Workshop and Fieldtrip: Geobiology in Space Exploration

7-14 February 2011
Marrakech, Morocco
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Sponsored by the European Space Agency (ESA) Topical Team, Geomicrobiology for Space Settlement and Exploration.

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Geobiology in Space Exploration will be a meeting with talks and discussions that aim to cover the full range of the contributions of geobiology to space exploration and settlement. It will have two core purposes: 1) To contribute to building the community of people working in geobiology and applying the discipline to themes in space sciences and exploration; and 2) To develop a strategic document on the range of geobiology applications and possible space missions for ESA. The meeting will begin midday on Monday the 7th and will finish on Wednesday the 9th and will be held at the Universite Cadi Ayyad (Morocco). The meeting will then be followed by a voluntary field trip for interested participants.

Topics to be covered at the meeting include: 1) microbe-mineral interactions, biosignatures and the search for life elsewhere, 2) use of microorganisms in practical applications in space exploration, 3) space missions involving aspects of geobiology. The meeting will also include discussions of 1) Mars analog field sites, and 2) space mission opportunities in which geobiology investigations might be developed (e.g., on ISS, Mars rovers etc.).

The field trip will last five days/four nights. The program will include: 1st night at Ourzazate (travel across the Atlas to see Precambrian stromatolites and Mars analogues suitable for Martian operations testing), 2nd day travel to Erfoud (lacustrine travertine adjacent to a small, basaltic plateaux), 3rd day at Erfoud with visit to Kess Kess Devonian mud mound-volcanoes, dinosaur fossil-rich zone, and possibly visits to sand dunes, 4th day travel to Kenifra, visit to bio-constructed mound, visit to the oldest Silurian- chemosynthetic carbonate bodies, published in Palaios), 5th day travel to Marrakech, arrival in early afternoon.

Additional information, including a preliminary field trip itinerary, can be found at:
http://www.irsps.unich.it/education/geoexp2011/
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