

# Curriculum Vitae

Last name, First name: **Vighi Marco**

Gender: **Male**

**Nationality: Italian**

## Overall Scientific Expertise:

Main fields of research:

- Eutrophication of marine and fresh waters; modelling the relationships between nutrient loads of and eutrophication; effects of eutrophication on water quality.
- Effects of micro pollutants on aquatic and terrestrial ecosystems; development of Quantitative Structure-Activity Relationships (QSAR) for organic chemicals; combined effect of mixtures of chemicals.
- Development of ecologically-based approaches for the assessment of effects of multiple stress factors on structure and functions of complex ecosystem.
- Environmental distribution and fate of contaminants; application and experimental validation of fugacity based approaches at different scales; long range transport of persistent organic pollutants (POPs and PBTs)
- Ecological risk assessment at local, regional and global scale; development of tools for mapping ecotoxicological risk using GIS.

## Professional Experience

[Starting with your present occupation, list in reverse chronological order each activity in which you have been engaged. Please copy and paste more rows if needed.]

Years employed from – to	Title of position	Employer – name and location	Areas of professional specialisation*
1/12/2020 to now	Consultant (Investigador Vinculado)	IMDEA Water Institute, Alcala' de Henares (Madrid), Spain	Freshwater ecology and ecotoxicology
1/12/2015 to 1/12/2020	Principal investigator	IMDEA Water Institute, Alcala' de Henares (Madrid), Spain	Freshwater ecology and ecotoxicology
1/3/1998 to 30/10/2015	Full professor	University of Milano Bicocca, Italy	General and applied ecology. Aquatic and terrestrial ecotoxicology
1/3/1983 to 1/3/1998	Associate professor	University of Milano, Italy	General and applied ecology. Aquatic and terrestrial ecotoxicology
1/1/1971 To 1/3/1983	Research assistant	Institute of Water Research – Italian National Council of Research – Brugherio (Milano), Italy	Freshwater ecology and ecotoxicology

## Educational Background

[Starting with the most recent, please provide the details of your post-secondary education and/or

professional training (e.g. university or its equivalent, postgraduate, postdoctoral). Please copy and paste more rows if needed.]

Year	Degree awarded	Educational Institution – name and location	Areas of educational specialisation*
1969	University degree (corresponding to master degree)	University of Milano - Italy	Biology (ecology)

**Memberships in Scientific Advisory Bodies/Committees/Panels (if any):**

From 1991 to 1997: Scientific Advisory Committee on Toxicology and Ecotoxicology (CSTE) of the European Commission (DG XXIV).

From 1997 to 2004: Scientific Advisory Committee on Toxicology, Ecotoxicology and the Environment (CSTEE) of the European Commission (DG SANCO).

From 2004 to 2013: Scientific Committee on Health and Environmental Risk (SCHER) of the European Commission (DG SANCO).

1998-99: Working Group on Genetically Modified Organisms, Scientific Committee on Plants (SCP) of the European Commission (DG SANCO).

2002-03: member of working groups on undesirable substances and feed additives within the Scientific Committee on Animal Nutrition (SCAN) of the European Commission (DG SANCO).

2003-2005: was member of the External Advisory Panel of HERA (Human and Environmental Risk Assessment).

Consultant to the 4<sup>th</sup> (Geneva, 2008) and the 7<sup>th</sup> (Geneva, 2011) meetings of the UNPD/POPRC (Persistent Organic Pollutants Review Committee). The POPRC is the Committee responsible for the implementation of the Stockholm Convention.

**Memberships in Learned Societies (if any):**

Society of Environmental Toxicology and Chemistry (SETAC)  
International Society of Limnology (SIL)  
Italian Society of Ecology (SItE)

**Memberships in Editorial Boards (if any):**

Integrated Environmental Assessment and Management  
Toxicological and Environmental Chemistry  
Ecotoxicology and Environmental Safety

**List of Publications:**

- About 190 peer-reviewed articles in international journals.
- 4 books
- More than 40 book chapters
- Several technical reports and other items of “grey literature”.

**7 selected articles:**

1. Calamari D., Bacci E., Focardi S., Gaggi C., Morosini M., Vighi M. (1991): Role of plant

- biomass in the global environmental partitioning of chlorinated hydrocarbons. *Environ. Sci. Technol*, 25, 1489-1495.
2. Vighi M., Altenburger R., Arrhenius A., Backhaus T., Bodeker W., Blanck H., Consolaro F., Faust M., Finizio A., Froener K., Gramatica P., Grimme H., Gronwall F., Hamer V., Scholze M., Walter H. (2003) Water Quality Objectives for mixtures of toxic chemicals: problems and perspectives. *Ecotoxicology and Environmental Safety*, 53, 139-150.
  3. Vighi M, Finizio A, Villa S (2006) The evolution of the Environmental Quality Concept: from the US EPA Red Book to the European Water Framework Directive. *Environmental Sciences and Pollution Research*, 13, 9-14
  4. A. Ippolito, S. Sala, J.H. Faber, M. Vighi (2010) Ecological vulnerability analysis: A river basin case study. *Science of the Total Environment* 408, 3880-3890
  5. Villa S, Migliorati S, Monti GS, Holoubek I, Vighi M (2017). Risk of POP mixture on the Arctic food chain. *Environmental Toxicology and Chemistry*, 36: 1181–1192
  6. Vighi M, Rico A (2018). The Concept of Resilience in Ecological Risk Assessment: Scientific and Regulatory Issues. *Integrated Environmental Assessment and Management*, 14: 581-585
  7. Vighi M, Rosal R, Bayo J, Fernández-Piñas F, Jesús Gago J, Gómez M, Hernández-Borges J, Herrera A, Landaburu J, Muniategui-Lorenzo S, Muñoz A, Rico A, Romera-Castillo C, Viñas L (2021). Micro and nano-plastics in the environment: Research priorities for the near future. *Reviews of Environmental Contamination and Toxicology*, 257: 163-218.