

**MARUM / GLOMAR Expert Course:****Coastal Sediment Dynamics**

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*Research Associate GLOMAR,**MARUM – Center for Marine Environmental Sciences***17 - 18 October 2013, MARUM, Bremen****Objective**

The objective of this course is to provide a basic understanding of sediment dynamics and morphodynamics in the coastal zone, in particular, explain the how the hydrodynamic drivers move the sediment which results in a certain coastline. This will be done through lectures as well as practical exercises.

The first morning will be occupied with the introduction to coastal geomorphology, hydrodynamics and sediment transport followed by a practical example of how to estimate sediment motion.

During the second morning, examples of coastal morphology and how they are formed from the interaction between hydrodynamics, sediment dynamics and morphodynamics will be explained. These examples will be chosen by the course participants between: beaches, estuaries, deltas, salt marshes, tidal flats, seagrass beds, coastal dunes and lagoons.

The level of the course will be adapted to the prior knowledge of the majority of participants

**Topics**

- Introduction to coastal geomorphology
- Hydrodynamics: waves and tides
- Sediment transport: sediment types, modes of transport and threshold of motions
- Examples of coastal geomorphology; 2 subjects from beaches, estuaries, deltas, salt marshes, tidal flats, seagrass beds, coastal dunes and lagoons

**Time**

9:00-12:30

**Location**

MARUM, University of Bremen, 28359 Bremen, Germany, Room 2060

**To subscribe**

To subscribe to this course, please fill in the [registration form](#).

Any enquiries concerning the course should be addressed to [glomar-courses@marum.de](mailto:glomar-courses@marum.de).