

RENY. P.DEVASSY

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WORK EXPERIENCE

August 2022 onwards- Senior marine biology specialist, Delmare marine services private limited, kerala, India

- > Preparation of project proposals
- Project reports
- > Data management
- > Reviewing of reports
- > Article wrting

March 2019 > March 2022 - Research Specialist, Red Sea Research Center, KAUST, Saudi Arabia

- > Participation in research cruises
- > Participation in various field trips
- ➤ Collection of plankton samples
- ➤ Continuous phytoplankton data collection using Cytobuoy, cytometer
- ➤ Analysis of Cytobuoy data for the results
- > Taxonomical analysis of phytoplankton samples up to the species level
- > Taxonomical analysis of zooplankton samples
- ➤ Live experiments with zooplankton specimens

- ➤ Guidance to master & PhD students for their experimental research
- > Report and article preparation
- ➤ Lab management
- Procurement and purchases
- Maintaining inventories for lab materials and research equipments
- ➤ Lab safety representative
- ➤ Field research plan preparation and approval from different government organizations

April 2011 > March, 2019 – Lecturer/Marine biologist, King Abdul Aziz University, Jeddah, Saudi Arabia

- ➤ Participation in coastal/offshore field trips along the entire Red Sea.
- ➤ Collection of Plankton samples using different types of nets.
- Taxonomical analysis of phytoplankton specimens up to species.
- Taxonomical analysis of Zooplankton up to the group level.
- > Taxonomic identification of major Copepoda genus in Red sea.
- ➤ Preparation of plankton samples for conducting stable isotope analysis.
- ➤ Preparation of live plankton samples for conducting UV ray experiments.
- ➤ Barnacle larval rearing and experiments with different environmental aspects
- > Water quality analysis.
- ➤ Data analysis, Interpretation, Report & Manuscript preparation.
- ➤ Conducting practical classes for postgraduate students.
- ➤ Guiding graduate and post graduate students for conducting research experiments in order to fulfill their education program.

April 2007> April 2011— Project Assistant, National Institute of Oceanography, India

- ➤ Participation in coastal/offshore field trips along different regions of the Indian Ocean (Arabian sea & Bay of Bengal).
- ➤ Collection of water, sediment & plankton samples using different equipments.
- ➤ Taxonomical analysis of marine and estuarine phytoplankton specimens up to species.

- Taxonomical analysis of Zooplankton up to the group level.
- \triangleright Size fractionated Primary production using radioactive C^{14}
- ➤ Size fractionated phytoplankton biomass (chl a) analysis.
- ➤ Identification of Benthic Macrofauna and Meiofauna.
- > Sediment Grain size analysis.
- ➤ Data analysis, Interpretation, Report & Manuscript preparation.

July 2004 > November 2006 - PGT (Post graduate teacher) of Biology in Children Public School (CBSE BOARD) Fatehpur, Uttar Pradesh (INDIA).

April 2004 > June 2004 - TGT (Trained Graduate teacher) of Biology in All Saint's Convent School (ICSE BOARD), New Tehri, Utterakhand (INDIA)

PUBLICATIONS

- ➤ El-Sherbiny, M. M., Devassy, R. P., El-Hefnawy, M. E., Al-Goul, S. T., Orif, M. I., & El-Newehy, M. H. (2023). Facile Synthesis, Characterization, and Antimicrobial Assessment of a Silver/Montmorillonite Nanocomposite as an Effective Antiseptic against Foodborne Pathogens for Promising Food Protection. *Molecules*, 28(9), 3699.
- ➤ Cai, C., Devassy, R. P., El-Sherbiny, M. M., & Agusti, S. (2022). Cement and oil refining industries as the predominant sources of trace metal pollution in the Red Sea: A systematic study of element concentrations in the Red Sea zooplankton. *Marine Pollution Bulletin*, 174, 113221.
- ➤ Karati, K. K., Vineetha, G., Devassy, R. P., Al-Aidaroos, A. M., & El-Sherbiny, M. M. (2022). Role of Ecohydrographical Barriers on the Spatio-Temporal Distribution of Chaetognath Community in the Gulf of Aqaba during Summer. *Water*, 14(5), 822.
- ➤ Bates, A. E., Primack, R. B., Biggar, B. S., Bird, T. J., Clinton, M. E., Command, R. J., Devassy, R. P., ... & Parmelee, J. R. (2021). Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation*, 263, 109175.

