

Department of Physical Chemistry, Faculty for Marine and Environmental Sciences, University of Cadiz, Andalusian Centre for Marine Sciences and Technology (CACYTMAR)

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Date of birth: 25.08.1970, in Reutlingen (Germany)

Positions:

2014	Senior researcher (Ramón y Cajal) at the Andalusian Center for Marine Science and Technology (CACYTMAR)
2013-2014	Research contract within the Consolider Ingenio project SCARCE (CSD2009-00065)
2009- 2013	JAE-Doc post-doctoral fellow: (Post-doctoral position for specialization at a CSIC Centre or Institute) at the Institute for Marine Sciences of Andalusia (ICMAN-CSIC) Cádiz (Spain). Holder of a Marie Curie European Reintegration Grant (Proposal N° 239325-ERA4PHARM, FP7-PEOPLE-ERG-2008)
2007-2009	Marie Curie post doctoral fellow (Proposal N° 039691-SALMONPHARM, FP6-2005-Mobility-5) at the Institute of Aquaculture, University of Stirling (Scotland).
2004-2007	FCT post doctoral fellow (Fundação para a Ciência e a Tecnologia, Ministério da Ciência, Tecnologia e Ensino Superior, Portugal) at the Research Institute for Fisheries and the Sea (IPIMAR) Lisbon (Portugal).
1998-2003	PhD fellow at the Institute for Marine Sciences of Andalusia (ICMAN-CSIC), Cádiz (Spain)

Education:

1990: **German Bachelor's Degree** Abitur

1993: **Spanish Bachelor's Degree** Selectividad, National University for Distance Education (UNED, Spain).

1993: **Master in Natural Sciences**, Bavarian Julius-Maximilian University in Würzburg (Germany).

1997: **Graduation in Marine Sciences**, Faculty for Marine Sciences, University of Cádiz (Spain).

2003: **PhD, University of Cádiz**. Qualification: *suma cum laude*.

PhD

Dissertation (University of Cadiz): Toxicity of homologues of Linear Alkylbenzene Sulphonate (LAS) and one degradation intermediate, Sulphophenyl Carboxylic Acid (SPC C₁₁) on embryos and larvae of the seabream (*Sparus aurata*). (Supervisor: Dr Julián Blasco).

PhD (University of Cadiz): Effects of the anionic surfactant Linear Alkylbenzene Sulphonate (LAS) on marine organisms. Ecotoxicological implications. (Supervisor: Dr Julián Blasco).

Research interests:

Ecotoxicology, ecotoxicogenómicas, proteomics and transcriptomics, gene expression profiling under environmental stress conditions, development of molecular biomarkers in non-target species, environmental impact assessment, emerging contaminants, pharmaceutical compounds, nanoparticles, surfactants, analysis of environmental levels of priority and emerging pollutants , aquatic environments, estuaries, coastal ecosystems.

Research experience:

Dr Miriam Hampel has been working in the Department of Ecology & Coastal Management of the Institute for Marine Sciences of Andalusia (ICMAN) from 1998 to 2004. She has a long experience in the field of (eco-) toxicology evaluating physiological, enzymatic endpoints of dissolved and sediment associated contaminants in organisms from different levels of organisation and habitats, including bivalves, crustaceans, copepods, snails, pelagic and benthonic fish and developing and applying different test devices and systems for the laboratory exposure of the test organisms for posterior derivation of water and sediment quality parameters and subsequent environmental risk assessment. She has a well based experience in the analysis of different environmental contaminants such as surfactants, PAH and pharmaceuticals in environmental and tissue matrixes by high performance liquid chromatography. Since 2005 she has initiated to specialize on the effect evaluation of molecular responses of toxicity employing genomic and proteomic tools and biomarker development of environmental contaminants, initiating the relations with the Institute of Aquaculture of the University of Stirling, a state-of-the-art institute in the field of (environmental) transcriptomics and proteomics. During her Marie Curie fellowship she evaluated the transcriptomic and proteomic effects of environmental levels of pharmaceutical contaminants in Atlantic salmon employing different high through-put molecular cutting edge techniques like cDNA microarrays and 2D DIGE. After her return to the Institute for Marine Sciences of Andalusia (ICMAN) funded by a Post Doctoral contract of the Spanish National Council for Scientific Research (CSIC) and a European Marie Curie Reintegration grant, she focused on the genomic effects and mechanisms of actions of environmentally relevant exposure concentrations in several non-target organisms (gilthead sea bream, clams, copepods). From 2011 to 2013 she coordinated the Marie Curie International Research Exchange Scheme Action: Use of genomic and proteomic tools for the development of contaminant specific biomarkers for the environmental risk assessment of aquatic ecosystems (GENERA), a network for staff and expertise exchange including 5 European and 5 non European countries. At present she is a Senior Researcher (Funding scheme: Ramón y Cajal) at the Andalusian Centre for Marine Science and Technology of the University of Cadiz (Spain), funded by the Spanish Ministry for Economy and Finance.

