testing services for the aquaculture industry*, sponsored by Kemin Industries South Asia (P) Ltd: US\$ 5577 (THB 195,186).
- 20. *Studying patterns of genetic diversity in farmed red tilapia strains* UAR Foundation, Andhra Pradesh, India (2015-2016): US\$ 5000.
- 21. *Capacity building for Indian Aquaculture* UAR Foundation, Andhra Pradesh, India: US\$ 6,650.
- 22. *Evaluation of the genetic quality of tilapia stocks farmed in AIT* AIT Research Initiation Grant: 50,000 Baht.
- 23. Identification of critical gene loci and novel mutations that affect economically important traits including individual growth rate in cultured Giant freshwater prawn stocks; 2012-13, Dept. of Biotechnology, Govt. of India.
- 24. Outlining levels and patterns of genetic diversity in the stocks of giant freshwater prawn stocks in India and Sri Lanka; 2009-10; Govt. of Australia.
- 25. Comprehensive Development of Fisheries and Aquaculture in Puthenvelikkara Grama Panchayath, Kerala, India (Puthenvelikkara Samagra Matsya Gramam Project) RKVY, Govt. of India.
- 26. Biodiversity of cultivable air-breathing fishes in Kerala and development of appropriate culture strategies for Heteropneustes and Clarias spp; 2007-10; Govt. of Kerala, India.
- 27. Assessment of resident time of antibiotics in farmed aquatic animals by evaluating the metabolites in vital organs; 2007-10; ICAR, Govt. of India.
- 28. Characterization of different stocks of Macrobrachium rosenbergii and development of genetically improved strain through selective breeding; 2007-10; Govt. of Kerala, India.
- 29. *Environmental and socioeconomic impacts of aquaculture in Pokkali fields of Kerala*; 2006-08; ADAK, Govt. of Kerala, India.
- 30. The impact of one crop paddy one crop prawn rotational farming on environment and socio-economics in Kuttanad; 2006-08; ADAK, Govt. of Kerala, India

PUBLICATIONS

Books

- 1. Advances in Giant Prawn Aquaculture and Fisheries: Hatchery Technology (2021). K.R. Salin (Editor). Springer (in press).
- 2. **Asian Aquaculture (2018)**. K.R. Salin (Editor), Book of Abstracts, Asian Aquaculture 2018, December 2018. Asian Institute of Technology, Bangkok, Thailand. ISBN 978-616-8230-00-8.
- 3. **Giant Prawns Emerging possibilities for sustainability** (2017). **K.R. Salin** (Editor) Book of Abstracts, GIANT PRAWN 2017, March 2017, Asian Institute of Technology, Bangkok, Thailand. ISBN 978-974-8257-94-5.

- 4. Profit on Aquaculture, Technical Guide: Best Management Practices for Sustainable Increase in Production and Profits from Aquaculture (2015). Salin K.R (Editor). Asian Institute of Technology, Thailand. ISBN: 978-974-8257-86-0.
- 5. *Macrobrachium: The culture of Freshwater Prawns* (2008) New, M.B., C.M. Nair, M.N. Kutty, **K.R. Salin** & M.C. Nandeesha. Macmillan India Ltd.
- 6. Freshwater Prawns: Advances in Biology, Aquaculture & Marketing (2007). C. Mohanakumaran Nair, Nambudiri D.D., Jose S., Sankaran T.M., Jayachandran K.V. & Salin K.R. (Eds.). Allied Publishers, India.
- 7. Compendium of Fisheries and Aquaculture Development in the Asia Pacific Region (2011). Jose T.M., Nair J.R., Salin K.R, Sherief T.M., Raman N.N., Krishnakumar S. & M. Jayapradeep (Eds.). College of Fisheries, Kochi, India.
- 8. *Manual of Freshwater Prawn Farming*, Four Volumes (2012, 2010, 2009 and 2008). Salin K. R. published as part of the National Training Program on Giant Freshwater Prawn Farming, funded by National Fisheries Development Board (NFDB), Govt. of India, Kerala Agricultural University, Kochi, India.

