

COCARDE: new view on old mounds – an international network of carbonate mound research

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Carbonate mounds are important contributors of life in different settings and throughout geological history. Research on modern cold-water coral carbonate mounds over the last decades made a major contribution to our overall understanding of these particular sedimentary systems. Fundamental questions could be addressed, which are not yet explored in fossil mound settings.

The international network COCARDE is a platform for exploring new insights in carbonate mound research of recent and ancient mound systems. Its aim is bringing scientific communities together studying Recent carbonate mounds in mid-slope environments and investigating fossil mounds spanning the whole Phanerozoic time, respectively.

Scientific challenges in modern and ancient carbonate mound research, as well as their diversity, got well defined during an ESF Magellan Workshop (Fribourg, January 2009). The following first joint Workshop and Field Seminar (Oviedo, September 2009) highlighted ongoing research from both Recent and fossil academic groups integrating the message from the industry. The field seminar focused on mounds from the Carboniferous platform of Asturias and Cantabria. Comparing ancient, mixed carbonate-siliciclastic mound systems of Cantabria with the Recent ones in the Porcupine Seabight, striking similarities in their genesis and processes in mound development asked for an integrated drilling campaign to better understand the 3D internal mound build-up. This led to the initiation of the ESF Research Network Programme COCARDE-ERN (June 2011). The second Workshop and Field Seminar (Rabat, October 2011) focussed on carbonate mounds of (f) Morocco, discussing innovative approaches in carbonate mound research, together with oil industry opportunities of international collaboration.