

Monika Soja-Woźniak

Ph.D. in Earth Sciences

Affiliation: University of Amsterdam, IBED
Marital status: Married, two children
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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
guest editor in a special issue of Remote Sensing, "Advances in Remote Sensing of Phytoplankton Optical Properties and for Studies in Marine Biology"
reviewer for International Journal of Remote Sensing
reviewer for GSTF Journal of Geological Sciences (JGS)
reviewer for Water MDPI
reviewer for Remote Sensing of Environment

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

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

PUBLICATIONS STATISTICS: source: *Google Scholar*, 4 Jun 2024

Publications: 25 in peer-reviewed journals (published or accepted)
Citations: 389
h-index: 11
i10-index: 11

SELECTED PUBLICATIONS:

[1] **Cyanobacteria index as a tool for the satellite detection of cyanobacteria blooms in the Baltic Sea**

M Konik, K Bradtke, J Stoń-Egiert, M Soja-Woźniak, et al. (2023) *Remote Sensing* 15 (6), 1601.
<https://doi.org/10.3390/rs15061601>

[2] **Estimation of the Global Distribution of Phytoplankton Light Absorption From Pigment Concentrations**

M Soja-Woźniak, L Clementson, B Wojtasiewicz, M Baird, (2022) *Journal of Geophysical Research* 127 (8)
<https://doi.org/10.1029/2022JC018494>

[3] **Modeling phytoplankton processes in multiple functional types**

M Baird, S Dutkiewicz, A Hickman, M Mongin, M Soja-Woźniak, J Skerratt, et al., (2022) *Advances in Phytoplankton Ecology*, 245-264. <https://doi.org/10.1016/B978-0-12-822861-6.00016-9>

[4] **Modelling the impact of phytoplankton cell size and abundance on inherent optical properties (IOPs) and a remotely sensed chlorophyll-a product**

L Laiolo, R Matear, M Soja-Woźniak, DJ Suggett, DJ Hughes, ME Baird, et al., (2021) *Journal of Marine Systems* 213, 103460.
<https://doi.org/10.1016/j.jmarsys.2020.103460>

[5] **Effect of phytoplankton community size structure on remote-sensing reflectance and chlorophyll a products**

M Soja-Woźniak, L Laiolo, ME Baird, R Matear, L Clementson, et al., (2020) *Journal of Marine Systems* 211, 103400.
<https://doi.org/10.1016/j.jmarsys.2020.103400>

[6] **Particulate backscattering ratio as an indicator of changing particle composition in coastal waters: Observations from Great Barrier Reef waters**

M Soja-Woźniak, M Baird, T Schroeder, Y Qin, L Clementson, B Baker, et al., (2019) *Journal of Geophysical Research: Oceans* 124 (8), 5485-5502. <https://doi.org/10.1029/2019JC014998>

[7] **Simulated nutrient and plankton dynamics in the Great Barrier Reef (2011–2016)**

JH Skerratt, M Mongin, ME Baird, KA Wild-Allen, BJ Robson, B Schaffelke, et al., (2019) *Journal of Marine Systems* 192, 51-74.
<https://doi.org/10.1016/j.jmarsys.2018.12.006>

[8] **A mechanistic model of coral bleaching due to temperature-mediated light-driven reactive oxygen build-up in zooxanthellae**

ME Baird, M Mongin, F Rizwi, LK Bay, NE Cantin, M Soja-Woźniak, et al., (2018) *Ecological modelling* 386, 20-37.
doi.org/10.1016/j.ecolmodel.2018.07.013

[9] **Information content of in situ and remotely sensed chlorophyll-a: Learning from size-structured phytoplankton model**

L Laiolo, R Matear, ME Baird, M Soja-Woźniak, MA Doblin, (2018) *Journal of Marine Systems* 183, 1-12.
doi.org/10.1016/j.jmarsys.2018.03.005

[10] **Laboratory measurements of remote sensing reflectance of selected phytoplankton species from the Baltic Sea**

M Soja-Woźniak, M Darecki, B Wojtasiewicz, K Bradtke, (2018) *Oceanologia* 60 (1), 86-96.
doi.org/10.1016/j.oceano.2017.08.001

[11] **Sea surface currents estimated from spaceborne infrared images validated against reanalysis data and drifters in the Mediterranean Sea**

C Heuzé, GK Carvajal, LEB Eriksson, M Soja-Woźniak, (2017) *Remote Sensing* 9 (5), 422. <https://doi.org/10.3390/rs9050422>

[12] **A novel statistical approach for ocean colour estimation of inherent optical properties and cyanobacteria abundance in optically complex waters**

M Soja-Woźniak, SE Craig, S Kratzer, B Wojtasiewicz, M Darecki, et al., (2017) *Remote Sensing* 9 (4), 343.
[doi:10.3390/rs9040343](https://doi.org/10.3390/rs9040343)

[13] **Empirical model for phycocyanin concentration estimation as an indicator of cyanobacterial bloom in the optically complex coastal waters of the Baltic Sea**

M Woźniak, KM Bradtke, M Darecki, A Krężel, (2016) *Remote Sens.* 8 (3), 212. [doi:10.3390/rs8030212](https://doi.org/10.3390/rs8030212)

[14] **Comparison of satellite chlorophyll algorithms for the Baltic Sea**

M Woźniak, KM Bradtke, A Krężel, (2014) *Journal of Appl. Remote Sens.* 8 (1), 083605-083605.