Contributed chapters

- 1. **K.R, Salin** (2019). Biomimicry in aquaculture Connecting science and practice. In: pp. 121 133. Report of the Special Session on Advancing Integrated Agriculture Aquaculture through Agroecology, Montpellier, France, 25 August 2018. FAO Fisheries and Aquaculture Report No. 1286, 2019. Rome.
- 2. **K.R, Salin**, and G.A. Atagube (2018). Aquaculture and the environment: towards sustainability. In: pp. 1 62. Sustainable Aquaculture (ed. by C. Visvanathan, R. Boopathy, and F. Hai). Springer.
- 3. **K.R, Salin**, V.V, Arun, C.M, Nair, and J.H. Tidwell (2018). Sustainable Aquafeed. In: pp. 123 151. Sustainable Aquaculture (ed. by C. Visvanathan, R. Boopathy, and F. Hai). Springer.
- 4. P. Pongtippatee, **K.R, Salin**, G.A. Atagube and B. Withyachumnarnkul (2018). Sustainable production of shrimp in Thailand. In: pp. 153 172. Sustainable Aquaculture (ed. by C. Visvanathan, R. Boopathy and F. Hai). Springer.
- 5. G.A. Atagube, M.T. Kamble and **K.R, Salin** (2017). Food Industry by-products as protein replacement in Aquaculture diets of Tilapia and Catfish In: Food Processing By-Products and their Utilization (ed. by A.K.Anal). Wiley-Blackwell. ISBN: 978-1-118-43288-4.
- Wagner C. Valenti, Michael B. New, K.R Salin and Jinyun Ye (2010). Grow-out Systems Monoculture, pp. 154 – 179. In: Freshwater Prawns – Biology and Farming (ed. by New, M.B., Valenti, W.C., Tidwell, J.H., D'Abramo, L.R., and Kutty, M.N). Wiley-Blackwell, UK.
- 7. C. Mohanakumaran Nair, **Salin K.R.**, Devika Pillai, Sarath S. & Manoj C.K. (2010). Simultaneous rice-fish culture system in modified *Pokkali* rice fields a possible alternative to improve sustainability. pp. 59 66. In: Coastal Fishery Resources of India-Conservation and Sustainable utilization (ed. by Meenakumari, B., Boopendranath, M.R., Edwin, L., Sankar, T.V., Gopal, N & Ninan, G). SOFTI, Kochi, India.
- 8. **Salin K.R**, Nair C.M & Sebastian C.D (2009). Sustainable rice-prawn farming system in Kole lands of Kerala, India. pp. 27-33. In: Giant Malaysian Prawn: Transforming the Industry through Technological Innovations. (ed. by Siti Shapor Siraj, Annie Christianus & Siti Khalijah Daud). Malaysian Fisheries Society, Kuala Lumpur, Malaysia.
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Conference presentations

- 1. **K.R. Salin** (2021) New paradigms for sustainable aquaculture the age of innovations. Plenary presentation at (SMART P3BLUEECO-2021, Shastri Indo-Canadian Institute-Golden Jubilee Conference Sustainable Marine Fisheries and Aquaculture: Policies, Packages and Perspectives in Blue Economy Paradigm, 12 March 2021. Kerala University, Dept. of Aquatic Biology and Fisheries, Thiruvananthapuram, Kerala, India.
- 2. **K.R. Salin** (2020) Eco-friendly and energy-efficient aquaculture systems in Asia. In: Joshi K.K. et al., pp. 150 152, Marine Ecosystems Challenges and Opportunities, MECOS-3, 8-10 January 2020, MBAI, Kochi, India.
- 3. **K.R. Salin** (2019) Sustainable aquaculture in an era of diversification: Successful examples from Asia, Aqua Aquaria 2019, 30-31 August, MPEDA, Hyderabad, India.
- 4. **K.R. Salin** (2019) Eco-friendly and energy-efficient coastal aquaculture development in Asia. Book of Abstracts, ICFA 2019, 22-23 August, Bangkok, Thailand.
- 5. **K.R. Salin** (2019) Evaluation of growth and digestibility of Asian seabass, *Lates calcarifer* fed with diets containing insect meal from two-spotted cricket, *Gryllus bimaculatus*. Book of Abstracts, ICFA 2019, 22-23 August, Bangkok, Thailand.
- 6. **K.R. Salin** (2019) Brackishwater Aquaculture in Thailand Holding Promise for a Sustainable Future. BRACQON 2019, World Brackishwater Aquaculture Conference, 23-25 January 2019, CIBA, Chennai, India.
- 7. **K.R. Salin**, G.A. Ataguba, Y-le Guil, and E. Bourgois (2016). Sailing through the sea of certification schemes for Asian shrimp farming How far at sea are we? Sustainable Aquaculture Workshop, 27 November to 5 December. National Taiwan Ocean University, Taipei, Taiwan.
- 8. **Salin, K.R.** (2016). Exotic species changing the economies: the case of *Litopenaeus (Penaeus)* vannamei and Nile tilapia in Thailand. Keynote presentation at the International Conference on Aquatic Exotics: Trends, Challenges and Policies, 28-30 March 2016, Department of Aquatic Biology and Fisheries, Kerala University, Thiruvananthapuram, Kerala, India.
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- 11. **Salin K.R.** (2015) Regaining the lost ground: How Thailand strives to fight back disease challenges by adopting alternative shrimp farming strategies. Presented at *AQUADACA* 2015 Simposio Internacional de Acuacultura, 30 Nov 2 Dec 2015, UJAT, Tabasco, Mexico.
- 12. **Salin K.R.** (2015) Ecosystem based feeding emerging approaches from the ailing shrimp farms of Thailand aimed at sustainability. Presented at *Seventh Aqua Feed Forum*, 22-24 October, Can Tho University, Vietnam.
- 13. **Salin K.R**. (2014) Genetic stock improvement: A tool for sustainable intensification of Aquaculture, Presented at *Sustainable Aquaculture Workshop*, 3-11 November, National Taiwan Ocean University, Taipei, Taiwan.
- 14. **Salin K.R**. (2015) Asian Institute of technology A Global Leader in Aquaculture Education and Research. Presented at *Profit on Aquaculture 2015*, 13 April 2015, Ananda Convention Centre, Bhimavaram, Andhra Pradesh, India. Uddaraju Anandaraju Foundation, Andhra Pradesh, India.
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- 26. **Salin K.R.**, Mohanakumaran Nair C., Juliet Joseph, Methil N Kutty (2010) Economics of organic rice giant freshwater prawn *Macrobrachium rosenbergii* farming in the traditional rice