- Duarte, C. M., Chapuis, L., Collin, S. P., Costa, D. P., Devassy, R.
 P., Eguiluz, V. M., ... & Juanes, F. (2021). The soundscape of the Anthropocene ocean. *Science*, 371(6529).
- ➤ El-Sherbiny, M. M., Devassy, R. P., Muller, E. M., Al-Sofyani, A. A., & Al-Aidaroos, A. M. (2019). Biodiversity and abundance of plankton communities along the coastal waters of Gulf of Aqaba, Saudi Arabia. *Pakistan Journal of Zoology*, 51(5), 1823.
- Devassy, R. P., El-Sherbiny, M. M., Al-Sofyani, A. A., Crosby, M. P., & Al-Aidaroos, A. M. (2019). Seasonality and latitudinal variability in the diatom-cyanobacteria symbiotic relationships in the coastal waters of the Red Sea, Saudi Arabia. *Symbiosis*, *1-13*.
- ➤ Karati, K. K., Al-Aidaroos, A. M., Devassy, R. P., El-Sherbiny, M. M., Jones, B. H., Sommer, U., & Kürten, B. (2019). Ecohydrographic control on the community structure and vertical distribution of pelagic Chaetognatha in the Red Sea. *Marine Biology*, 166(3), 1-13.
- ➤ Kürten, B., Zarokanellos, N. D., Devassy, R. P., El-Sherbiny, M. M., Struck, U., Capone, D. G., ... & Jones, B. H. (2019). Seasonal modulation of mesoscale processes alters nutrient availability and plankton communities in the Red Sea. *Progress in Oceanography*, 173, 238-255.
- Al-Aidaroos, A. M., Devassy, R. P., & El-Sherbiny, M. M. (2019). Unusual dominance of harmful microalgae Pseudo-nitzschia delicatissima cf.(Cleve) Heiden in the coastal waters of Jeddah, central Red Sea. *Pak. J. Bot*, *51*(2), 1-6.
- Devassy, R. P., El-Sherbiny, M. M., Al-Sofyani, A. M., & Al-Aidaroos, A. M. (2017). Spatial variation in the phytoplankton standing stock and diversity in relation to the prevailing environmental conditions along the Saudi Arabian coast of the northern Red Sea. *Marine biodiversity*, 47(4), 995-1008.
- Al-Aidaroos, A. M., Satheesh, S., & Devassy, R. P. (2017). Effects of pharmacological compounds on the barnacle larval development, metabolism and settlement. *International Biodeterioration & Biodegradation*, 117, 190-196.

- Al-aidaroos, A. M., Karati, K. K., El-sherbiny, M. M., Devassy, R. P., & Kürten, B. (2017). Latitudinal environmental gradients and diel variability influence abundance and community structure of Chaetognatha in Red Sea coral reefs. *Systematics and Biodiversity*, 15(1), 35-48.
- Al-Aidaroos, A. M., Satheesh, S., & Devassy, R. P. (2016). Biochemical Analysis of Adhesives Produced by the Cypris Larvae of Barnacle Amphibalanus amphitrite. *Thalassas: An International Journal of Marine Sciences*, 32(1), 37-42.
- ➤ Kürten, B., Al-Aidaroos, A. M., Kürten, S., El-Sherbiny, M. M., Devassy, R. P., Struck, U., ... & Sommer, U. (2016). Carbon and nitrogen stable isotope ratios of pelagic zooplankton elucidate ecohydrographic features in the oligotrophic Red Sea. *Progress in Oceanography*, 140, 69-90.
- ➤ Vineetha, G., Jyothibabu, R., Madhu, N. V., Kusum, K. K., Sooria, P. M., Shivaprasad, A., Devassy, R. P.,... & Deepak, M. P. (2015). Tidal influence on the diel vertical migration pattern of zooplankton in a Tropical Monsoonal Estuary. *Wetlands*, 35(3), 597-610.
- ➤ Kürten, B., Khomayis, H. S., Devassy, R. P., Audritz, S., Sommer, U., Struck, U., ... & Al-Aidaroos, A. M. (2015). Ecohydrographic constraints on biodiversity and distribution of phytoplankton and zooplankton in coral reefs of the R ed S ea, Saudi Arabia. *Marine Ecology*, 36(4), 1195-1214.
- Shivaprasad, A., Vinita, J., Revichandran, C., Reny, P. D., Deepak, M. P., Muraleedharan, K. R., & Naveen Kumar, K. R. (2013). Seasonal stratification and property distributions in a tropical estuary (Cochin estuary, west coast, India). *Hydrology and Earth System Sciences*, 17(1), 187-199.
- ➤ Shivaprasad, A., Vinita, J., Revichandran, C., Manoj, N. T., Srinivas, K., Reny, P. D., ... & Muraleedharan, K. R. (2013). Influence of saltwater barrage on tides, salinity, and Chlorophyll a in Cochin Estuary, India. *Journal of Coastal Research*, 29(6), 1382-1390.