Project participation:

1998-2001: Priority Surfactants and their toxic metabolites in waste effluent discharges: an integrated study (PRISTINE). Funding entity: European Community (Contract ENV4-CT97-494). Principal researcher: Dr. Thomas Knepper (University of Mainz, Germany).

2001-2004: Use of immobilized marine microalgae systems in the incorporation and evaluation of toxic substances in marine ecosystems. Funding entity: *CICYT (Center for Scientific Investigation and Technology, Spain)*. Principal researcher: Dr. Julián Blasco (Spanish National Council for Scientific Research, Andalusian Institute for Marine Sciences ICMAN-CSIC).

2004-2007: Evaluation of the quality of sediments of different site specific environments employing the hydrobid snail *Hydrobia ulvae*. Funding entity: *Fundação para a Ciência e a Tecnologia, Portugal* Principal researcher: Dr. Carlos Vale (*Institute for Fishery and Marine Research, IPIMAR*).

2004-2007: Evaluation of the pollution of waters and sediments of the Tagus and Trancão Rivers (Avaliação da poluição das águas e sedimentos do Tejo e Trancão). Funding entity: *Sistema*

Multimunicipal de Saneamento do Tejo e Trancão (SIMTEJO). Principal researcher: Dr. João Canário (*Institute for Fishery and Marine Research, IPIMAR*).

2007-2008: Evaluation of the genomic effects of four environmentally suspect pharmaceutical compounds on Atlantic salmon (*SALMONPHARM*). Funding entity: European Community (Proposal N° 039691, FP6-2005-Mobility-5). Principal researcher: Dr. Michael Leaver (*Institute of Aquaculture, University of Stirling, UK*).

2008-2011: Environmental risk assessment of four pharmaceutical compounds employing genomic tools and the seabream, *Sparus aurata* (*ERA4PHARM*). Funding entity: European Community (Proposal N° 239325, FP7-PEOPLE-ERG-2008). Principal researcher: Dr. Miriam Hampel (Spanish National Council for Scientific Research, Andalusian Institute for Marine Sciences ICMAN-CSIC).

2009-2010: South West European Research Network (Red de Investigación del Suroeste de Europa) (RISE). Funding entity: European Community : *Cross-Border Cooperation Programme Spain-Portugal (Interreg EU)*. Principal researcher: Dres. José Luis Gómez-Ariza, Maria João Bebianno, Julian Blasco.

2010-2013: Use of genomic and proteomic tools for the development of contaminant specific biomarkers for the environmental risk assessment of aquatic ecosystems (*GENERA*). Funding entity: European Community (FP7-PEOPLE-2009-IRSES - Proposal n° 247559) Principal researcher: Dr. Miriam Hampel (Spanish National Council for Scientific Research, Andalusian Institute for Marine Sciences ICMAN-CSIC).

2010-2012: Functionalized nanoparticles for hyperthermia applications and evaluation of ecotoxicity. Funding entity: Andalusian Regional Government, Excellence Projects. Principal researcher: Dr. Asunción Fernández Camacho (Institute for Material Sciences of Seville, Joint Center CSIC-University of Seville).

