



## Dr. Roland Doerffer

Head of Remote Sensing Laboratory  
 Institute for Coastal Research  
 GKSS Research Center

Max-Planck-Str. 1, D-21502 Geesthacht, Germany  
 Phone: +49 4152 87 1580,  
 Fax: +49 4152 87 1596  
 Email: [doerffer@gkss.de](mailto:doerffer@gkss.de)  
 Website: [www.gkss.de](http://www.gkss.de)

### Background

- Oceanography and Marine Biology,
- Optical Remote Sensing of Coastal Waters and Tidal flats
- Optical oceanography, radiative transfer modelling, development of instruments and algorithms
- Coordinator of several ocean cruises and aircraft campaigns
- PI of national and European research projects
- Expert Support Laboratory for MERIS /ENVISAT mission

### Activities in Education

- Annual Master Course in Coastal Science, Ecology Center University of Kiel
- Annual Master Course in Coastal Engineering, University of Kiel
- International Courses in Ocean Colour Remote Sensing and Optical Oceanography

### Distinctions / Memberships

- ESA MERIS Scientific Advisor Group
- ESA MERIS Quality Working Group
- ESA MERIS AATSR Validation Team
- International Ocean Colour research Coordination Group (IOCCG)
- Reviewer: Applied Optics, Int. J. of Remote Sensing, J. of Geophysical Res.

### Selected Publications

H. Schiller and Roland Doerffer, 1999, Neural Network for Emulation of an Inverse Model --- Operational Derivation of Case II Water Properties from MERIS data; Int. Journal of Remote Sensing, vol. 20, No 9,1735--1746.

Doerffer, R. and H. Schiller, 2000, Neural Network for Retrieval of Concentrations of Water Constituents with the Possibility of Detecting Exceptional out of Scope Spectra, IEEE 2000 International Geoscience and Remote Sensing Symposium, 24--28 July, Honolulu Hawaii USA, Vol. II, pp. 714--717, ISBN 0-7803-6359-0

Akihiko Tanaka, Motoaki Kishino, Roland Doerffer, Helmut Schiller, Tomohiko Oishi and Tadashi Kubota, 2004 ; Development of a Neural Network Algorithm for Retrieving Concentrations of Chlorophyll, Suspended Matter and Yellow Substance from Radiance Data of the Ocean Color and Temperature Scanner; Journal of Oceanography, Vol. 60, pp. 519 to 530,.

Helmut Schiller and Roland Doerffer, 2005, Improved Determination of Coastal Water Constituent Concentrations From MERIS data; IEEE Transactions on Geoscience and Remote Sensing, Vol. 43, pp. 1585--1591

Röttgers, R., W. Schönfeld, P.-R. Kipp, R. Doerffer, 2005, Practical test of a point-source integrating cavity absorption meter: the performance of different collector assemblies, Appl. Opt. 44, 5549-5560

Doerffer, R, H. Schiller, 2006, The MERIS Case 2 Water Algorithm", Int. Journal of Remote Sensing, in press