

XX Congress of the Iberian Association of Limnology (AIL-2020)
and III Iberoamerican Congress of Limnology (CIL-2020)

Limnology in a changing world

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Guest Editors

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PREFACE

Limnology in a changing world

Between 26th and 29th of October 2020 it was celebrated from Murcia (Spain) the XX Congress of the Iberian Association of Limnology (AIL-2020) and III Iberoamerican Congress of Limnology (CIL-2020). Due to COVID restrictions, this meeting had to take place in a virtual (online) format but provided a valuable opportunity for the exchange of knowledge and experiences among Iberian and Ibero-American limnologists. According to the theme of the congress, “Limnology in a changing world” was a forum to discuss key issues to manage inland aquatic ecosystems that, despite being of high importance for humans, are subjected to increasing human pressures and impacts.

A total of 283 participants from 21 countries were registered (11 European countries, 8 Iberoamerican, Algeria and EEUU) presented a total of 245 communications (148 orals and 97 posters). There were seven plenary sessions by invited speakers. Nancy B. Grimm (Ramón Margalef Conference) exposed “The need for positive thinking in times of crisis: co-producing sustainable future scenarios and nature-based solutions for cities”. Mariana Meerhoff (University of the Republic, Uruguay) communicated about “Climate warming decreases ecosystem resilience against eutrophication; what about the other way round?”. Raquel Mendonça (Federal University of Juiz de Fora, Brasil) delivered an interesting presentation on “Carbon footprint of reservoirs – lessons learned from tropical systems”. Luisa Orsini (University of Birmingham, UK) elucidated on “Back to the future with the evolutionary time machine”. Cayetano Gutiérrez-Cánovas (University of Barcelona, Spain) talk on “Multiple stressor impacts on freshwater ecosystems: biodiversity responses and functional consequences”. Nicolás Vicente Parra (University of Oslo, Norway), and winner of the Best Doctoral Thesis Award of the Iberian Association of Limnology-2020, explored about “Saline lakes as barriers against pollution: the case of Pétrola Lake”. Finally, Narcís Prat (University of Barcelona) and winner of Lifetime Achievement Award in Limnology of the Iberian Association of Limnology-2020, reviewed the research and management of water in Spain with his conference: “Danzando con quironómidos: Una mirada retrospectiva a la investigación y gestión del agua en España”.

During the four days of the congress 11 regular sessions delved into topics on: microbial ecology; population and community ecology; biodiversity and conservation of aquatic ecosystems; ecosystem processes and functioning; stressed aquatic ecosystems; wetlands, lakes and estuarine ecology; monitoring, management and restoration of aquatic ecosystems; alien and invasive species; urban aquatic ecosystems; global change and aquatic ecosystems; and ecosystem services. In addition, 10 special session dealt with topics on: new challenges in management water and aquatic ecosystems in a changing world; the nitrogen cycle in inland waters: natural and human-driven processes; water quality of reservoirs: monitoring tools and challenges for the future; effects of contaminants on aquatic systems: from cells to ecosystems; DNA barcoding, (e)DNA metabarcoding and metagenomics to address ecological and evolutionary questions in aquatic ecosystems; biogeochemistry of the carbon cycle; beyond the natural sciences tool-box: what social sciences and humanities can teach us about freshwater ecosys-

tems; metacommunity ecology in aquatic ecosystems: applications, innovations and challenges; the tech revolution: improving aquatic biogeochemical knowledge through new approaches and methodologies; tropical limnology in the Americas: current status and future perspectives; and EU projects workshop: exchanging experience in IAS management and awareness.

Additionally, an interesting live round table was developed under the theme: “New challenges in the management of water and aquatic ecosystems in a changing world” organized by Romina Álvarez-Troncoso (University of Vigo) and Manuel Graça (University of Coimbra) in which participated Francisca Baraza Martínez (President of the Commonwealth of the Taibilla Canals), Eduardo La Fuente Sacristán (Confederación Hidrográfica del Segura), Rui Cortes (University of Trás-os-Montes e Alto Douro) and João Pádua (Labelec – EDP – Energias de Portugal, S.A.).

The J-AIL organized the workshop: “The obscure part of science” led by Dr. Andrea García Bravo, to discuss the difficulties that they may encounter along their scientific career and come up with strategies to overcome failures and unsuccessfulness. Also, Míriam Colls and Ferran Romero, from Institut Català de Recerca de l’Aigua (ICRA) presented the project URBIFUN. (“Urbanization effects on the relationship between microbial biodiversity and ecosystem functioning”) winner in the 3rd call for the Collaborative Research Projects for young AIL-members.

The group Gender & Science organized a special session which involved four introductory videos available online and a live session covering the following aspects: i) science from a feminist and anti-colonial perspectives that takes into account not only gender as an aspect typical of people but also as an encoded in cultural and knowledge systems, thanks to the presentation by researcher Irene Iniesta-Arandia (Universitat Autònoma de Barcelona), ii) current activities carried out by the AIL Gender and Science group, iii) the exhibition “Women in Limnology”, knowing its journey during the last two years, and finally iv) a debate on the participation and visibility of women during scientific conferences.

During the congress the following prizes were awarded: Best Oral Communication (Transmitting Science Award) sponsored by the Iberian Association of Ecology (SIBECOL); Best Poster Communication (Quercus Award), and for the first time, the SIBECOL award to the best interdisciplinary talk.

Finally, the virtual form of the congress was not an obstacle to enjoy some cultural activities. We were able to enjoy: i) the performance by the “Cuadrilla de Tallante and Las Palas”; ii) Cine-Forum: “Original version of the Segura: fluvial natural reserves of the Segura river basin”; and iii) a live stream concert by Sara Zamora & Juan Tae (Murcia, Spain).

This special number of *Limnetica* includes 10 papers presented as communications during the congress. The organizers acknowledge the support provided by Transmitting sciences, INUAMA (Institute of Water and the Environment of the University of Murcia), The Royal Society Publishing, Life Invasqua, El Ciruelo, Quercus and SIBECOL. We thank all participants and the Scientific Committee for their contribution to the congress.

The Invited Editors

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