



The deep water column and the sediments in the central Arabian Sea are the focus of this special issue, presenting biological and biogeochemical characteristics in this as yet little known region of the deep sea. It presents results of the investigations of the research project BIGSET (Biogeochemical transports of energy and matter in the deep sea), which was a part of the German deep-sea research programme, and related projects carried out between 1995 and 1999. These studies were conducted during four cruises and give evidence of how the surface water productivity is reflected in the benthic processes of the abyssal Arabian Sea.

Olaf Pfannkuche and Karin Lochte -- The biogeochemistry of the deep Arabian Sea: overview -- 2615-2628

T. Rixen, V. Ittekkot, B. Haake-Gaye and P. Schäfer -- The influence of the SW monsoon on the deep-sea organic carbon cycle in the Holocene -- 2629-2651

Rolf Koppelman and Horst Weikert -- Transfer of organic matter in the deep Arabian Sea zooplankton community: insights from ^{15}N analysis -- 2653-2672

Bernd Christiansen and Antje Boetius -- Mass sedimentation of the swimming crab *Charybdis smithii* (Crustacea: Decapoda) in the deep Arabian Sea -- 2673-2685

Antje Boetius, Barbara Springer and Carolin Petry -- Microbial activity and particulate matter in the benthic nepheloid layer (BNL) of the deep Arabian Sea -- 2687-2706

Sibylle Grandel, Dirk Rickert, Michael Schlüter and Klaus Wallmann -- Pore-water distribution and quantification of diffusive benthic fluxes of silicic acid, nitrate and phosphate in surface sediments of the deep Arabian Sea -- 2707-2734

B. Schnetger, H.-J. Brumsack, H. Schale, J. Hinrichs and L. Dittert -- Geochemical characteristics of deep-sea sediments from the Arabian Sea: a high-resolution study -- 2735-2768

Michael E. Böttcher, Holger Schale, Bernhard Schnetger, Klaus Wallmann and Hans-J. Brumsack -- Stable sulfur isotopes indicate net sulfate reduction in near-surface sediments of the deep Arabian Sea -- 2769-2783

Ursula Witte and Olaf Pfannkuche -- High rates of benthic carbon remineralisation in the abyssal Arabian Sea -- 2785-2804

Olaf Pfannkuche, Stefan Sommer and Anja Kähler -- Coupling between phytodetritus deposition and the small-sized benthic biota in the deep Arabian Sea: analyses of biogenic sediment compounds -- 2805-2833

A. Boetius, T. Ferdelman and K. Lochte -- Bacterial activity in sediments of the deep Arabian Sea in relation to vertical flux -- 2835-2875

Robert Turnewitsch, Ursula Witte and Gerhard Graf -- Bioturbation in the abyssal Arabian Sea: influence of fauna and food supply -- 2877-2911

F. Kurbjewit et al. -- Distribution, biomass and diversity of benthic foraminifera in relation to sediment geochemistry in the Arabian Sea -- 2913-2955

Stefan Sommer and Olaf Pfannkuche -- Metazoan meiofauna of the deep Arabian Sea: standing stocks, size spectra and regional variability in relation to monsoon induced enhanced sedimentation regimes of particulate organic matter -- 2957-2977

Ursula Witte -- Vertical distribution of metazoan macrofauna within the sediment at four sites with contrasting food supply in the deep Arabian Sea -- 2979-2997

Felix Janßen, Tina Treude and Ursula Witte -- Scavenger assemblages under differing trophic conditions: a case study in the deep Arabian Sea -- 2999-3026

Bernd Christiansen and Bettina Martin -- Observations on deep-sea benthopelagic nekton at two stations in the northern Arabian Sea: links to organic matter supply? -- 3027-3038

Roger Luff, Klaus Wallmann, Sibylle Grandel and Michael Schlüter -- Numerical modeling of benthic processes in the deep Arabian Sea -- 3039-3072