

Monika Soja-Woźniak

Ph.D. in Earth Sciences

Affiliation: University of Amsterdam, IBED
Marital status: Married, two children
Home address: Roghorst 121, 6708KE Wageningen, Netherlands
Date of birth: 9 Jul 1983
Telephone: +61 43 28 29 577
e-mail: monika@soja-wozniak.com
web: soja-wozniak.com



EMPLOYMENT: Postdoc in the Department of Freshwater and Marine Ecosystems, (from Sep 2022)
IBED, University of Amsterdam, the Netherlands

Postdoctoral Fellowship in Coastal Environmental Modelling Team (Nov 2016-Jan 2022)
CSIRO, O&A Hobart, Australia

Research Scientist (Post-Doc position) in the Radar Remote Sensing Group (Apr 2015-Oct 2016)
Chalmers University of Technology, Gothenburg, Sweden

EDUCATION: Ph.D. Oceanography (2015) *summa cum laude*
University of Gdansk, Poland

M.Sc. Physics (2007)
B.Sc. Mathematics (2008)
University of Szczecin, Poland

Program Socrates-Erasmus, Physics (2005/2006)
University of Rostock, Germany

RESEARCH INTERESTS:

optical properties of phytoplankton
remote sensing of ocean colour
implementing mathematical methods to environmental studies

TEACHING EXPERIENCE:

graduate level: Remote sensing in oceanography
undergraduate level: Mathematics, IT

PROFESSIONAL ACTIVITIES:

member of Sentinel-3 Scientific Validation Team S3VT
reviewer for International Journal of Remote Sensing
reviewer for GSTF Journal of Geological Sciences (JGS)
reviewer for Water MDPI

COMPUTER SKILLS: MATLAB, Hydrolight-Ecolight, STATISTICA, GIS software, LaTeX

LANGUAGES: Polish (mother tongue), English (fluent), Swedish (basic)

PUBLICATIONS STATISTICS: *source: Google Scholar, 6 Sep 2022*

Publications: 24 in peer-reviewed journals (published or accepted)
Citations: 252
h-index: 10
i10-index: 10

SELECTED PUBLICATIONS:

- [1] **Soja-Woźniak M.**, Clementson L., Wojtasiewicz B., Baird M., Estimation of the global distribution of phytoplankton light absorption from pigment concentrations, *JGR: Oceans*, 127, e2022JC018494. <https://doi.org/10.1029/2022JC018494>
- [2] Baird M., Dutkiewicz S., Hickman A., Mongin M., **Soja-Wozniak M.**, Skerratt J., and Wild-Allen K., (2022) Modeling phytoplankton processes in multiple functional types; Pages: 245-264. In CLEMENTSON, *Advances in Phytoplankton Ecology*. Elsevier. <https://doi.org/10.1016/B978-0-12-822861-6.00016-9>.
- [3] Baird M., Wild-Allen K., Parslow J., Mongin M., Robson B., Skerratt J., Rizwi F., **Soja-Wozniak M.**, et al., (2020) CSIRO Environmental Modelling Suite (EMS): scientific description of the optical and biogeochemical models (vB3p0). *Geosci. Model Dev.*, 13, 4503–4553, <https://doi.org/10.5194/gmd-13-4503-2020>
- [4] **Soja-Wozniak M.**, Laiolo L., Baird M., Matear R., Clementson L., Schroeder T., Doblin M., Suthers I., *Effect of phytoplankton community size structure on remote-sensing reflectance and chlorophyll a products*, 2020, *Journal of Marine Systems* Vol.211, 103400, <https://doi.org/10.1016/j.jmarsys.2020.103400>
- [5] **Soja-Wozniak M.**, Baird, M., Schroeder, T., Qin, Y., Clementson, L., Baker, B., et al. *Particulate backscattering ratio as an indicator of changing particle composition in coastal waters: Observations from Great Barrier Reef waters*. 2019, *Journal of Geophysical Research: Oceans*, 124, 5485– 5502, <https://doi.org/10.1029/2019JC014998>
- [6] Skerratt J., Mongin M., Baird M., Wild-Allen K., Robson B., Schaffelke B., Davies C. H., Richardson A. J., Margvelashvili N., **Soja-Wozniak M.**, Steven A. D. L., *Simulated plankton and nutrient dynamics in the Great Barrier Reef (2011-2016)*. *Journal of Marine Systems*. 2019; 192:51-74, <https://doi.org/10.1016/j.jmarsys.2018.12.006>
- [7] Baird M., Mongin M., Rizwi F., Bay L., Cantin N., **Wozniak M.**, et al. *A mechanistic model of coral bleaching driven by temperature-mediated reactive oxygen build-up in zooxanthellae*. *Ecological Modelling*, 2018, 385:20-37, doi.org/10.1016/j.ecolmodel.2018.07.013
- [8] Laiolo L., Matear R., Baird M., **Wozniak M.**, Doblin M., *Information Content of in Situ and Remotely Sensed Chlorophyll-a: Learning from Size-Structured Phytoplankton Model*; *Journal of Marine Systems*, 2018, 183:1-12, doi.org/10.1016/j.jmarsys.2018.03.005
- [9] **Soja-Wozniak M.**, Darecki M., Wojtasiewicz B., Bradtke K. M., *Laboratory measurements of remote sensing reflectance of selected phytoplankton species from the Baltic Sea*; *Oceanologia* 2017, 60(1):86-96, doi.org/10.1016/j.oceano.2017.08.001
- [10] **Soja-Wozniak M.**, Craig S. E., Wojtasiewicz B., Kratzer S., Darecki M., Jones C. T., *A Novel Statistical Approach for Ocean Colour Estimation of Inherent Optical Properties and Cyanobacteria Abundance in Optically Complex Waters*; *Remote Sens.* 2017, 9, 343; [doi:10.3390/rs9040343](https://doi.org/10.3390/rs9040343).
- [11] **Wozniak M.**, Bradtke K. M., Darecki M., Krężel A., *Empirical Model for Phycocyanin Concentration Estimation as an Indicator of Cyanobacterial Bloom in the Optically Complex Coastal Waters of the Baltic Sea*; *Remote Sens.* 2016, 8, 212; [doi:10.3390/rs8030212](https://doi.org/10.3390/rs8030212).
- [12] **Wozniak M.**, Bradtke K. M., and Krężel A., *Comparison of satellite chlorophyll a algorithms for the Baltic Sea*, *J. Appl. Remote Sens.* 8(1), 2014