2010-2012: Tools for assessment of pollution in the Western Mediterranean (Morocco and Spain) and their sustainable management through the analysis of environmental compartments. Funding entity: Spanish National Council for Scientific Research (CSIC) – Moroccan National Center for Energy Sciences and Nuclear Techniques (CNESTEN). Principal researcher: Dr. Julián Blasco (CSIC), Dr. Abdelmourhit Laissaoui (CNESTEN).

2012-2014: Cross Border Research and Technology Transfer Spain-Portugal (I2TEP). Funding entity: European Community: *Cross-Border Cooperation Programme Spain-Portugal (Interreg EU)*. Principal researcher: Dr Julian Blasco (CSIC).

2011-2012: Fate, behavior and ecotoxicity of pharmaceutical compounds in marine ecosystems: Cádiz bay and Gdansk Gulf (2010PL0014). Funding entity: Spanish National Council for Scientific Research (CSIC), Polish Academy of Sciences. Principal researchers: Dres. Julián Blasco(CSIC), Ksenia Pazdro (Polish Academy of Sciences Academia).

2010-2015: Assessing and predicting effects on water quantity and quality in Iberian rivers caused by global change (*SCARCE*). Funding entity: Spanish Ministry for Sciences and Innovation (*Consolider-Ingenio 2010 CSD2009-00065*). Principal researcher: Dr. Damiá Barceló (Spanish National Council for Scientific Research, Institute of Environmental Assessment and Water Research IDAEA-CSIC) .

2013-2016: Metal nanoparticles (Cu, Zn, Ce and Ti): bioavailability, trophic transfer bioaccumulation, ecotoxicity and associated risk in marine and estuarine ecosystems. Funding entity: Andalusian Regional Government, Excellence Projects. Principal researcher: Dr. Julián Blasco (CSIC).

2013-2015: Evaluation of the effects of conventional and emerging contaminants in aquatic organisms. Controlled exposure tests and validation "in situ" in estuarine ecosystems. Spanish Ministry of Economy and Competitiveness. Principal researcher: Dr. Julián Blasco (CSIC).

2015-2018: Integration of Omic Tools for the evaluation of Environmental Risk of emerging contaminants in marine species of commercial interest (HORACIO). Funding entity: Spanish Ministry for Economy and Competitiveness. Principal researcher: Dr. Miriam Hampel and Dr Pablo Lara University of Cadiz.

Complementary information

10-14 November 2014: EMBL-EBI-Wellcome Trust workshop on Proteomics Bioinformatics, organized by the Wellcome Trust in Hinxton, Cambridge

1-10 October 2011: Wellcome Trust Advanced Courses: Next Generation Sequencing, organized by the Wellcome Trust in Hinxton, Cambridge

December 2010: Independent expert evaluator at the European Commission (DG RTD, Priority Area 5) for the call FP7-ENV-2011-ECO-INNOVATION, 1st step evaluation

13-15th May 2008: Practical Ettan DIGE workshop, organised by GE Healthcare (Amersham). University of Glasgow.

December 2008: Aquagenome: Genomics for Beginners and Applied Workshop, organized by Genesis Faraday and the Roslin BioCentre. University of Stirling.

January 2006: Practical course about DNA chips. Fundamentals and applications of macro-, micro and electronic chips, practical use of DNA chips in the different biological fields and data analysis, statistics and data bases. Department of Biochemistry and Molecular Biology, Fundación Universidad Empresa de Valencia, ADEIT.

October-December 2005: Training in molecular techniques (**proteomics, transcriptomics**) at the Institute of Aquaculture in Stirling, Scotland. Leading international centre in its field graded **5** in the 2001 RAE (Regional Assessment Evaluation).

April 2005: Independent expert evaluator at the European Commission (DG RTD, Priority Area 5) for the call FP6-FOOD-3-A.

