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In and out of the Laboratory: Raman Spectroscopy for the Analysis of Prehistoric Rock Art Paintings located in Argentinian Patagonia

par

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KEYWORDS. — Rock Art Paintings; Raman Spectroscopy; Patagonia; Materials; Conservation State.

SUMMARY. — Prehistoric rock art paintings are commonly found in the Patagonian (Argentina) scenery. The archaeological and analytical investigations of the rock art paintings and sites provide a deeper insight of the hunter-gatherer populations who inhabited the areas together with their practices and methods. Raman spectroscopy has grown to be one of the most appreciated molecular techniques for the analysis of cultural heritage objects. The analytical examination can be performed in the laboratory with benchtop Raman systems but also directly, on site with mobile Raman spectrometers. Raman spectroscopy was applied on samples extracted from rock art paintings found in Patagonia, Argentina. In 2016, an on-field Raman spectroscopy campaign was organized, for the analysis of rock art paintings and surfaces, on sites in the provinces of Neuquén, Río Negro, Chubut. The research on these magnificent works of art is twofold: to analyse the materials used and examine their conservation state.

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