



Cities on Volcanoes 9
November 20-25, 2016
Puerto Varas, Chile

'Understanding volcanoes and society: the key for risk mitigation'



Volcanoes and geothermal energy: The importance of scientific communication to its development

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Keywords: Sciences Weeks, Renewable Energy, Geothermic, Volcano, Students

The “Sciences Weeks”, carried out since 2001 in the Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, constitute an outreach activity aimed at the divulgation of knowledge of several disciplines, throughout stands activities, seminars and lectures. The event is addressed to the general public, although most of the visitors consist of elementary and high school students. Since 2015, both during the Earth Sciences and the Physics Weeks, the Fundación YPF (Argentinean national oil company) has sponsored a stand called “Geothermic: the clean energy of the Earth”, whose specific objective is to raise awareness of the existence of this type of renewable energy available in many volcanic areas of Argentina. The didactic methods carried out for this purpose consisted of the presence of exhibitors, who gave explanations and answered the public questions, as well as a number of didactic resources such as the display of a poster with a conceptual geothermal model, the projection of videos showing different thermal manifestations and the display a three dimensional model of a volcano with a geothermal reservoir. With the latter, the exhibitors were able to perform an experiment to show geothermal reservoir degassing and how a geothermal energy plant works. The challenge of the experience lied in being able to show to the community the existence of an alternative sustainable energy resource that at the present has no development at all in Argentina. Here lies the unavoidable importance of scientific divulgation, as this knowledge is not known in the society. In conclusion, through this experience, students as well as their teachers, had an approach to these knowledges and learned about this sustainable energy related to volcanic environments in a didactic way. This new knowledge is fundamental to understand the importance of using alternative energy for a sustainable future.