September- December 1997: Stage at the **Brixham Environmental Laboratory**, part of Astra Zeneca Ltd. in Brixham (Great Britain). Research about the effects of endocrine-disrupting chemicals on survival and reproduction output of the marine copepod *Tisbe battagliai* (Crustacea, Copepoda, Harpacticoida).

August- September 1996: Practical training at the **Alfred-Wegener Institute for Polar and Marine Research in Bremerhaven** (Germany). Determination of the corporal and gonadal size, as well as the sex ratio of the marine copepod *Calanus finmarchicus* (Crustacea, Copepoda, Harpacticoida) in arctic water samples. Determination of the stomach content of fishery samples of the North Sea, as well as determination of the degree of a fungus disease in shrimps.

1995-1997: Assistant at the **Department for Marine Zoology (Invertebrates)** of the Faculty for Marine Sciences, University of Cádiz. Collaboration in different research projects about benthic invertebrates.

Languages:

Speaks and writes correctly German (maternal language), Spanish and English. Good knowledge of French and Portuguese.

Publications**Scientific Journals**

Hutchinson TH, Pounds NA, Hampel M, Williams TD (1999) Life-cycle studies with marine copepods (*Tisbe battagliai*) exposed to 20-hydroxyecdysone and diethylstilbestrol. *Environmental Toxicology and Chemistry*, V18 (12).

Hutchinson TH, Pounds NA, Hampel M, Williams TD (1999) Impact of natural and synthetic steroids on the survival, development and reproduction of marine copepods *Tisbe battagliai*. *Science of the Total Environment*, V 233, pp 167-179.

Blasco J, Saenz V, Puppo J, Hampel M (1999) Metal Contamination and Pollution of Estuaries and Coastal Areas. *UNESCO (Intergovernmental Oceanographic Commission: Technical Series) Baltic Floating University Research Bulletin*. (Eds. N. Plink and A. Del Valls)

Hampel M, Moreno-Garrido I, Sobrino C, Lubián LM, Blasco J (2001) Acute Toxicity of LAS Homologues in Marine Microalgae. Esterase Activity and Inhibition Growth as Endpoints of Toxicity. *Ecotoxicology and Environmental Safety*. 48, 287-292.

Moreno-Garrido I, Hampel M, Lubián LM, Blasco J (2001) Marine microalgae toxicity test for linear alkylbenzene sulfonate (LAS) and alkylphenol ethoxylate (APEO). *Fresenius' Journal of Analytical Chemistry*, 371 (4), 474-478.

Hampel M, Blasco J (2002) Toxicity of linear alkylbenzene sulphonate (LAS) and one long-chain degradation intermediate, sulphophenyl carboxylic acid (SPC C11) on early life-stages of seabream (*Sparus aurata*). *Ecotoxicology and Environmental Safety* 51, 53-59.

Hampel M, Moreno-Garrido I, Blasco J (2002) Can early life-stages of the marine fish, *Sparus aurata*, be useful for the evaluation of the toxicity of Linear Alkylbenzene Sulphonates homologues (LAS C10- C14) and commercial LAS?, *Analysis, Toxicity and Biodegradation of Organic Pollutants in Groundwater from Contaminated Land, Landfills and Sediments, The Scientific World* Vol 2, 1689-1698.

Moreno-Garrido I, Hampel M, Lubián LM, Blasco J (2003) Sediment toxicity tests using benthic marine microalgae *Cylindrotheca closterium* (Ehremberg) Lewin & Reimann (Bacillariophyceae). *Ecotoxicology and Environmental Safety* 54, 290-295.

Moreno-Garrido I, Hampel M, Lubián LM, Blasco J (2003) Marine benthic microalgae *Cylindrotheca closterium* (Ehremberg) Lewin & Reimann (Bacillariophyceae) as a tool for measuring toxicity of Linear Alkylbenzene Sulphonate (LAS) in sediment. *Bull. Environ. Contam. Tox.*, V 70, 242-247.

Hampel M, Ortiz-Delgado JB, Moreno-Garrido I, Sarasquete C, Blasco J (2004) Sublethal Effects of Linear Alkylbenzene Sulphonate on Larvae of the Sea-bream (*Sparus aurata*): histological approach. *Histology and Histopathology*, 19: 1061-1073.