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ORGANIZATION OF TRAINING COURSES, CONFERENCES, SEMINARS, AND WORKSHOPS:

International conferences organized as Chair/Co-chair

	Conferences	Duration	Venue	Attendance
1	GIANT PRAWN 2019 (www.giantprawn.org) - Co-Chair	15 – 18 November 2019	Shanghai, China	Forthcoming Conference
2	Asian Aquaculture 2018 (www.asianaquaculture.org) - Chair	3 – 6 December 2018	AIT, Thailand	210 participants from 25 countries
3	Gender in Fisheries and Aquaculture (GAF7) 2018 (www.gafconference.org) – Co-Chair	18 – 21 October 2018	AIT, Thailand	175 participants from 32 countries
4	GIANT PRAWN 2017 (www.giantprawn.org) - Chair	20 – 24 March 2017	AIT, Thailand	176 participants from 34 countries
5	Profit on Aquaculture 2017 (http://www.profitonaquaculture.in/) - Chair	11 – 14 February 2017	Bhimavaram, Andhra Pradesh, India	~500 participants mostly from India

International Workshops/Seminars organized as Course Director

	Technical Workshop/Seminar		Duration	Venue	Attendance
1	International webinar on Entrepreneurship Development in Seaweed Business for Cooperatives (https://www.nedac.info/downloads/2101 22%20Seaweed%20Schedule.pdf)	Virtual	28 January 2021	Zoom webinar	>500 participants
2	i-FLOCS 2020, Virtual Aquaculture Workshop: Innovative Biofloc Technologies for Sustainable Production of Tilapia and Shrimp (https://www.aitaquaculture.org/ait-ifloc- aquaculture-workshop.htm)		23 to 25 Nov 2020	AIT, Thailand (Webinar)	40 participants from 10 countries
3	Aquaculture in the Desert: Examples from the GCC Countries (https://www.aitaquaculture.org/pdf/Aqu aculture-in-the-desert.pdf)	Online by Zoom	22 October 2020	AIT, Thailand (Webinar)	80 participants
4	AIT-Aquamimicry Aquatainment Symposium Thailand: 2020		17 to 22 Mar 2020	Hua Hin, Thailand	Had to be postponed because of Covid-19 restrictions
5	International Aquamimicry Sustainable Shrimp Farming Workshop – 2 (http://www.venturefarmsg.com/4258298 65/4418159/posting/east-meet-west-at- international-aquamimicry-aquatainment)	Co- organizer (Keynote Speaker)	8 – 11 Jan 2017	Hua Hin, Thailand	75 international participants