- ➤ Madhu, N. V., Reny, P. D., Paul, M., Ullas, N., & Resmi, P. (2011). Occurrence of red tide caused by Karenia mikimotoi (toxic dinoflagellate) in the Southwest coast of India. *Indian Journal of Geo-Marine Sciences* (2011), 40(6), 821-825.
- ➤ Sooria, P. M., Reny, P. D., Jagadeesan, L., & Nair, M. (2011). Influence of river influx on phytoplankton community during fall inter—monsoon in the coastal waters off Kakinada, east coast of India. *Indian Journal of Geo-Marine Sciences* (2011) 40(4), 550-558.

SYMPOSIUM / SEMINAR/CONFERENCE

- ➤ Reny P. Devassy, Al-Aidaroos AM, El- Sherbiny MM, Kürten B (2016). Biodiversity of marine net-phytoplankton in the oligotrophic Red Sea with special reference to diatom and Dinoflagellates. International Conference on the Marine Environment of the Red Sea, November 14-16, KAUST, Saudi Arabia.
- ➤ Effect of the Indian Ocean monsoon on the biogeochemistry of the Red Sea International Conference on the Marine Environment of the Red Sea, November 14-16, KAUST, Saudi Arabia.
- Net-plankton collections offer taxonomic insights into the phytoplankton and zooplankton biodiversity during whale shark (Rhincodon typus) aggregations near Al Lith in the central Red Sea. International Conference on the Marine Environment of the Red Sea, November 14-16, KAUST, Saudi Arabia.
- ➤ <u>Kürten B</u>, Schulz I, Kürten S, **Devassy RP**, Zarokanellos N, Sanders T, Daehnke K, Emeis K-C, Struck U, Al-Aidaroos AM, Jones BH (2016) Nitrate and zooplankton stable isotopes together with plankton taxonomy reveal the importance of nitrogen fixation by *Trichodesmium* for the biogeochemistry of the Red Sea. 10th International IsoEcol Conference, Tokyo (JPN).
- ➤ <u>Kürten B</u>, Al-Aidaroos AM, Kürten S, El-Sherbiny MM, **Devassy RP**, Struck U, Zarokanellos N, Sommer U, Hansen T, Jones BH (2015) Ecohydrographic constraints of planktonic food web

- configuration in the Red Sea. Dynamics of the Indian Ocean: Perspective and Retrospective. Goa (IND).
- ➤ <u>Kürten B</u>, Kürten S, **Devassy RP**, El-Sherbiny MM, Sommer U, Struck U, Al-Aidaroos AM (2015) Influence of natural environmental gradients and anthropogenic effluents on coral reefs in the Red Sea. Dynamics of the Indian Ocean: Perspective and Retrospective. Goa (IND).
- Cocurrence of Diatom-Cyanobacterial symbiotic relationship in the coastal surface waters of Northern Red Sea. Hisham khomayis, Ulrich Sommer, Ali Al-Aidaroos, Benjamin Kürten, and Reny Devassy,In Geophysical Research Abstracts, Vol. 15, EGU2013-2804, EGU General Assembly 2013, Vienna, Austria.
- ➤ Occurrence of Diatom (Rhizosolenia hebetate) Cyanobacterial (Richelia intracellularis Schmidt) symbiosis in the Palk bay, south east coast of India. Madhu. N.V, Meenu Paul., **Reny. P.D**, Ullas.N, On National conference on Marine Biodiversity, present status and prospectus In Bharatidasan University, Trichy, Tamilnadu.
- ➤ Seasonal variation of planktonic (phyto- and zoo-) abundance, standing stock and community structure of Cochin Backwaters India. Sooria,P.M; Vineetha G; Reny.P.D; Meenu Paul; Ratheesh U; Fausia K.H; Madhu, N.V. MECOS 09, International Symposium on Marine Ecosystems Challenges and Opportunities, 9-12 February 2009, Kochi, India.
- ➤ Hydrographic changes in a tropical estuary (Cochin backwaters) during pre monsoon Vijay John Gerson, Resmi. P, Muhammed Rafeeq.M.M, Reny. PD, Meenu Paul, Madhu, N.V., Nair, M., Revichandran, C., 2009 National Conference on coastal Process, Resource and Management, Centre for Earth Science Studies, Thiruvanthapuram.
- ➤ Participated in the International symposium on Remote sensing and Fisheries, 15-17 February; 2010, Kochi, India, Organized by Societal Applications in Fisheries and Aquaculture Using Remote sensed Imagery (SAFARI).

