



## **After three decades of research, is the Nabataean city of Petra still under threat?**

M. Gomez-Heras (1,2), P. Lopez-Arce (1), F. Bala'awi (3), F. Ishakat (3), M. Alvarez de Buergo (1), R. Fort (1), and W. Wedekind (4)

(1) Instituto de Geociencias (CSIC-UCM), Madrid, Spain, (2) Fac. CC. Geologicas, Universidad Complutense Madrid, Spain (mgh@geo.ucm.es), (3) Queen Rania Institute of Tourism & Heritage, Hashemite University, Zarqa Jordan., (4) Geosciences Center, Georg-August-University, Göttingen, Germany

The year 2012 marks the 200th anniversary of the rediscovering of the Nabataean city of Petra (Jordan) by Swiss archaeologist Johann Ludwig Burckhardt. The city of Petra is one of the most singular built-heritage monumental sets in the world because of the size of the built structures, the extension in which these structures appear and the intricate relation between natural and built environment in the site. These are part of the reasons of its uniqueness that conducted to its inscription as a UNESCO World Heritage Site in 1985. However, the conservation and management of such a large archaeological site can be very challenging due to the diverse decay processes and agents operating on the site. As a result, the site conservation has been heavily hindered in the past and Petra was included in 1998, 2000 and 2002 in the former World Monuments Fund list of the one hundred most endangered sites (now World Monuments Watch). It also was described as one of the most endangered world heritage sites in the ICOMOS reports "Heritage at risk". Many studies on the decay processes that operate in Petra have been carried out from the point of view of earth sciences, from the first studies carried out in the 80's by many researchers from several countries, funded by very different funding schemes; sometimes working on different specific topics within the high variability of existing problems in Petra, but sometimes, working in parallel without communication. In addition to this, many of the studies carried out locally have not been published internationally and therefore neither have not reached the wider scientific community nor the local decision makers. Petra is, therefore, a good example of how a complex and large site may favour a research environment in which scientific results are fragmentary and synergies are not generated, moreover when it should be approached under inter and multidisciplinary teams. These synergies could be of great benefit, not only to the scientific community but also to send a unified scientific message to the stake-holders involved in the conservation of the site.

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