

## **Dr. Ludwig Karbe**

Home working place:

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University of Hamburg (retired)

Centre of Marine and Atmospheric Sciences (ZMAW)

Institute of Hydrobiology and Fisheries Science (IHF)

Former Working Groups Marine and Freshwater Eco-Toxicology & Molecular Endocrinology

### **Curriculum Vitae**

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| 1952 - 1958 | Student, University of Hamburg<br>Basic studies in physics, chemistry and biology<br>Graduate studies in Zoology, botany and fisheries biology<br>Diploma (master) in biology  |
| 1959 – 1960 | Scientific assistant, Zoological Institute and Museum, University of Hamburg, and PhD student of Prof. C. Kosswig<br>Thesis: Speciation phenomena and sterility in Anatolian cyprinodontid fishes  |
| 1961 – 1962 | Research fellow of Prof Kosswig, German Research Community (DFG) special program "New Systematics", guest scientist at the State Institute of Lake Research, Langenargen, Lake of Constance. Speciation and effects of eutrophication on intra-lacustrine speciation phenomena in lake herrings            |
| 1963 – 1968 | Research fellow of Prof. Caspers, DFG special program "Water Research". Water quality criteria according to the Saprobic System and dynamics of energy turnover in freshwater systems.<br>Change from the Zoological Institute to the Institute of Hydrobiology and Fishery Science, University of Hamburg |
| 1972 ff     | Senior scientist (Wissenschaftlicher Oberrat)  |
| 1972 - 1998 | Lecturer (Dozent) in aquatic biology: limnology and oceanography, water management, biology of water supply and sewage treatment, aquatic chemistry, aquatic toxicology  |
| 1973 ff     | Supervisor and examiner in Hydrobiology and fisheries science (Diploma and PhD),. 53 Diploma theses, 15 PhD theses. Head of the working group Aquatic Toxicology   |
| 1998 ff     | Retired, active in environmental life-sciences and bio-climatology   |
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### **Functions in freshwater and marine environmental research, in life-sciences and bio-climatology**

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| 1969 - 1975 | DFG-Special Program "Pollution in Coastal Waters" and Special Program of the Federal Ministry of Research and Technology (BMFT) "Marine |
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- Pollution": Speaker of the toxicity projects
- 1974 - 1981 DFG-Special Program "Water Research-Bioaccumulation in Food Chains": Coordinator of the projects related to heavy metals.
- 1979 OECD - Chemicals Testing Program. Expert Group Bioaccumulation
- 1976 - 1981 Atlantis II Deep Metalliferous Sediments Development Program (MESEDA). Head of the environmental components of the MESEDA program conducted on behalf of the Saudi-Sudanese Red Sea Joint Commission and the German Federal Ministry of Research and Technology (risks of deep sea mining)
- 1984 ff OECD Water Management Policy Group: German delegate group of experts in biological testing
- 1980 ff Monitoring of contaminants along the German coast on behalf of the Environmental Agency of Lower Saxony
- 1984 - 1993 Interdisciplinary BMFT programs "Circulation and Turnover of Contaminants in the North Sea (ZISCH)" and "Processes of Sea to Atmosphere Cycling of Contaminants - Ecosystem German Bight (PRISMA)": Speaker of the biological subprojects and head of the benthos group
- 1986 - 1995 DFG-Special Program "Elbe Tidal Waters": Head of two projects, effects of humid compounds on the toxicity of heavy metals , and interrelationships between sediment re-suspension and microbial activities
- 1990 ICES-IOC Sea-Going Workshop on Biological Effects Techniques: Coordinator of the Water Quality Bioassay Group
- 1992 ff German Institute for Standardization (DIN): Chairman of the Working group Bio-Testing with Marine Species
- 1992 - 1996 Projects under EU Marine Science and Technology and EU Environment:  
- "Sediment Toxicity Tests for Poorly Water-Soluble Substances"  
- "Validation of Sediment Toxicity Tests for Poorly Water-Soluble Substances"
- 1992 - 1996 DFG-Project: "Communities, adaptive responses of biota and toxic effects along the upper and intermediate Elbe river (BIOTOX Elbe)"
- 1995 ff ICES Working Group on Biological Effects of Contaminants
- 1996 - 2000 German National Program "Environmental Hormones" (UBA): Head of the project "Eco-toxicological relevance of endocrine reactive compounds in the aquatic environment. Field studies along the Elbe river as a model system"
- 1997 - 2001 CEFIC-EMSG project: "Endocrine modulating effects in fish along the Elbe river and in reference areas. Assessment of risks related to the habitat conditions and the natural variability of endocrine functions."
- 1999 EU/EU Transatlantic Co-operation in Human and Environmental Health: Endocrine Disrupter Expert Panel Meeting on Opportunities for Collaborative EU/US Research: Chairman of the Effects in Wildlife Workgroup.
- 2003 - 2005 GKSS Research project: "Estrogenic acting compounds in coastal waters of the Baltic – Application of the MCF-7-ERE-Luc Bioassay"

2008

Symposium “Warnsignal Klima: Folgen des Klimawandels- Gefahren für Menschen, Tiere und Pflanzen” (Effects of Climate Change – Impacts on Human Health, Animals and Plants) (Hamburg, February 2008), Member of the Preparatory Board and Co-Editor of the book prepared for this event