Hampel M., González-Mazo, E., Vale C., Blasco, J. (2007) Derivation of predicted no effect concentrations (PNEC) for marine environmental risk assessment: application of different approaches to the model contaminant Linear Alkylbenzene Sulfonate (LAS) in a site specific environment. *Environment International*, 33: 486-491.

- Hampel M, Ortiz-Delgado JB, Sarasquete C, Blasco J (2008) Lethal and Sublethal Effects of sediment sorbed Linear Alkylbenzene Sulphonate on Juveniles of the Senegal Sole (*Solea senegalensis*): indicator of sublethal effects of exposure. *Histology and Histopathology* 23, 87-100.
- Hampel M, Canário J, Branco V, Vale C, Blasco J (2008) Environmental levels of linear alkylbenzene sulphates (LAS) in sediments from the Tagus estuary, Portugal. *Environmental Monitoring and Assessment* 149(1-4), 151-161. (DOI 10.1007/s10661-008-0190-0).
- Hampel M, Moreno-Garrido I, González-Mazo E, Blasco J (2009) Suitability of the marine prosobranch snail *Hydrobia ulvae* for sediment toxicity assessment: a case study with the anionic surfactant Linear Alkylbenzene Sulfonate (LAS). *Ecotoxicology and Environmental Safety* 72(4), 1303-1308. (Doi.: 10.1016/j.ecoenv.2008.09.005).
- Mauffret A, Rottiers A, Federle T, Hampel M, Gillan D, Blasco J, Temara A.(2009) Colonized beads as inoculum for marine biodegradability assessment: Application to Linear Alkylbenzene Sulfonate. *Environment International*, 35(6), 885-892. doi:10.1016/j.envint.2009.03.007
- Diz FR, Araújo CVM, Moreno-Garrido I, Hampel M, Blasco J. (2009). Short-term toxicity tests on the harpacticoid copepod *Tisbe battagliai*: Lethal and reproductive endpoints. *Ecotoxicology and Environmental Safety* 72(7), 1881-1886 (Doi.: 10.1016/j.ecoenv.2009.03.004).
- Hampel M, Alonso E, Aparicio I, Bron JE, Santos JL, Taggart JB, Leaver MJ (2010) Potential physiological effects of pharmaceutical compounds in Atlantic salmon (*Salmo salar*), implied by transcriptomic analysis. *Environmental Science and Pollution Research*, 17 (4), 917-933. DOI: 10.1007/s11356-009-0282-6
- Hampel M, Mauffret A, Pazdro K, Blasco J (2011) Anionic surfactant linear alkylbenzene sulphates (LAS) in sediments from the Gulf of Gdańsk (southern Baltic Sea, Poland) and its environmental implications. *Environmental Monitoring and Assessment*, 184(10), 6013-6023. DOI: 10.1007/s10661-011-2399-6
- Trombini C, Hampel M, Blasco J (2012). Effects of the exposure of the clam *Ruditapes philippinarum* to carbamazepine, diclofenac and ibuprofen. Evaluation of enzymatic and molecular endpoints. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 163, Suppl., S22.
- García-Negrete CA, Blasco J, Volland M, Rojas TC, Hampel M, Lapresta-Fernández A, Jimenez de Haro MC, Fernández A (2013). Behaviour of Au-citrate nanoparticles in seawater and accumulation in bivalves at environmentally relevant concentrations. *Environmental Pollution* 174, 134-141
- Nieto E, Blasco J, González-Ortegón E, Drake P, Hampel M. (2013). Is *Atyaephyra desmarestii* a useful candidate for lethal and sub-lethal toxicity tests with pharmaceutical compounds? *Journal of Hazardous Materials*. Materials 263P, 256– 265. <http://dx.doi.org/10.1016/j.jhazmat.2013.08.035>.
- Hampel M, Bron JE, Taggart JB, Leaver MJ (2014) The antidepressant drug Carbamazepine induces differential transcriptome expression in the brain of Atlantic salmon, *Salmo salar*. *Aquatic Toxicology* 151, 114-123. *Special Issue on Antidepressants*
- Blasco J, Durán-Grados V, Hampel M, Moreno-Gutiérrez J. (2014) Towards an integrated environmental risk assessment of emissions from operating ships. *Environment International*, 6, 44–47.
- Roig N, Sierra J, Nadal M, Moreno-Garrido I, Nieto E, Hampel M, Pérez-Gallego E, Schuhmacher

