Friday 10th July, 10:00 – 11:00 Session 3B

Science communication for resilient cities: monitoring digital communication to be weather-ready

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The quality of science and technology communication has become more challenging due to the fact that access to information has hugely increased in terms of variety and quantity. This is a consequence of different factors, among others the development of public relations by research institutes and the pervasive role of digital media (Bucchi 2013; Trench 2008). A key question is how can we objectively assess science and technology communication? Relatively few studies have been dedicated to the definition of pertinent indicators and (Neresini and Bucchi 2011).

This research aims to understand how communication strategies, addressed to the general public, can optimise the impact of research findings in hydrology for resilient cities and how this can be assessed. Indeed urban resilience to extreme weather events relies both on engineering solutions and increased awareness of urban communities as it was highlighted by the FP7 SMARTesT project and the experiences carried out in the framework of TOMACS (Tokyo Metropolitan Area Convective Studies for Resilient Cities) and CASA (Engineering Research Center for Collaborative Adaptative Sensing of the Atmosphere, supported by the U.S. National Science Foundation).

The research will greatly benefit from the development of automated analysis of unstructured Big Data that allows the exploration of huge amounts of digital communication data: blogs, social networks postings, press articles... Furthermore, these techniques facilitate the comparison of socioeconomic trends with physical-environmental trends.

We will also investigate case studies corresponding to several research projects under the umbrella of the Chair "Hydrology for resilient cities": for example the Interreg NWE IVB RAINGAIN project, the KIC Climate Blue Green Dream project and worldwide collaborations such as TOMACS. All these projects involve awareness raising and capacity building activities aimed to stimulate cooperation between scientists, professionals (e.g. water managers, urban planners) and beneficiaries (e.g. concerned citizens, policy makers).