

Tymon Przemyslaw Zielinski

**ul. Powstancow Warszawy 71/1
81-712 Sopot, Poland
Mobile 48 507 300 208
Email: tymon@iopan.gda.pl**

CURRICULUM VITAE

EDUCATION

Institute of Oceanology Polish Academy of Sciences, **Postdoctoral degree “habilitacja”, 2008**
Thesis Title: Physical properties of near-water aerosol layer in coastal areas.

University of Gdansk, Department of Biology, Geography and Oceanography, **Ph.D., 1996**
Thesis Title: The Application of Lidar Methods in Determining the Influence of Dynamic
Conditions of the Atmosphere on the Concentrations and Size Distributions of Marine Aerosols.

University of Gdansk, Department of Biology, Geography and Oceanography, **M.Sc., 1991**
Thesis Title: The Influence of Chosen Physical Parameters on Exchange Processes Between the
Sea and the Atmosphere.

University of Cambridge, International Examinations - Certificate of Proficiency in English,
1993.

EMPLOYMENT HISTORY

since 2010 Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland
 - **Assoc. professor.**

1998 – 2010 Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland
 - **Senior Scientist.**

2008 - 2009 University of Szczecin, Poland
 - **Professor**, Head of the Marine and Environmental Physics Faculty.

1996 - 1998 Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland
 - working on Polish Committee for Scientific Research grant #6PO4
 E03611 project dedicated to estimating the pollution transfer from
 estuary areas to the atmosphere.

1991 - 1996 University of Gdansk, Department of Biology, Geography and
 Oceanography.

Doctoral candidate simultaneously teaching students and working under
Polish Committee for Scientific Research grant #6PO4 EP202 012 04 for

the investigation of the role of the coastal ecosystem of the southern Baltic Sea in the exchange of nutrients, carbon dioxide, methane and trace metals between the sea and the atmosphere.

RELEVANT EXPERIENCE

- 1992 - 2010 **Hundred and twenty seven** oral and poster presentations at international conferences and meetings in Poland, Austria, Germany, Holland, Italy, Russia, Sweden, USA, UK, Belgium, Spain, Croatia, Hungary, Japan, Portugal, Norway, Mexico, Ireland, Bulgaria, Greece, Romania, Denmark, Turkey.
- Invited lectures** at NATO Sensors&Electronics Technology Panel (SET) Symposium in Naples, Italy, 1998; Oceanology International 2000 in Brighton, UK; Indiana University, 2000, National Technical University of Athens, Greece, 2001, University of Miami 2002, Institute of Marine Sciences, Barcelona, 2003; University of Szczecin, Poland, 2004, Warsaw University, Poland, 2005, 2006; Institute of Meteorology and Water Management, Cracow, Poland, 2002, 2005, 2006; Second International Conference on Global Warming, Santa Fe, USA, 2006; Iowa University, 2006; Wyoming University, 2006; NUIG, Ireland, 2007; INOE, Romania, 2009; AWI, Potsdam, Germany, 2009; PSI, Switzerland, 2010; OTEM, Romania, 2010, 2011; NOAA, USA, 2011, University of Florence, Italy, 2011, Role of aerosols in climate system Conference, Warsaw, 2013.
- Invited to** present work at Goddard Space Flight Center; Naval Postgraduate School and Naval Research Laboratory in Monterey; SPAWAR Systems, San Diego; Office of Naval Research in Arlington, 1998, 1999, 2000; Risoe National Laboratory in Denmark, 2001, 2004; DLR-Institute of Space and Sensor Technology in Berlin, Germany, AWI-Alfred Wegener Institute in Germany, UK-V4 Frontiers of Science, 2007; DELICE meeting, Romania 2009; CNR, Bologna, Italy, 2008, 2009.
- Invited to** the lidar workshop as part of the scientific exchange with the Estonian Academy of Sciences, August 1999, September 2000.
- Since 2014 Member of the Board of Directors of the Center for Polar Studies.
- Since 2013 **Principle Investigator** in the iAREA, Polish-Norwegian Fund Grant.
- 2010 - 2013 **Coordinator** in a Polar-AOD Polish chapter project of the Polish Committee for Scientific Research grant POLAR-AOD/2010.
- Since 2013 **Investigator** in the 7 FP Sea for Society project.
- Since 2011 **Coordinator** of the IOPAS team for the 7 FP EDUSCIENCE project.

- 2009 - 2012 **Advisory board** member in an EU DELICE project.
- 2007 - 2010 **Coordinator** in a Marine Aerosols in Climate Studies – MACS in Polish Committee for Scientific Research grant AERONET/59/2007.
- Since 2006 **Principal Investigator** in the NASA Marine Aerosol Network.
- Principle Investigator** in a SAFARI project within the ACCENT Program.
- Researcher** in a Studies of the Marine Aerosol Emission Polish-Norwegian Project (MACRON).
- Researcher** in a IPY 2007/SCSCS project.
- Principal Investigator** in a SOAP/ACCENT project 2006.
- National coordinator** in a IPY 2007/POLAR-AOD project.
- Before 2006 **Recipient** of five Office of Naval Research (VSP) grants in 1998, 1999, 2002, 2003, 2005.
- National coordinator** in an international project ASTAR-Arctic Study of Tropospheric Aerosols, Clouds and Radiation 2004-2007.
- Station Manager** for the NASA AERONET Project 1999-2003.
- Co-principal investigator** in a Visby Project grant, 2000.
- Coordinator** in Polish Committee for Scientific Research grant #6PO4 012 17 dedicated to the evaluation of the AOT and visibility in the coastal area of the Baltic Sea, 1999-2001.
- Principal Investigator** in Polish Committee for Scientific Research grant #6PO4 E 036 11 dedicated to the evaluation of the aerosol physical properties in the coastal area of the Baltic Sea, 1997-1999.