- M, Blasco J (2015). Assessment of sediment ecotoxicological status as a complementary tool for the evaluation of surfacewater quality: the Ebro river basin case study. *Science of the Total Environment* 503–504, 269–278.
- Hampel M, Alonso E, Aparicio I, Santos JL, Leaver MJ. (2015) Hepatic proteome analysis of Atlantic salmon (*Salmo salar*) after exposure to environmental concentrations of human pharmaceuticals. *Molecular and Cellular Proteomics*, 14(2): 371-81.
- Volland M, Hampel M, Trombini C, Garcia-Negrete C, Martos-Sitcha JA, Martínez-Rodríguez G, Fernandez A, Blasco J. (2015) Citrate gold nanoparticle exposure in the marine bivalve *Ruditapes philippinarum*: Uptake, elimination and effect on biomolecular homeostasis. *Environmental Science and Pollution Research. Special Issue GENERA*, 22(22): 17414-17424. DOI 10.1007/s11356-015-4718-x
- Hampel M, Blasco J, Segner H (2015) Molecular and cellular effects of contamination in aquatic ecosystems. *Environmental Science and Pollution Research. Special Issue GENERA*. 22(22): 17261–17266. DOI 10.1007/s11356-015-4718-x
- González-Ortegón E, Blasco J, Nieto E, Hampel M, Le Vay L, Giménez L (2016) Individual and mixture effects of selected pharmaceuticals on larval development of the estuarine shrimp *Palaemon longirostris*. *Science of the Total Environment* 540: 260–266.
- Trombini C, Hampel M, Blasco J (2016). Evaluation of acute effects of four pharmaceuticals and their mixtures on the copepod *Tisbe battagliai*. *Chemosphere* 155, 319-328.
- Nieto E, Blasco J, González-Ortegón E, Drake P, Hampel M. (2016). Influence of temperature on toxicity of single pharmaceuticals and mixtures, in the crustacean *A. desmarestii*. *Journal of Hazardous Materials*, 313, 159-169.
- Volland M, Blasco J, Hampel M (2017). Validation of Reference Genes for RT-qPCR in Marine Bivalve Ecotoxicology: Systematic Review and Case Study using Copper Treated Primary *Ruditapes philippinarum* Hemocytes. *Aquatic Toxicology*. DOI 10.1016/j.aquatox.2017.01.003
- Hampel M, Blasco J, Babbucci M, Ferrareso S, Bargelloni L, Milan M. (2017) Transcriptome analysis of the brain of the sea bream (*Sparus aurata*) after exposure to human pharmaceuticals at realistic environmental concentrations. *Marine Environmental Research* 1-10. <http://dx.doi.org/10.1016/j.marenvres.2017.04.012>
- Nieto E, Hampel M, Sánchez-Argüello P, Blasco J. (2016) Pharmaceuticals (Diclofenac, Ibuprofen and Carbamazepine) spiked sediment effects on *Chironomus riparius*. *Science of the Total Environment accepted after minor revisions*
- Nieto E, Hampel M, Acuña J, González-Ortegón E, Pérez S, Drake P, Blasco J (2016) Enantiospecific chronic effects of Ibuprofen in the freshwater crustacean, *Athyaephyra desmarestii*. *In preparation*
- Volland M, Katsumiti A, Hampel M, Cajaraville M, Blasco J (2016). Synthesis methods influence characteristics, behaviour and toxicity of bare CuO NPs in primary *Ruditapes philippinarum* exposure experiment. *In preparation*.
- Volland M, Torreblanca A, Blasco J, Hampel M (2017) Citrate gold nanoparticle exposure in the marine bivalve *Ruditapes philippinarum*: Effects on protein expression evidenced by iTRAQ. *Submitted to Nanotoxicology*.

