Monika Soja-Woźniak
Ph.D. in Earth Sciences

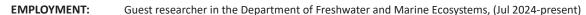|	
Affiliation:	University of Amsterdam, IBED
Marital status:	Married, two children
Nationality:	Polish & Australian
Home address:	Roghorst 10, 6708KM Wageningen, Netherlands
Date of birth:	9 Jul 1983
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EMPLOYMENT:

Guest researcher in the Department of Freshwater and Marine Ecosystems, (Jul 2024-present)
IBED, University of Amsterdam, the Netherlands

Postdoc in the Department of Freshwater and Marine Ecosystems, (Sep 2022-Jul 2024)
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 methods for monitoring and modelling water quality in aquatic systems
remote sensing of water constituents and pollution indicators (e.g., phytoplankton, turbidity, CDOM)
implementing mathematical methods to environmental studies
processing and visualization of large-scale environmental and remote sensing datasets

TEACHING EXPERIENCE:

Remote sensing in oceanography (graduate level) Mathematics, IT (undergraduate level)

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, GSTF Journal of Geological Sciences (JGS), Water MDPI, Remote Sensing of Environment

COMPUTER SKILLS: GIS software, MATLAB, Hydrolight-Ecolight (radiative transfer model), R, STATISTICA, LaTeX

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

PUBLICATIONS STATISTICS: *source: Google Scholar, 4 May 2025*

Publications: 26 in peer-reviewed journals (published)
Citations: 445
h-index: 11
i10-index: 12

COMMUNITY INVOLVEMENT: Poolse School Nijmegen-Arnhem, Sep 2023-Present, (Volunteer, Treasurer)

Manage the school's finances, including preparing and overseeing the budget.
Write grant proposals to secure funding for educational and cultural projects.
Provide financial reports and ensure compliance with local regulations.
Support the school's mission by facilitating financial sustainability for its activities.

SELECTED PUBLICATIONS:

[1] **Loss of sea ice alters light spectra for aquatic photosynthesis.**
Soja-Woźniak M., Holtrop T., Woutersen S., Van Der Woerd H.J., Lund-Hansen L.C. Huisman J. (2025) Nature Communication 16, 4059
https://doi.org/10.1038/s41467-025-59386-x

[2] **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

[3] **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

[4] **Modeling phytoplankton processes in multiple functional types**
M Baird, S Dutkiewicz, A Hickman, M Mongin, M Soja-Wozniak, J Skerratt, et al., (2022) Advances in Phytoplankton Ecology, 245-264.
https://doi.org/10.1016/B978-0-12-822861-6.00016-9

[5] **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

[6] **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

[7] **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

[8] **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

[9] **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

[10] **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

[11] **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

[12] **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

[13] **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. https://doi.org/10.3390/rs9040343

[14] **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. https://doi.org/10.3390/rs8030212

[15] **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. https://doi.org/10.1117/1.JRS.8.083605