



Special Seminar on Water and Climate Change

- ◆ 38th Session of IPCC (Intergovernmental Panel on Climate Change) will be held in Yokohama, Japan 25-29 March, 2014. Two distinguished scientists in the field of water and climate change will visit Japan. At this opportunity, they will provide us seminars at IIS/The University of Tokyo.
- ◆ Place: As303/304 Seminar Room, IIS, The University of Tokyo
- ◆ Date: March 24th, 2014.
- ◆ 16:00-Blanca Jiménez Cisneros (Director of the Division of Water Sciences, Secretary of the International Hydrological Programme “IHP”, UNESCO)
 - ✓ Potable, Stormwater, and Wastewater City Strategies in the Context of Climate Change
- ◆ 17:00-Petra Döll (Institute of Physical Geography, Goethe University, Frankfurt, Germany)
 - ✓ To what extent can we reduce climate change impacts on freshwater resources by climate mitigation?



生産技術研究奨励会 学術講演会 外国人研究者講演会

水と気候変動

- ◆ 2014年3月末に横浜で開催されるIPCC(気候変動に関する政府間パネル)第38回全体会合に来日する水と気候変動に関する専門家2名によるセミナーを下記の通り開催いたします。参加無料ですが、事前に沖大幹までご連絡ください。
- ◆ 場所: 東京大学生産技術研究所As棟3階As303/304
 - ✓ <http://www.iis.u-tokyo.ac.jp/access/access.html>
- ◆ 日時: 2014年3月24日(月) 16時~18時(予定)
- ◆ Blanca Jiménez Cisneros (ユネスコIHP事務局水科学部長)
 - ✓ Potable, Stormwater, and Wastewater City Strategies in the Context of Climate Change
- ◆ Petra Döll (ドイツ・フランクフルトゲーテ大学自然地理学科教授)
 - ✓ To what extent can we reduce climate change impacts on freshwater resources by climate mitigation?



“Potable, Stormwater, and Wastewater City Strategies in the Context of Climate Change”

Blanca Jiménez Cisneros

Director of the Division of Water Sciences

Secretary of the International Hydrological Programme (IHP, UNESCO)



In many countries, water accounts for a significant share of the costs of climate change impact due to the many economic activities dependent upon it. Parry et al., 2009 estimated that the cost of adaptation of the water sector represents a similar investment to that needed to fulfill the MDG (Millennium Development Goals, costing \$9–11 billion USD per year according UNFCCC, 2007). To reduce these costs, strategies for adaptation are needed, notably for municipal water services. However, these are difficult to identify at a local level as impacts are the result of direct and indirect events and act through a long and complex chain of events that are not always obviously related. In this context, the literature recommends the development of “a portfolio” of adaptation options including “no regret solutions” to reduce vulnerability and increase resilience to climate change. This presentation will describe the challenges to supply water services for cities in the future, considering the impacts of climate change. Many of these challenges will be present even in the absence of climate variation as they are also caused by population growth, types of development and the inefficient management of urban water worldwide. Options to address the problems identified are discussed; highlighting those specifically linked to climate change adaptation or mitigation measures that may be helpful in building such a portfolio. One important aspect is the need to review the concept of urban water services as it has been made urgent by the need to properly manage water in cities.



“To what extent can we reduce climate change impacts on freshwater resources by climate mitigation?”

Petra Döll

Institute of Physical Geography, Goethe University, Frankfurt, Germany



Climate mitigation aims at limiting the magnitude and rate of greenhouse gas emissions and thus climate change such that negative impacts of climate change, e.g. on freshwater resources, are reduced as compared to futures without effective climate mitigation. To support the implementation of climate mitigation policies, it is helpful to assess the effect of emissions reductions on climate change impacts on future freshwater resources and on freshwater-related vulnerability of humans. Unfortunately, such assessments are subject to large uncertainties due to the translation of emissions pathways to climatic changes, the translation of climatic changes to changes in freshwater systems, and the translation of changes in the physical freshwater system to vulnerability of humans. In my presentation, I will show the results of selected global-scale studies on the impacts of reduced emissions on freshwater resources and availability, while discussing the involved uncertainties.