Book chapters

Blasco J, Hampel M, Moreno-Garrido I (2002) Toxicity of surfactants for aquatic life. In: Analysis and fate of surfactants. Elsevier Book Series: Comprehensive Analytical Chemistry, Knepper, Barceló, De Voogt (Eds.) V 40, 827-862.

Blasco J, Sáenz V, Arias AM, González-Pascual R, Campana O, Ransome T, Moreno-Garrido I and Hampel M (2003) Efecto del accidente minero sobre los organismos residentes en el estuario del Guadalquivir y en las zonas de la plataforma próxima a su desembocadura. In: Contaminación por metales pesados en el estuario del Guadalquivir. Efectos del accidente minero de Aznalcóllar sobre el medio físico y los organismos marinos. I. Sáez, J.M. Forja y A. Gómez-Parra (eds). *Servicio de publicaciones Universidad de Cádiz*.

Hampel M, Blasco J, Martín-Díaz L (2016). Biomarkers and Effects. In: Marine Ecotoxicology, 1st Edition. Current Knowledge and Future Issues. Blasco J, Chapman P, Campana O, Hampel M (eds). Elsevier Academic Press, Pages: 121-164. ISBN9780128033715

Blasco J, Hampel M, Campana O, Moreno-Garrido I (2017). Biological effects of pharmaceuticals in marine environment. In: Problems in Marine Biology: Methodological Aspects and Applications. Garcia Barrera T, Gomez Ariza JL (eds). CRC Press, 344 Pages. ISBN 9781482264500, CAT# K24422

Congress Participations:

Poster Contributions

Hampel M, González R, Blasco J (2000) Efecto del lineal alquilbenzeno sulfonato sódico (LAS) sobre las enzimas antioxidantes en la glándula digestiva de la almeja *Ruditapes philippinarum* (Adams & Revé, 1850). *X Seminario Ibérico Química Marina. Cádiz (Spain)*.

Hampel M, Ortíz JB, Sarasquete C, Moreno A, Blasco J (2000) Effects of homologues of linear alkylbenzene sulphonates (LAS C₁₀ to C₁₄) on survival of embryos and larvae of seabream (*Sparus aurata*). *5th World Surfactant Congress CESIO. Florence (Italy)*.

Hampel M, Moreno-Garrido I, Sobrino C, Lubián LM, Blasco J (2000) Acute toxicity in marine microalgae. Esterase activity and growth inhibition as endpoints of toxicity. *5th World Surfactant Congress CESIO. Florence (Italy)*.

Hampel M, Moreno-Garrido I, Blasco J (2001) Acute toxicity of homologues of linear alkylbenzene sulphonate (LAS C₁₀ to C₁₄) and commercial LAS on survival of seabream (*Sparus aurata*) larvae. *SETAC Europe 11th annual meeting, Madrid (Spain)*.

Blasco J, Hampel M, Moreno-Garrido I, Arias AM (2001) Evaluation of pollution in the Guadalquivir river estuary. Biomarker approach. *SETAC Europe 11th annual meeting, Madrid (Spain)*.

González-Pascual R, Hampel M, Blasco J (2001) Is Scrobicularia plana a useful organism to biomonitor the contamination and pollution of sediment by heavy metals in the Guadalquivir estuary? *SETAC Europe 11th annual meeting, Madrid (Spain)*.

González-Pascual R, Hampel M, Blasco J (2001) Is Scrobicularia plana a useful organism to biomonitor the contamination and pollution of sediment by heavy metals in the Guadalquivir estuary? *IV Iberian and I Iberoamerican Congress of Environmental Contamination and Toxicology CICTA, Madrid (Spain)*

Hampel M, Moreno-Garrido I, Blasco J (2001) Acute toxicity of linear alkylbenzene sulphonates (LAS) homologues (C₁₀-C₁₄) and commercial LAS on survival of two early development stages of *Sparus aurata*. Workshop on Analysis, Toxicity and Biodegradation of Organic Pollutants in Groundwater from Contaminated Land, Landfills and Sediments. *Gpoll of European Science Foundation (ESF) and Consejo Superior de Investigaciones Científicas (CSIC), Barcelona (Spain)*.