CONFERENCE ACTIVITIES

Co-organization and member of the scientific committee, I National Conference, Role of aerosols in climate system, Warsaw, 2013.

Member of the scientific committee, 40th annual European Meeting on Atmospheric Studies by Optical Methods, Norway, 2013.

Organization and a Chairman, 39th annual European Meeting on Atmospheric Studies by Optical Methods Sopot, Poland, 2012.

Organization and Chairing, GeoPlanet Climate Forum, Sopot, Warsaw, Wroclaw, Poland, 2012.

Organizing and chairing, international workshop on atmospheric studies in the Arctic 2011, Sopot, Poland, 2011.

Chairman, Optoelectronic Techniques for Environmental Monitoring, OTEM, Cluj, Romania, 2010, 2011.

Organization and chairing, international workshop on Marine impact on aerosol physical properties, Sopot, Poland, 2009.

Co-organization and chairing, Sopot Forum of Young Scientists, Sopot, Poland, 2009 – 2013.

Co-chairman, Remote Sensing Session at the European Aerosol Conference, Salzburg, Austria, 2007.

Co-organization of an International Aerosol Summer School, Jastarnia, Poland, 2006.

Organization and chairing of the Polish-Norwegian Atmospheric Science Workshop, Sopot, Poland, 2006, 2007.

Co-organization and participation in the Baltic Science Festival, 2003, 2004, 2005, 2007, 2012, 2013.

Co-organization and chairing of the IOPAS-University of Gdansk Workshop on air-sea interactions, Gdynia, Poland, 2004.

Organization and chairing of the Special Symposium on Aerosols and Climate Change/Indirect Effects during the AAAR 2004 Conference in Atlanta, USA, 2004.

Co-chairman at three sessions during the AAAR 2003 conference in Anaheim, USA, 2003.

Organization and chairing of the IOPAS-AWI (Germany) Seminar on Lidar Investigations in the Arctic, Sopot, Poland, 2003.

Organization and chairing the IOPAS-DLR (Germany) Workshop on Remote Sensing 2002.

Co-chairman, Radiative effects and climate Symposium during the AAAR 2002 Conference, Charlotte, USA, 2002.

Co-chairman, Atmospheric Aerosols Workgroup, European Aerosol Assembly - Co-chairman at Marine Aerosols session at the European Aerosol Conference, Hamburg, 1997.

Member of the AAAR, Atmospheric Aerosols Workgroup, 2002-2006.

Organization and leadership of 16 international experiments, including sea cruises.

Participation in over 55 sea and coastal measurement campaigns.

Laser Diagnostic Instruments, Tallinn, Estonia, 1992

- Internship/training in the use and application of lidar techniques in the remote sensing of atmospheric aerosols.

OTHER PROFESIONAL ACTIVITIES

- | | |
|------------|---|
| Since 2014 | Topical editor in peer-reviewed journal Oceanologia. |
| Since 2013 | Member of the Scientific Council of the Climate Forum – Science on Climate. |
| 2013 | Editor of a Springer Series: GeoPlanet: Earth and Planetary Sciences book entitled <i>Insights on environmental changes. Where the World is Heading</i> , ISBN 978-3-319-03683-0, 2014. |
| 2013 | Reviewer for chapters 7 and 8 of the Fifth IPCC report. |
| 2013 | Editor in Chief of a Topical Issue in the Acta Geophysica – Optical Methods in Atmospheric Sounding. |
| 2013 | Member of the commission for the “habilitacja” process of M. Ostrowska. |
| Since 2012 | Member of the Ph.D. commissions at the Institute of Oceanology PAS. |
| 2012 | Review of Ph.D. by M. Posyniak; Member of the commission for the “habilitacja” process of A. Lewandowska. |
| Since 2012 | Member of the scientific council of the University of Gdańsk Ph.D. Study Program in Oceanography. |
| Since 2011 | Director of the IO PAS Ph.D. Study Program. |
| 2007-2011 | Scientific Secretary at the Institute of Oceanology Polish Academy of Sciences. |
| Since 2009 | President of the Sopot Association for the Advancement of Science. |

2007 - 2009	Co-founder of the Sopot Association for the Advancement of Science.
Since 2006	Member of the editorial board in the Science Research Essays.
2007	Organization and participation in a TV Debate on Climate Change.
Since 2002	<p>Regular paper reviewing:</p> <ul style="list-style-type: none"> - Journal of Geophysical Research-Atmospheres, - Applied Optics, - Optics Express, - Tellus, - Atmospheric Environment, - Atmospheric Chemistry and Physics, - Acta Geophysica, - Oceanologia, - Boundary Field Problems and Computer Simulation, - EARSeL Proceedings.

TEACHING EXPERIENCE

Since 2011	Teaching online and direct classes on Oceanography in the EU EDUSCIENCE project.
2012	Gdansk University; Ph.D. Study program - lectures on Air-Sea Interaction processes.
2008 - 2009	Directing the Marine Physics Department and teaching courses in physics at the University of Szczecin.
2007	Organization and lecturing at the Science-Society Dialog Club entitled "Marine tales" in Sopot, Poland.
2006 - 2011	Teaching Academic Skills course at the British Council in Gdansk, Poland.
Since 2006	IOPAS Ph.D. Study program - lectures on Air-Sea Interaction processes.
1991 - 1996	Department of Oceanography, University of Gdansk - lecturing third and fourth year students of the Oceanography program on the application of modern physical methods for atmospheric investigations.