➤ Participated in the Symposium on Applications of Flow Cytometry in Marine Biology at National Institute of Oceanography, Dona Paula Goa on April 8, 2010.

SKILLS & EXPERTISE

- ➤ Well experienced in operating **Cytobuoy continuos flow cytometer** and data analysing, interpretation of results through easycluz and cytocluz software.
- ➤ Well experienced in operating **Cytobuoy cytosense benchtop cytometer** and data anlysing, interpretation of results easycluz and cytocluz software
- > Trained in operating various other flow cytometers (Facscanto, Sysmex cube 8)
- > Experienced in operating various radiometers (PUV2500, BIC spectroradiometer 2104P, C-OPS)
- > Trained for operating Phyto PAM
- ➤ Well experienced in operating different **light and UV sensors**
- Experienced in operating different types of zooplankton and phytoplankton nets (Bottle net, IOS, Neuston, Bongo, Multinet, Apstein WP2& Horizontal nets).
- ➤ Well versed in operating different microscopes (Leica DMI 3000, M80,& M205, Wild Heerbrugg, Olympus IX 51 & CK30).
- ➤ Various image analyzing programs such as LAS (Leica Application Suite & Olympus Image Analyzer).
- ➤ Operated various equipments such as **Liquid Scintillation counter**, **Flow cam(fluid imagics)**, **HPLC** (Agilent technologies), **Flourometer** (Turners), **Spectrophotometer** (Shimadzu).
- ➤ Well experienced in using different softwares like **SURFER**, **PRIMER**, **SPSS**, **ORIGIN**

SAFETY TRAININGS

- Biosafety
- ➤ Lab safety
- Primary hazardous substances
- > Emergency incident
- > First aid

- Chemical spill
- > Field research
- > CITI animal safety
- ➤ Hazardous waste

SCIENTIFIC PROJECTS (RED SEA)

- ➤ Assessment of marine Bio diversity and Ecosystem Health in Gulf Of Aqaba, Saudi Arabia (A research cooperation between King Abdul Aziz University and Mote Marine Laboratory and Aquarium, Florida, USA)
- "Nutrient Cycling in Red sea" (A research cooperation between King Abdul Aziz University and King Abdullah University of Science and Technology, Principle Investigator Dr. Burt H. Johns).
- > "Impact of Ultra violet rays on Red sea Zooplankton" (A Research project in which **Dr. Carlos M. Duarte**, a highly cited researcher worked as the scientific investigator).
- ➤ "Environmental Monitoring of Jeddah Coastal waters" (A research project chaired by Prince Khaled Bin Sultan research foundation which emphasizes monthly marine biological monitoring of different locations along Jeddah coast).
- "Nutrient gradients in red sea:-How do they correlate with plankton diversity and abundance and with coral macro algal interactions" (A research cooperation between King Abdul Aziz University and IFM-GEOMAR, Germany).
- ➤ "Biodiversity monitoring of Red sea" (Research cooperation between King Abdul Aziz University and university of Senckenberg, Germany).
- > "Obuhur Creek Plankton Biodiversity Monitoring" (Deanship of Scientific Research project KAU).
- ➤ "A study on heavy metal composition of zooplankton from the coastal waters of Jeddah" (Deanship of Scientific Research project KAU).
- ➤ "Isolation and characterization of Adhesive material from the common fouling barnacle Amphibalanus amphitrite" (Deanship of Scientific Research project KAU).