Blasco J, Hampel M, Moreno-Garrido I (2002) Marine microalgae and early life-stages of seabream (*Sparus aurata*) as tools for marine environmental risk assessment. *Management of toxic substances in the marine environment. Analysis of the Mediterranean and the Baltic (AMEBA)*. Ministerio de Medio Ambiente (Spain) and Regrinskansliet (Sweden).

Hampel M, Moreno-Garrido I, González-Mazo E, Blasco J (2003) Sediment toxicity testing: is the mudsnail *Hydrobia ulvae* a suitable candidate for LAS spiked sediment toxicity assessment? *SETAC Europe 13th annual meeting, Hamburg (Germany)*.

Hampel M, González-Mazo E, Blasco J (2004). Bioavailability of sediment sorbed Linear Alkylbenzene Sulfonates (LAS) in sediments with different organic matter load. *3rd European Sediment Research Network (SedNet) Workshop, Monitoring sediment quality at river basin scale. Lisbon (Portugal)*.

Hampel M, González-Mazo E, Blasco J (2004). Equilibrium partitioning method and assessment factor approach for environmental risk assessment in marine sediments. A case study: linear alkylbenzene sulfonates (LAS) in a littoral ecosystem. *SETAC Europe 14th annual meeting. Prague (Czech Republic)*.

Hampel M, Blasco J (2004). Derivation of Predicted No Effect Concentrations (PNEC) of Sediment Sorbed Linear Alkylbenzene Sulfonates (LAS) by Equilibrium Partitioning Method and Assessment Factor Approach for Environmental Risk Assessment in Marine Sediments. *3rd Conference on Aquatic Ecosystems and Organisms. Moscow (Russia)*.

Hampel M, Campana O, Blasco J (2004). Evaluation of the suitability of assessment factor approach and equilibrium partitioning method for PNEC sediment derivation. A case study: linear alkylbenzene sulfonates in a littoral ecosystem. *4rd International Conference on Marine Pollution and Ecotoxicology. Hong Kong (China)*.

Hampel M, González-Mazo E, Berna JL, Blasco J (2004). Spiked sediment toxicity test with the mudsnail *Hydrobia ulvae* for the evaluation of the effects of sediment sorbed commercial Linear Alkylbenzene Sulfonate (LAS). *6th World Surfactant Congress CESIO. Berlin (Germany)*.

Hampel M, González-Mazo E, Berna JL, Blasco J (2004). Toxicity of sediment sorbed Linear Alkylbenzene Sulfonates (LAS) on juvenile *Solea senegalensis*: a histological approach. *6th World Surfactant Congress CESIO. Berlin (Germany)*.

Hampel M, Canário J, Vale C, Blasco J (2005) Environmental levels of linear alkylbenzene sulphonates (LAS) in sediments from the Tagus estuary, Portugal. *VI Iberian and III Iberoamerican Congress of Environmental Contamination and Toxicology CICTA, Cádiz (Spain)*.

Hampel M, González-Mazo E, Vale C, Blasco J (2005) Derivation of predicted no effect concentrations (PNEC) for marine environmental risk assessment: application of different approaches to the model contaminant linear alkylbenzene sulphonates (LAS) in a site specific environment. *VI Iberian and III Iberoamerican Congress of Environmental Contamination and Toxicology CICTA, Cádiz (Spain)*.

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Mauffret A, Rottiers A, Federle T, Hampel M, Blasco J, Matthijs E, Temara A (2005) A new screening test for persistency assessment in the marine environment. *Making Europe more attractive for researchers. Marie Curie Action, Pisa/ Livorno (Italy)*.

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Other relevant information.

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