AWARDS

2013	Bronze Cross of Merit awarded by the President of Poland for going beyond the call of duty in my work for the country and society as a whole.
2013	Award of the Director of the IO PAS for publishing .
2012	Award of the Director of the IO PAS for publishing .
2004	Award of the Scientific Council of the IO PAS for publishing.

2003	Award of the Scientific Council of the IO PAS for publishing.
2002	Award of the Scientific Council of the IO PAS for publishing.
2000	Award of the Scientific Council of the IO PAS for publishing.
1999	Award of the Scientific Council of the IO PAS for publishing.
1998	Award of the Scientific Council of the IO PAS for publishing.

PERSONAL DATA

Date of Birth - 9 March 1965.

Marital status: remarried, wife Izabela.

Dependents - Three children ages 22 (daughter Leal), 20 (son Kasper), 1 (daughter Aurora).

Hobbies – Football (play and watch), philosophy and GOOD beer.

PUBLICATIONS

1. Preliminary application of lidar to measurements of the marine aerosol concentration in the atmosphere over the Gulf of Gdańsk at Sopot. **Oceanologia** 33, 191-201. Zielinski T., Korzeniewski K., Falkowska L., **1992**.
2. Estimation of kinetic coefficients describing marine aerosol by means of lidar method. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 41, No. 3, 161-168. Zielinski T., Zielinski A., Piskozub J., **1993**.
3. Aerosol Fluxes in the Breaker Zone of Gdańsk Bay at Hel. **Oceanologia** 35, 13-25. Zielinski T., **1993**.
4. Investigation of marine aerosol with multifrequency lidar. **Applied Laser Radar Technology, SPIE Proceedings**, Vol. 1936, 213-222. Zielinski A., Piskozub J., Irczuk M., Zielinski T., **1993**.
5. Breaker zone aerosol dynamics in the southern Baltic Sea. **Atmospheric Propagation and Remote Sensing, SPIE Proceedings**, Vol. 2222, 316-327. Zielinski T., Zielinski A., **1994**.
6. Lidar Method in Investigations of Marine Aerosols. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 42, No. 1, 77-88. Zielinski A., Piskozub J., Zielinski T., **1994**.
7. Aerosol Fluxes in the Breaker Zone During the BAEX'93 Experiment. **19th Conference of the Baltic Oceanographers Proceedings**, Vol. I, 26-35. Zielinski T., Piskozub J., **1994**.
8. Results of lidar based investigations of marine aerosol concentrations in the coastal zone of the Southern Baltic Sea. **19th Conference of the Baltic Oceanographers Proceedings**, Vol. I, 64-75. Zielinski A., Piskozub J., Król T., Irczuk M., Drozdowska V., Zielinski T., **1994**.
9. A comparison of several measurement techniques used in BAEX' 93 marine aerosol experiment. **19th Conference of the Baltic Oceanographers Proceedings**, Vol. I, 36-42. Piskozub J., Petelski T., Król T., Marks R., Chomka M., Zielinski T., **1994**.

10. Breaker zone aerosol dynamics in the southern Baltic Sea. **Atmospheric Propagation and Remote Sensing, SPIE Proceedings**, Vol. 2222, 316-327. Zielinski T., Zielinski A., **1994**.
11. Lidar studies of marine aerosol in the coastal zone. **Atmospheric Propagation and Remote Sensing IV, SPIE Proceedings**, Vol. 2471, 256-264. Zielinski A., Piskozub J., Irczuk M., Zielinski T., **1995**.
12. Residence times of aerosols in the breaker zones of the Southern Baltic Sea. **Atmospheric Propagation and Remote Sensing IV, SPIE Proceedings**, Vol. 2471, 356-364. Zielinski T., **1995**.
13. Aerosol fluxes and their gradients in the marine boundary layer over the coastal zone. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 44, No. 4, 203-211. Zielinski A., Zielinski T., **1996**.
14. Thickness of the mixed atmosphere layer above the sea surface determined by means of the lidar method. **Laser Radar Technology and Applications, SPIE Proceedings**, Vol. 2748, 365-373. Zielinski T., Zielinski A., **1996**.
15. Model describing the dependence of aerosol microstructure on different sea bottom types. **Application of Lidar to Current Atmospheric Topics, SPIE Proceedings**, Vol. 2833, 266-273. Zielinski T., Zielinski A., **1996**.
16. Dependence of aerosol fluxes and their residence times on different types of sea bottoms. **Journal of Aerosol Science**, Vol. 27, Suppl. 1, 57-59. Zielinski A., Zielinski T., **1996**.
17. Aerosol size distribution function in the coastal area. **Journal of Aerosol Science**, Vol. 28, Suppl. 1, 41-42. Zielinski A., Zielinski T., Piskozub J., **1997**.
18. Verification of sea spray emission model. **Journal of Aerosol Science**, Vol. 28, Suppl. 1, 101-103. Petelski T. Chomka M., Zielinski A., Piskozub J., Zielinski T., **1997**.
19. Aerosol concentrations and their gradients near urban areas determined by means of the lidar method. **EurOpto Series, Lidar Atmospheric Monitoring**, Vol. 3104, 242-247. Zielinski T., Zielinski A., **1997**.
20. Aerosol masses and mass gradients in the marine boundary layer over the breaker zone. **Oceanologia**, 39 (3), 201-209. Zielinski T., **1997**.
21. Vertical distribution of aerosols in coastal areas of the southern Baltic Sea. **Journal of Aerosol Science**, Vol. 29, Suppl. 1, 653-654. Zielinski A., Zielinski T., Piskozub 1., **1998**.
22. Verification of different techniques for the measurement of marine aerosols in coastal areas. **Journal of Aerosol Science**, Vol. 29, Suppl. 1, 853-854. Zielinski T., Chomka M., Piskozub J., Petelski T., **1998**.