SCIENTIFIC PROJECTS (Indian Ocean)

- ➤ "Eco-biogeography of the estuarine and coastal waters of south west coast of India", funded by Council of scientific and Industrial Research (CSIR) India.
- "Ecosystem modeling of Cochin backwaters, Southwest coast of India" Funded by Integrated Coastal and Marine Area Management Project Directorate (ICMAM PD).
- → "Environment and Bio-diversity monitoring of the exploratory drilling sites of Krishna-Godavari block (KG-OSN-2001/3)" sponsored by Gujarat State Petroleum Corporation (GSPC) INDIA.
- ➤ "Marine Environmental Impact assessment for the release of treated effluent of onshore gas terminal of GSPC.Ltd".
- ➤ "Rapid marine Environmental Impact Assessment studies of proposed dredging operations for gas processing plant of M/S. GSPC.Ltd".
- ➤ "Environmental Monitoring of drilling wells at Mahanadi Offshore block" (MN-DWN) Sponsored by Oil and Natural Gas Corporation (ONGC) INDIA.
- > "Environmental Impact Assessment studies of the exploratory drilling sites off Mumbai" sponsored by Prize petroleum corporation Mumbai INDIA.
- > "Environmental Impact Assessment studies of the harbor extension project Tuticorin", sponsored by Tuticorin Port trust INDIA.
- Figure 12 "Environmental impact assessment studies of the ongoing International Container Transshipment Terminal project Cochin", sponsored by Cochin Port trust INDIA.
- ➤ "Environmental impact assessment studies for alignment 4 A of Sethusamudram channel", sponsored by Sethusamudram Corporation Ltd, Chennai.

SCIENTIFIC CRUISES/ TRIPS (RED SEA)

- ➤ Participated in Deep Coral Cruise on **RV Thuwal** in January, 2022 (7days)
- ➤ Participated in DEEP cruise on **RV Thuwal** in April, 2019 (9 days)
- ➤ Participated in Gulf of Aqaba Biodiversity Expedition on **RV**Thuwal in March 2018 (11 days)
- ➤ Participated in the deep Sea biodiversity cruise on **RV Al Assisi** in May 2017 (10 days)
- ➤ Participated in Gulf of Aqaba Biodiversity Expedition on RV Al Assisi in September 2016 (11 days)
- ➤ Participated in Nutrient Cycling Cruise in **RV Thuwal** (1st 2nd, 3rd & 5th Leg) 40 days in October 2014, April 2015, August 2015 & August 2016)
- ➤ Participated in International Red Sea Expedition (deep water cruise) on behalf of the Jeddah Transect Project in April 2012 (25 days) in **RV Pelagia** (NIOZ Holland).
- ➤ Participated in Coral Plankton Expedition (COPEX) in coastal red sea on behalf of the Jeddah Transect project in September/October 2011 (30 days).
- ➤ Participated in International Red Sea Biodiversity Monitoring in February/March 2012 (25 days).
- ➤ Participated in International Red Sea Biodiversity Monitoring in June 2013 (15 days).
- ➤ Participated in monthly field trips along the Red sea coast of Jeddah.

EDUCATIONAL PROFILE

- ➤ M.Sc Botany. St. Albert's College, Ernakulam, M.G. University (2001-2003) with 69.3% Marks.
- ➤ **B.Sc Botany.** S.N.M College, Maliankara, M.G. University (1998-2001) with 75% Marks
- ➤ **B.Ed.** Natural Science. S.N.D.P. Yogam Training College, Adimali, M.G. University (2003-2004) with 61.5% Marks.
- ➤ Qualified **SET** (State Eligibility Test) in Botany (Mandatory for Higher Secondary School Teaching in Kerala, India)

PERSONAL DETAILS

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Varapetty P.O

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Pin- 686691

➤ Date of Birth : 14 Th April 1981

Marital Status : Married

Religion : Christian, Catholic

Languages Known: English, Hindi, Malayalam & Arabic

REFERENCES

Prof. Ali M Al- Aidaroos Prof. Susana Agusti

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