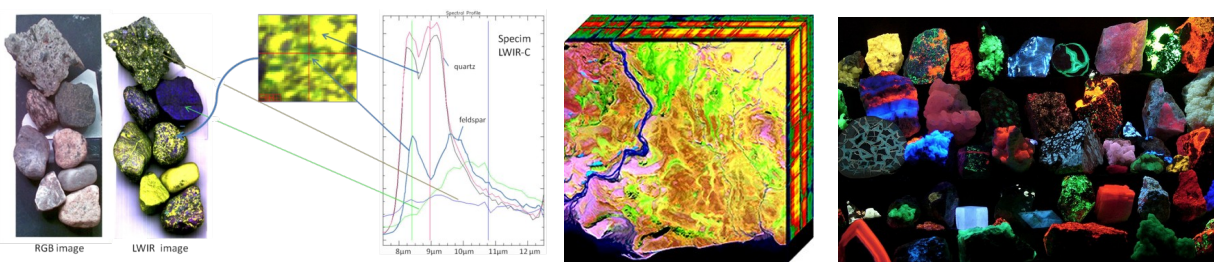


## HiWi Job + BA/MA Theses available: Underwater Hyperspectral Imaging

Spectral imaging allows to characterize the color of objects in more detail than common digital cameras can provide. We are setting up a lab for spectral analysis using multi- and hyperspectral imaging techniques. In this context, we are looking for a HiWi to apply the methods to various research targets of GEOMAR in an open-minded and exploratory manner. We seek to discriminate minerals, identify species and monitor mines in the Baltic sea. Thus we will progress towards application of the methods in the field to test it on board our research vessels.



Examples of spectral imaging applications. Copyrights: Aappo Roos, NASA, Hannes Grobe/AWI (all from Wikipedia)

Within the Deep Sea Monitoring Group of the GEOMAR, intelligent, high-throughput computer vision algorithms are developed and applied to large visual data sets acquired in the deep ocean. To step forward, we develop new camera technology that is applied in the lab and during research cruises using remotely controlled or autonomous robots.

If you are interested in applying your knowledge in practice for fusing different spectral technologies and if you are not afraid of some (C++) programming you probably are the right candidate. There are various research topics available including image processing, electrical engineering, lab and field experiment setup and execution as well as pattern recognition. The HiWi job amounts to 37.5 hours per month for one year.

To inquire about the HiWi job or possible BA/MA topics in the same field please contact us:

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