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CONFERENCE PAPER ABSTRACT

NAME OF PRESENTER:	Marco Hernández-Escampa, Daniel Barrera-Fernández
TITLE OF PAPER:	Corrosion studies and archaeometallurgical heritage conservation in Pacific Ocean basins of Mexico
THEME:	<i>Theme 1: Heritage at Risk – Climate Change and Disasters</i>
PAPER ABSTRACT:	
<p>Archaeometallurgical heritage refers to any material culture built in metals. Therefore, this particular heritage set includes both fixed and movable items included in a vast temporal array. Examples include sculptures, bells, and architectural structures and ornaments. Corrosion constitutes the main deterioration process of metals, triggered by the properties of the surrounding matrix, usually atmospheric. Due to specific conditions, subduction of the Cocos Plate under North America provokes not only earthquakes but also volcanism far away inland in Mexico. Previous studies (Sarmiento et al. 2013) have shown that volcanic emissions considerably increase the corrosive properties of the atmosphere in Morelos state, putting in risk metallic materials. Anthropogenic activity also adds impact on metallic corrosion. In the case of Oaxaca state, the number of vehicles has increased out of proportion in the last decades. Current research focuses on measuring atmospheric corrosion in the capital city, listed in the World Heritage list. Results yield information in terms of heritage conservation and urban planning decisions. It is expected that these experiences, developed in the Pacific basins of Mexico, might be useful to other Pacific sites or areas, which share both, the tectonic and anthropogenic circumstances observed in the American Continent.</p>	
BRIEF BIOGRAPHICAL INFORMATION ABOUT THE PRESENTER:	
<p>Marco Hernández-Escampa is a Professor and Researcher at the Faculty of Architecture, Autonomous University of Oaxaca “Benito Juárez” in Oaxaca, Mexico. His research interests focus on cultural anthropology and heritage conservation.</p> <p>Daniel Barrera-Fernández is a Professor and Researcher at the Faculty of Architecture, Autonomous University of Oaxaca “Benito Juárez” in Oaxaca, Mexico. His research interests focus on urban and cultural tourism, tourist use of heritage, intangible heritage, city marketing and events.</p> <p>Most publications of the authors can be found on Academia.edu and ResearchGate</p>	