23. Changes in aerosol concentration with altitude in the marine boundary layer in coastal areas of the southern Baltic Sea. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 46, No. 3-4, 133-139. Zielinski T., **1998**.
24. Dependence of aerosol size distribution on different sea bottom types. **NATO Sensors&Electronics Technology Panel (SET) Symposium**, 38, 1-7, Zielinski A., Zielinski T., Piskozub J., **1998**.
25. Aerosol optical depth over the southern Baltic sea measured by lidar. **Journal of Aerosol Science**, Suppl. 1, 95-97, Zielinski T., Zielinski A., Piskozub 1., **1999**.
26. Influence of dynamic conditions on aerosol enrichment factor in the coastal area. **Journal of Aerosol Science**, Suppl. 1, 186-187, Zielinski T., Falkowska L, Piskozub 1., **1999**.
27. Variations of aerosol extinction over the coastal area of the southern Baltic Sea. **Journal of Aerosol Science**, Suppl. 1, 455-456, Zielinski T., Zielinski A., **2001**.
28. Remote sensing in the marine boundary layer over the southern Baltic sea. **EOS/SPIE Remote Sensing Symposium Proceedings**, Vol. 3865, 144-149, Zielinski T., Piskozub J., Zielinski A., **1999**.
29. Particle deposition velocity in marine boundary layer over coastal areas. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 47, No. 4, 207-214. Zielinski T., **1999**.
30. Aerosol optical thickness over the coastal area of the southern Baltic Sea. **Optica Applicata**, XXIX, No. 4, 339-447. Zielinski T., Zielinski A., Piskozub J., Drozdowska V., Irczuk M., **1999**.
31. Lidar based investigations of optical extinction in the marine boundary layer over the coastal area. **Oceanological Studies** XXIX, No. 3, 35-42. Zielinski T., Piskozub J., Drozdowska V., Zielinski M., Irczuk M., **2000**.
32. Selected parameters of the mixed atmosphere layer above the sea surface determined with lidar. **Bulletin of the Polish Academy of Sciences, Earth Sciences**, Vol. 49, No. 1, 67-74, Zielinski T., **2001**.
33. Aerosol extinction and optical thickness in the atmosphere over the Baltic Sea determined with lidar. **Journal of Aerosol Science**, 33/6, 47-61, Zielinski T., Zielinski A., **2002**.
34. A lidar study of aerosols in the lower troposphere over coastal regions in Poland and Greece, **SPIE Proceedings** Vol. 5229, 54-57, Z. Błaszczałk, M. Hałas, J. Grabowski, T. Zielinski, A. Papayannis, **2003**.
35. Physical and optical properties of marine aerosols over the coastal area during the BALTIRS campaigns, **Journal of Aerosol Science**, Vol. II, 1139-1140, T. Zielinski, B. Pflug, B. Gerash, G. Zimmermann, **2003**.

36. Impact of meteorological parameters on temporal variations of aerosol vertical concentrations derived for the coastal area of the Baltic Sea. **Journal of Aerosol Science**, Vol. II, 1143-1144, A. Zielinski, T. Zielinski, **2003**.
37. Dependence of surf zone aerosol on wind direction and wind speed at a coastal site of the Baltic Sea. **Oceanologia**, No. 45(3), 359-371, Zielinski T., **2003**.
38. Variations of physical properties of surf generated aerosols with altitude. **Oceanologia**, No. 45(4), 1-11, Zielinski T., **2003**.
39. Fluorescence characteristics of the surface water layer of Arctic Seas based on lidar and spectrophotometric methods, **Proceedings of EARSeL Workshop on Remote Sensing of the Coastal Zone**, V. Drozdowska, J. Stoń, A. Beszczyńska-Moller, W. Walczowski, J. Piskozub, T. Zielinski, Vol. 3, No. 1, 136-142, **2004**.
40. Studies of aerosol physical properties in coastal areas. **Aerosol Science&Technology**, 38 (5): 513-524, T. Zielinski., **2004**.
41. Variations of aerosol optical properties and ozone contents in the Spitsbergen Region. **Journal of Aerosol Science**, Vol. II, 597-598, Zielinski T., **2004**.
42. Aerosol physical properties measured in the Arctic during the AREX campaigns 2000-2003. **Journal of Aerosol Science**, Vol. II, 725-726, Zielinski T., Petelski T., **2004**.
43. Lidar study of seasonal changes in spatial distribution of aerosol in the lower troposphere over urban coastal areas. **Oceanologia**, No. 46(3), 347-364, M. Hałas, Z. Błaszczałk, I. Grabowski, A. Papayannis, T. Zielinski, **2004**.
44. Studies of aerosols in the marine boundary layer in the coastal area during the EOPACE'99 campaign. **Boundary-Layer Meteorology**, Vol. 116, No. 3, 533-541, T. Zielinski, J. Piskozub, **2005**.
45. Physical properties of aerosol near-water layer in coastal areas, **Rozprawy i Monografie** IOPAN, No. 18, 164 pp., Zieliński T., **2006** (in Polish).
46. Studies of aerosol physical properties in the coastal area. **Optica Applicata**, No. 4, Vol. 36, 629-634, T. Zielinski, T. Petelski, **2006**.
47. Remote oil film thickness measurements on the water surface by means of water Raman signal attenuation, **Physicochemical problems of natural waters ecology**, Vol. 5, 31-36, V. Drozdowska, T. Zielinski, J. Piskozub, **2007**.
48. Preliminary studies of aerosol composition in coastal areas, **Academic Journals, Scientific Research and Essays**, Vol. 2 (6), 259-262, T. Zielinski, A. Ponczkowska, **2007**.
49. Aerosols in Polar regions: A historical review on the basis of optical depth and in-situ observations, **Journal of Geophysical Research**, Vol. 112, D16205,

