



The DFG Research Training Group on Urban Water Interfaces (UWI) invites  
to a guest lecture by

**Dr. Armando Sepulveda-Jauregui,  
Universidad de Magallanes, Punta Arenas, Chile**

**Wednesday, 6<sup>th</sup> September 2017, 9:00 am, Hotel Sommerfeld, Kremmen**

**Lecture title: *Greenhouse gas emissions from "natural" and urban inland waters, what makes the difference?***

*Abstract*

Globally, inland waters are considered one component of the global greenhouse gas sources to the atmosphere. The aforementioned has been observed due to the large methane and carbon dioxide emissions to the atmosphere by inland waters, contributing with ca. 92 TgC yr<sup>-1</sup> and 1 800 TgC yr<sup>-1</sup>, respectively. This is remarkable, since they cover a small proportion of the Earth's non-glaciated surface (ca. 4%). It is worsened by the fact that these ecosystems have been subject to anthropogenic changes. Therefore, any natural or anthropogenic disturbances of inland waters represent an important global consequence. In this regard, how inland waters are affected by human activities remain as major gap in our knowledge of the global greenhouse gas budget. All of the above exposes the need to improve our understanding of the role of human activity disturbance upon the "natural" or disturbed (urban) inland waters, calling attention to what these gas emissions might change in the future.

*About the speaker*

Studies

- Eng. in Biochemical Engineering (Suitable waste management from a regional park), 2001-2006
- MSc. in Biotechnology (Greenhouse gas emission in Mexican lakes), 2006-2008
- PhD. in Biotechnology (Methane cycling in subtropical and arctic lakes), 2009-2012

Postdoctoral Research

- Project: The effect of thawing permafrost on microbial methane dynamics in arctic lakes, University of Alaska Fairbanks (UAF), Water and Environmental Research Center (WERC), Fairbanks, Alaska, USA, 2013
- Project: Role of humic substances on anaerobic oxidation of methane in aquatic ecosystems, Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), Department of Experimental Limnology, Stechlin, Germany, 2014-2015
- Project: Methanogenic Biodiversity and activity in Arctic and Sub-Antarctic Ecosystems affected by climate change, Universidad de Magallanes (UMAG), Punta Arenas, Chile, 2016

Current Position

- Researcher, Universidad de Magallanes, Punta Arenas, Chile (since Jan 2017)
- Affiliate Researcher, University of Alaska Fairbanks, Water and Environmental Research Center (WERC), Fairbanks, Alaska, USA, (since Jan 2014)
- Adjoint Researcher, Center for Climate and Resilience Research (CR)2, Biogeochemistry, DFG, Universidad de Chile, Santiago, Chile, (since July 2017)