



**UNIVERSITÉ  
DE GENÈVE**

FACULTÉ DES SCIENCES

SECTION DES SCIENCES DE LA TERRE  
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Genève, 28 février 2011

**Reference letter to support Dr Irene Manzella in her application to Sasakawa Award**

Dear Administrator of the UN Sasakawa Award for Disaster Reduction,

I am writing to support and propose Dr. Irene Manzella for the Sasakawa award. Dr. I. Manzella was hired on 1<sup>st</sup> January 2009 in the Unit of Geological Risk at the University of Geneva with the idea of enlarging our expertise in the study of natural risk and developing a dedicated lab for the study of geophysical flows.

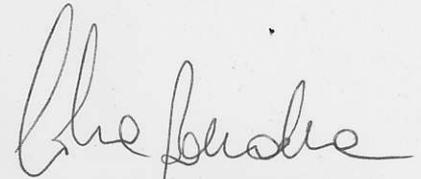
Dr. I. Manzella completed her PhD at the Rock Mechanics Laboratory of EPFL (Lausanne) on the experimental modeling of granular flows under the supervision of Dr. V. Labiouse and her first postdoc at the Department of Civil and Environmental Engineering of MIT (Massachusetts Institute of Technology, USA) in the numerical modeling of granular flows under the supervision of Prof. Einstein. She is also author of 8 peer-reviewed publications in this field and she was awarded a 1-year fellowship by the Swiss National Science Foundation to carry out her Postdoctoral research at MIT. As a result, Dr. I. Manzella was specifically selected out of a range of applicants with different backgrounds (including geology and volcanology) to develop a cutting-edge research in the field of granular flows (including landslides, rock-falls and volcanogenic avalanches) that could complement my own expertise, which is mainly based on the numerical modeling and probabilistic assessment of volcanic phenomena. In addition, taking into account her experience gained also with the master of advanced studies in "Settlements upgrading for cooperation and development" and her experience in Nicaragua she has been chosen to take part to the teaching and organization of the CERG-C training (Specialisation certificate for the assessment and management of geological and climate related risk). Over the last 20 years the CERG-C has trained participants from 65 countries around the world in collaboration with the Swiss Federal Institute of Technology (EPFL) and in association with the United Nations University (UNU), the Swiss Agency for Development and Cooperation (SDC), International Strategy for Disaster Reduction (ISDR) and the Swiss Seismological Service (SED). It has also cooperated in research projects around the world. The essence of our work at the CERG-C is to educate its participants on how to incorporate risk science into everyday reality in an attempt to reduce losses to an acceptable level. Another crucial component of our program is training participants on how to communicate effectively with government agencies, media, public and private sectors before, during and after natural hazard events.

During her first two years at the University of Geneva, Dr. I. Manzella has focused on the development of a dedicated lab for the study of geophysical flows and has already largely contributed to the teaching of both the CERG-C training and the ELSTE Master (Joint School of Earth Sciences of the Geneva and Lausanne Universities). In addition, her input has been crucial to the development of important Suisse and European projects in the field of Risk Reduction. As an example, she is playing an important role in the European project "ENSURE—Enhancing resilience of communities and territories facing natural and na-tech hazards" that has Vulcano island (Italy) has one of the three case studies. As part of this work we are assessing the vulnerability of this volcanic island in order to find the best strategies for risk reduction. Dr. I. Manzella has been involved in the building survey for the assessment of physical vulnerability as well as in the development of outreach activity with the local community (e.g., school exercise based on the management of a volcanic crisis).

I know Dr. I. Manzella for two years and I have already been positively impressed with her scientific excellence and her dedication to both research and teaching. Since January 2009 Dr. I. Manzella has largely contributed also to the experimental research in my group. In addition she always enthusiastically and efficiently gets herself involved in other activities of my group, such as organizing, conceiving and presenting new and original ideas at our stand of the Nuit des Sciences in Geneva (June 2009). As a result, I am very pleased with her work in our Unit of Geological Risk and enthusiastic to have the opportunity to expand my own field of research to mountain hazards thanks to her contribution.

This prestigious award would greatly contribute to the exposure of both Dr. I. Manzella and the entire group of Geological Risk at the University of Geneva in the field of Risk Reduction and would enhance further collaborations with key players. This is why I strongly recommend that her application is positively received.

With Best Wishes,



**Costanza BONADONNA**