6	International Aquamimicry Sustainable Shrimp Farming Workshop – 1 (http://www.ait.ac.th/news-and- events/2016/news/ait-to-assume-a-lead- role-in-aquamimicry-sustainable-shrimp- farming-venture/#.WWnvQIiGM2w)	Co- organizer	7 – 11 Aug 2016	Hua Hin, Thailand	participants from 26 countries
7	Special session on Biofloc Technology at 11th Asian Fisheries and Aquaculture Forum, Asian Fisheries Society (https://enaca.org/publications/workshops-and-proceedings/11afaf/11afaf-programme.pdf).	Convener	5 August 2016	BITEC, Bangkok	~50 Conference delegates
8	Smart Shrimp Farming Workshop for the Asia Pacific Region -Living with EMS and EHP: Challenging the Disease through Smart Shrimp Farming practices (https://www.was.org/view/press-release-smart-shrimp-aquaculture-workshop.aspx)	Convener	20 – 22 January 2016	AIT, Thailand	>150 participants from 36 countries
9	International Workshop on Recirculating Aquaculture Systems and Aquaponics (http://www.ait.ac.th/news-and-events/2016/events/workshop-on-recirculating-aquaculture-systems-and-aquaponics/#.WWny1IiGM2w)	Course Director	15- 19 January 2016	AIT, Thailand	27 participants from 12 countries
10	Profit on Aquaculture 2015 (http://www.serd.ait.ac.th/wpserd/report-by-dr-salin-on-technical-seminar-profit-on-aquaculture-2015-organized-by-aarm-ait-in-association-with-uddaraju-anandaraju-foundation-ananda-foundation-in-india-on-13-april-2015/)	Convener	13 April 2015	Bhimavara m, Andhra Pradesh, India	~1000 participants

International Training courses organized

	Training Course		Duration	Venue	Attendance
1	International Training program on Biofloc, Biomimicry, and Biological farming for innovative aquaculture entrepreneurship (https://www.ait.ac.th/event/training-program- on-biofloc-biomimicry-and-biological-farming- for-innovative-aquaculture-entrepreneurship/)	Course Director	2 – 7 December 2019	AIT & Hua Hin, Bangkok	20 participants from 14 countries
2	Sustainable Asian Aquaculture Series – Integrated Multi-trophic Aquaculture (https://www.asianaquaculture.org/training.ht m)	Course Director	1 to 2 Dec 2018	AIT, Thailand	participants from 8 countries
3	Sustainable Asian Aquaculture Series – Management of Parasitic Diseases in Aquaculture (https://www.asianaquaculture.org/training.ht m)	Course Director	26 to 30 Nov 2018	AIT, Thailand	35 participants from 8 countries
4	International Training on Management of Parasitic Diseases in Fish (https://www.aitaquaculture.org/events.htm)	Course Director	13-17 Sep 2017	AITCC	27 participants

					from 5 countries
5	International Training program on Sustainable Shrimp Farming Technologies: Biofloc, Biomimicry and Biological Farming	Course Director	21 – 26 August 2017	AIT & Hua Hin, Bangkok	21 participants from 9 countries
6	Advances in Hatchery Management of Giant Freshwater Prawns (https://www.enaca.org/index.php?id=861&title=giant-prawn-2017)	Course Director	17 – 19 Mar 2017	AIT, Thailand	participants from 10 countries
7	International Training program on Sustainable Shrimp Farming Technologies: Biofloc, Biomimicry and Biological Farming (http://www.serd.ait.ac.th/wpserd/international-aquaculture-training-series-5-innovative-shrimp-production-technologies-bioflocbiomimicry-biological-farming-on-23rd-28thmay-2016/)	Course Director	23 – 28 May 2016	AIT, Thailand	32 participants from 12 countries
8	Innovative Biofloc Technologies for Disease Prevention and Shrimp Farming (http://www.ait.ac.th/news-and-events/2015/news/27-participants-from-15-countries-join-biofloc-technology-training#.WWnqXoiGM2w)	Course Director	12 – 16 Oct 2015	AIT, Thailand	27 participants from 15 countries
9	Innovative Biofloc Technologies for Disease Prevention and Shrimp Farming (http://www.ait.ac.th/news-and-events/2015/news/ait-hosts-international-workshop-on-2018innovative-biofloctechnologies-for-disease-prevention-and-shrimp-farming2019-organized-by-aarm#.WWnrPoiGM2w)	Course Director	6 – 10 July 2015	AIT, Thailand	30 participants from 14 countries

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