



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

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



## **Population dynamics: the changing spatial pattern of hazard vulnerability and resilience in the Azores**

**Alessandra Lotteri<sup>1</sup>; David Chester<sup>1 2</sup>; Janet Speake<sup>1</sup>; Angus Duncan<sup>2</sup>**

<sup>1</sup>Department of Geography and Environmental Science, Liverpool Hope University, Hope Park Liverpool L16 9JD, UK

<sup>2</sup>Department of Geography and Planning, University of Liverpool, Liverpool L69 3BX, UK

Key words: hazard, vulnerability, resilience, human mobility

Research into risk-mitigation combines analysis of the physical characteristics of the threat, with the characteristics of the vulnerability and resilience of the places being threatened. Risk mitigation involves reducing vulnerability and enhancing resilience. This project aims to investigate the ways in which the population of the Azores is exposed to earthquakes, volcanic eruptions and related phenomena. The study operates at two levels. First, it considers how the changing distribution of population over time and spatially has both created vulnerable communities and placed other settlements into relatively safe locations. Secondly, by selecting examples of sites subject to potential future threats, features of site specific vulnerability (e.g. building types, evacuation potential and social and perceptual) will be studied in detail. In order to achieve this goal, research will be focused on two contrasting islands: São Miguel and Faial. Techniques to be used in the detailed survey will include questionnaires and semi-structured interviews, and comparisons will be drawn with previous studies published in the 1990s and subsequently. Research is supported by an extensive literature published mostly in Portuguese and English and by archival information and official publication held in the Azores.