- doi:10.1029/2007JD008432, C. Tomasi, V. Vitale, A. Lupi, C. Di Carmine, M. Campanelli, A. Herber, R. Treffeisen, R. S. Stone, E. Andrews, S. Sharma, V. Radionov, W. von Hoyningen-Huene, K. Stebel, G. Hansen, C. L. Myhre, C. Wehrli, V. Aaltonen, H. Lihavainen, A. Virkkula, R. Hillamo, J. Ström, C. Toledano, V. Cachorro, P. Ortiz, A. de Frutos, S. Blindheim, M. Frioud, M. Gausa, T. Zielinski, T. Petelski, M. Shiobara, **2007**.
50. Lidar-based Studies of Aerosol Optical Properties Over Coastal Areas, **Sensors**, 7, 3347-3365, T. Zielinski, B. Pflug, **2007**.
51. Aerosol measurements in Hornsund during the XXIX PAS Polar expedition, **Problemy Klimatologii Polarnej**, 18, A. Rozwadowska, T. Petelski, T. Zielinski, **2008** (in Polish).
52. Maritime Aerosol Network (MAN) as a component of AERONET, **Journal of Geophysical Research-Atmospheres**, Vol. 114, D06204, doi: 10.1029/2008JD011257, A. Smirnov, B. Holben, I. Slutsker, D. Giles, C. McClain, T. Eck, S. Sakerin, A. Macke, P. Croot, G. Zibordi, P. Quinn, J. Sciare, S. Kinne, M. Harvey, T. Smyth, S. Piketh, T. Zielinski, A. Proshutinsky, J. Goes, N. Nelson, P. Larouche, V. Radionov, P. Goloub, K. Krishna Moorthy, R. Matarrese, E. Robertson, F. Jourdin, **2009**.
53. Aerosol optical depth measured at different coastal boundary layers and its links with synoptic-scale features, **Remote Sensing**, 1, doi:10.3390/sensors90rs1030557, A. Ponczkowska, T. Zielinski, T. Petelski, K. Markowicz, G. Chourdakis, G. Georgouassis, **2009**.
54. Cluster analysis of the impact of air back trajectories on aerosol optical properties at Hornsund, Spitsbergen, **Atmospheric Chemistry and Physics**, 10, (3), 877 – 893, A. Rozwadowska, T. Zielinski, T. Petelski, P. Sobolewski, **2010**.
55. Observations of new aerosol particle formation in the south-eastern Baltic Sea region. Part I. Generation and growth of aerosols at a coastal site, **Oceanologia**, 52 (1), 53-75, K. Plauškaitė, V. Ulevicius, N. Špirkauskaitė, S. Byčenkiė, T. Zielinski, T. Petelski, A. Ponczkowska, **2010**.
56. Studies of the impact of aerosol optical properties on climate change processes, **Environmental Engineering and Management Journal**, Vol. 10, No. 1, 155-159, P. Makuch, A. Strzalkowska, A. Ponczkowska, T. Zielinski, T. Petelski, J. Kowalczyk, V. Drozdowska, D. Gutowska, A. Rozwadowska, J. Pasnicki, K. Zielinski, **2011**.
57. Maritime aerosol network as a component of AERONET – first results and comparison with global aerosol models and satellite retrievals, **Atmospheric Measurement Technique**, 4, doi:10.5194/amt-4-583-2011, A. Smirnov, B. N. Holben, D. M. Giles, I. Slutsker, N. T. O'Neill, T. F. Eck, A. Macke, P. Croot, Y. Courcoux, S. M. Sakerin, T. J. Smyth, T. Zielinski, G. Zibordi, J. I. Goes, M. J. Harvey, P. K. Quinn, N. B. Nelson, V. F. Radionov, C. M. Duarte, R. Losno, J. Sciare, K. J. Voss, S. Kinne, N. R. Nalli, E. Joseph, K. Krishna, Moorthy, D. S. Covert, S. K. Gulev, G. Milinevsky, P. Larouche, S. Belanger, E. Horne, M. Chin, L. A. Remer, R. A. Kahn, J. S. Reid, M. Schulz, C. L. Heald, J. Zhang, K. Lapina,

R. G. Kleidman, J. Griesfeller, B. J. Gaitley, Q. Tan, and T. L. Diehl, **2011**.

58. Remote sensing measurements of the volcanic ash plume over Poland in April 2010, **Atmospheric Environment**, <http://dx.doi.org/10.1016/j.atmosenv.2011.07.015>, K. M. Markowicz, T. Zielinski, A. Pietruczuk, M. Posyniak, O. Zawadzka, P. Makuch, I. S. Stachlewska, A. K. Jagodnicka, T. Petelski, W. Kumala, P. Sobolewski, T. Stacewicz, **2011**.
59. Recent Alterations of Aerosol Concentration, Mercury Distribution and Organic Matter Deposition in the Arctic, **Papers on global change IGBP**, Vol. 18, No. 1/2011, 23-33, J. Pempkowiak, T. Zielinski, T. Petelski, A. Zaborska, J. Beldowski, **2011**.
60. Study of vertical structure of aerosol optical properties with Sun photometers and ceilometer during MACRON Campaign in 2007, **Acta Geophysica**, 60 (5): 1308-1337, K. M. Markowicz, T. Zielinski, S. Blindheim, M. Gausa, A. K. Jagodnicka, A. Kardas, W. Kumala, S. P. Malinowski, T. Petelski, M. Posyniak, T. Stacewicz, **2012**.
61. Studies of aerosols advected to coastal areas with use of remote techniques, **Acta Geophysica**, vol. 60, no. 5, DOI: 10.2478/s11600-011-0075-4, 1359-1385, T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, A. Ponczkowska, K. M. Markowicz, G. Chourdakis, G. Georgoussis, S. Kratzer, **2012**.
62. Evaluation of sun photometer capabilities for retrievals of aerosol optical depth at high latitudes: The POLAR-AOD intercomparison campaigns, **Atmospheric Environment**, 52: 4-17 Sp. Iss. SI JUN 2012, M. Mazzola, R.S. Stone, A. Herber, C. Tomasi, A. Lupi, V. Vitale, C. Lanconelli, C. Toledano, V.E. Cachorro, N.T. O'Neill, M. Shiobara, V. Aaltonen, K. Stebel, T. Zielinski, T. Petelski, J.P. Ortiz de Galisteo, B. Torres, A. Berjon, P. Goloub, Z. Li, L. Blarel, I. Abboudm, E. Cuevas, M. Stock, K.-H. Schulz, A. Virkkula, **2012**.
63. Impact of urban pollution emitted in Warsaw on aerosol properties, **Atmospheric Environment**, 69: 15-28 APR 2013, O. Zawadzka, K. M. Markowicz, A. Pietruczuk, T. Zielinski, J. Jaroslawski, **2013**.
64. Aerosol properties and radiative forcing for three air masses transported in Summer 2011 to Sopot, Poland, **AIP Conf. Proc.** 1531, 504 (2013); doi: 10.1063/1.4804817, A. Rozwadowska, I. Stachlewska, P. Makuch, K. Markowicz, T. Petelski, A. Strzalkowska, T. Zielinski, **2013**.
65. Studies of aerosol optical depth with use of Microtops sun photometers and MODIS detectors in the coastal areas of the Baltic Sea, **Acta Geophysica**, O. Zawadzka, P. Makuch, K.M. Markowicz, T. Zielinski, T. Petelski, V. Ulevicius, A. Strzalkowska, A. Rozwadowska, D. Gutowska, vol. 62, no. 2, Apr. 2014, pp. 400-422, DOI: 10.2478/s11600-013-0182-5, **2014**.
66. Atmospheric Studies by Optical Methods, **Acta Geophysica**, T. Zielinski, vol. 62, no. 2, Apr. 2014, 274-275; DOI: 10.2478/s11600-013-0189-y, **2014**.

67. Insights on Environmental Changes; Where the World is Heading; **Springer Series: GeoPlanet: Earth and Planetary Sciences**; T. Zielinski, K. Pazdro, A. Dragan-Gorska, A. Weymann, ISBN 978-3-319-03682-3, **2014**.
68. Marine aerosol fluxes determined by simultaneous measurements of Eddy Covariance and gradient method; **Environmental Engineering and Management Journal**, P. Markuszewski, T. Petelski, T. Zielinski, **2014** (in print).

ABSTRACTS

1. Aerosol fluxes and their gradients in the marine boundary layer over the coastal zone. *European Geophysical Society*, OA 062. Zielinski A., Zielinski T., 1997.
2. Influence of dynamic atmospheric conditions on the concentrations and particle size distribution of the marine aerosol. *Russian Aerosol Society, 4th International Aerosol Symposium, Proceedings*, v. 4a, N 11, 109. Zielinski T., Zielinski A., Piskozub J., 1998.
3. Remote sensing in the marine boundary layer over the coastal areas. *Proceedings of the 3rd Functioning of Coastal Ecosystems in Various Geographical Regions*, 31-32, Zielinski T., Kozłowski Ł., Irczuk M., 2001.
4. Extinction and aerosol optical thickness in the atmosphere over the Baltic Sea. *IAMAS 2001 Proceedings*, 37, Zielinski T., Zielinski A., 2001.
5. Atmospheric measurements carried out by the IOPAS team within the BALTIKS framework. *Proceedings of the Joint Workshop on Ocean Remote Sensing*, Zielinski T., 2002.
6. Studies of aerosol dynamics in selected coastal areas of the Baltic Sea and the Atlantic Ocean, *Proceedings of the Annual American Association for Aerosol Research Annual Conference*, 11C3, 108, T. Zielinski, A. Zielinski, J. Piskozub, 2002.
7. Atmospheric ground-truth measurements in the marine boundary layer over the coastal area of the southern Baltic Sea, *Proceedings of the European Conference of Coastal Zone Research: an ELOISE Approach*, pp.192, T. Zielinski, B. Pflug, B. Gerasch, 2003.
8. Particle transport in the marine boundary layer over the coastal area, *Proceedings of the European Conference of Coastal Zone Research: an ELOISE Approach*, pp.221, T. Petelski, T. Zielinski, J. Piskozub, M. Irczuk., M. Chomka, R. Jaworski, J. Heldt, 2003.
9. Remote sensing in the marine boundary layer over the coastal areas, *Proceedings of EARSeL Workshop on Remote Sensing of the Coastal Zone*, pp. 76, T. Zielinski, A. Zielinski, J. Piskozub, V. Drozdowska, M. Irczuk, 2003.
10. Fluorescence characteristics of the surface water layer of Arctic Seas based on lidar and spectrophotometric methods, *Proceedings of EARSeL Workshop on Remote Sensing of the Coastal Zone*, pp.14, V. Drozdowska, J. Stoń, A. Beszczyńska-Moller, W. Walczowski, J. Piskozub, T. Zielinski, M. Irczuk, 2003.

11. Aerosol physical properties in the coastal zone near the urban area in the southern Baltic Sea, *Proceedings of the Annual American Association for Aerosol Research Annual Conference*, 1B3, 5, T. Zielinski, A. Zielinski, 2003.
12. Studies of aerosol physical properties in the Arctic region of Spitsbergen, *Proceedings of the Annual American Association for Aerosol Research Annual Conference*, 3D, 108, T. Zielinski, 2004.
13. The impact of air mass types on aerosol properties derived at different coastal stations in the southern Baltic Sea using lidar, *Proceedings of the European Association of Remote Sensing Laboratories Conference*, p.25, T. Zielinski, 2004.
14. Lidar-based studies of aerosols in the marine boundary layer, V Workshop on atomic and molecular physics, Jurata 2004, T. Zielinski, J. Piskozub, 2004.
15. Studies of physical properties of Arctic aerosols, *Proceedings of the Third International Symposium on the Arctic Research*, Tokyo, T. Petelski, T. Zielinski, A Rozwadowska, R. Neuber, p. 25, 2005.
16. Atmospheric ground-truth measurements in the marine boundary layer over the coastal areas, *Proceedings of the 25th EARSeL General Assembly and Workshops*, T. Zielinski, B. Pflug, B. Gerasch, p. 36, 2005.
17. Optical properties of aerosols in the MBL of the Baltic coastal zone, *Proceedings of the Remote sensing and bio-optical modelling of the Baltic Sea Workshop*, Gdansk, T. Zielinski, 2005.
18. Własności aerozolu w Hornsundzie podczas kampanii pomiarowej ASTAR 2004, *Materiały XV Ogólnopolskie Seminarium Meteorologii i Klimatologii Polarnej*, A. Rozwadowska, T. Petelski, T. Zielinski, S. Debatin, 2005 (in Polish).
19. Studies of aerosol properties in coastal areas, *Proceedings of the Baltic Science Sea Congress*, T. Zielinski , T. Petelski, J. Piskozub, V. Drozdowska p. 43, 2005.
20. Studies of aerosol vertical distribution over urban coastal areas, *Proceedings of the EAC*, T. Zielinski, M. Halas, J. Grabowski, A. Papayannis, p. 607, 2005.
21. Aerosol properties in Hornsund, Spitsbergen, during ASTAR 2004 campaign, *Proceedings of the EAC*, A. Rozwadowska, T. Petelski, S. Debatin, T. Zielinski, p. 706, 2005.
22. Badania aerozolu morskiego, *Materiały Zjazdu Fizyków Polskich*, T. Zielinski, T. Petelski, J. Piskozub, V. Drozdowska, 2005 (in Polish).
23. Aerosol optical properties in the Arctic region, *Proceedings of the Annual American Association for Aerosol Research Annual Conference*, 1PH16, 59, T. Zielinski, T. Petelski, A. Rozwadowska, 2005.
24. Observation of optical properties and radiative forcing of nonspherical particles over

Poland, *Proceedings of ACCENT conference*, K. M. Markowicz, A. E. Kardaś, C. Hochherz, K. Stelmaszczyk, A. Rozwadowska, T. Zielinski, G. Karasiński, J. Remiszewska, M. Witek, Sz. Malinowski, T. Stacewicz, L. Woeste, 2005.

25. Badania atmosfery w programach badawczych ASTAR I POLAR-AOD, *Materiały Konferencyjne XVI Seminarium Meteorologii i Klimatologii Polarnej*, T. Petelski, T. Zielinski, Torun, 2006 (in Polish).
26. Polish contribution to POLAR-AOD, *POLAR-AOD Workshop*, T. Zielinski, T. Petelski, Ny-Alesund, 2006.
27. Aerosol radiative forcing studies at different types of sites, *Proceedings of the International Aerosol Conference*, 3G30, T. Zielinski, K. Markowicz, G. Chourdakis, N. Mihalopoulos, B. Pflug, A. Rozwadowska, 2006.
28. Aerosols in Polar regions, *Proceedings of the Second International Conference on Global Warming*, C. Tomasi, V. Vitale, A. Lupi, C. Di Carmine, M. Campanelli, A. Herber, R. Treffeisen, R. S. Stone, E. Andrews, S. Sharma, V. Radionov, W. von Hoyningen-Huene, K. Stebel, G. Hansen, C. L. Myhre, C. Wehrli, V. Aaltonen, H. Lihavainen, A. Virkkula, R. Hillamo, J. Ström, C. Toledano, V. Cachorro, P. Ortiz, A. de Frutos, S. Blindheim, M. Frioud, M. Gausa, T. Zielinski, T. Petelski, M. Shiobara, 2006.
29. Remote measurements of oil film thickness on the water surface by means of water Raman signal attenuation, *Proceedings of the Physical and chemical problems of natural waters ecology Conference*, 14-15, V. Drozdowska, J. Piskozub, T. Zielinski, 2006.
30. Studies of aerosols in the marine boundary layer, *German-Polish Workshop on air-sea interaction*, T. Zielinski, T. Petelski, J. Piskozub, V. Drozdowska, M. Irczuk, L. Stojek, 2006.
31. Observation of optical properties and Radiative forcing of nonspherical particles over Poland, *GRA vol. 8, 06233, EGS - AGU - EUG Joint Assembly, Vienna* Markowicz, K. M., A. E. Kardaś, C. Hochherz, K. Stelmaszczyk, Anna Rozwadowska, Tymon Zieliński, G. Karasiński, J. Remiszewska1, M. Witek, Sz. Malinowski, T. Stacewicz, and L. Woeste, 2006.
32. Polar-AOD Radiometer Inter-comparison Experiment at Ny-Alesund in the Arctic: Preliminary Result and Validation Analysis, *Proceedings of the 29th Symposium on Polar Meteorology and Glaciology*, M. Shiobara, R. Stone, A. Herber, V. Vitale, C. Tomasi, S. Blindheim, M. Gausa, C. Ritter, E. Graeser, W. von Hoyningen-Huene, A. Lupi, M. Mazzola, V. Aaltonen, A. Ehrlich, T. Petelski, T. Zielinski, K. Stebel, N. O'Neill, J. Freemantle, C. Toledano, P. Ortiz, 2006.
33. Aerosol optical properties measured during the SOAP experiment, Summer 2006, Crete, 5th *ACCENT General Assembly*, T. Zielinski, 2007.
34. The ocean-atmosphere, *UK-V4 Frontiers of Science Meeting*, p. 30, T. Zielinski, 2007.

35. Studies of marine aerosol dynamics in coastal areas of the Baltic Sea, *Proceedings of the Baltic Sea Science Congress*, T. Zielinski, T. Petelski, J. Piskozub, V. Drozdowska, A. Ponczkowska, M. Dynakowska, 2007.
36. Oceanic Aerosol Network: A maritime component of AERONET, Smirnov, A., B.N. Holben, C.R.McClain, S.M.Sakerin, T.Smyth, V.F.Radionov, T.Zielinski, R.Matarrese, G.Zibordi, A.Proshutinsky, L.Robertson, M.Harvey, I.Slutsker, D.Giles, and A.Tran, Joint Assembly, Acapulco, Mexico, May 22-25, 2007 (Eos Trans. AGU, 88(23), Jt. Assem. Suppl., *Abstract OS34A-06*), 2007.
37. Aerosol Robotic Network (AERONET) activity within the framework of the International Polar Year Smirnov, A., B.N.Holben, N.T.O'Neill, M.V.Panchenko, M.Sorokin, P.Sobolewski, S.M.Sakerin, V.F.Radionov, R.Wagener, B.Bojkov, G.Zibordi, T.Zielinski, A.Proshutinsky, T.F.Eck, A.Sinyuk, I.Slutsker, D.Giles, *SPIE Europe Remote Sensing 2007*, Florence, Italy, September 17-20, 2007.
38. Impact of aerosol physical properties on remote sensing of coastal areas, *Proceedings of the European Association of Remote Sensing Laboratories*, Bolzano, T. Zielinski, A. Ponczkowska, T. Petelski, K. Markowicz, J. Remiszewska, G. Chourdakis, N. Mihalopoulos, B. Pflug, p. 87, 2007.
39. Impact of different aerosol sources on particle optical properties – Experiment SOAP, *EAC2007 Abstracts*, T13A012, T. Zielinski, J. Remiszewska, G. Chourdakis, N. Mihalopoulos, 2007.
40. Aerosol physical properties as an important factor in remote sensing of coastal areas, *EAC2007 Abstracts*, T13A013, T. Zielinski, A. Ponczkowska, 2007.
41. Studies of the impact of Arctic aerosols on climate modifications, *EAC2007 Abstracts*, T13A011T, Zielinski, J. Piskozub, T. Petelski, A. Rozwadowska, S. Malinowski, T. Stacewicz, K. Markowicz, A. K. Jagodnicka, M. Posyniak, M. Gausa, S. Blindheim, R. Neuber, 2007.
42. Origin of the aerosol nanoparticles in the marine boundary layer over south-eastern Baltic Sea, *EAC2007 Abstracts*, T13A226, V. Ulevičius, K. Plauškait, N. Prokopčiuk, N. Špirkauskait, T. Petelski, T. Zielinski, 2007.
43. Results of spring aerosol campaigns in Hornsund, Spitsbergen, 2004 and 2007, *EAC2007 Abstracts*, T13A234, A.Rozwadowska, T. Petelski, K. Migala, T. Zielinski, 2007.
44. Aerosol from mid-latitudes influencing Arctic atmosphere – a case study, [EGU2008-A-09205](#); AS3.05-1TU5P-0099, S.P. Malinowski, T. Stacewicz, T. Zielinski, T. Petelski, A.K. Jagodnicka, K.M. Markowicz, M. Posyniak, M. Gausa, S. Blindheim, A.E. Kardas, W. Kumala, I. Stachlewska, J. Piskozub, 2008.

45. MACRON: Maritime Aerosol, Clouds and Radiation Observation in Norway, [*EGU2008-A-08946*](#); AS2.02-1WE4P-0060, S.P. Malinowski, T. Stacewicz, T. Zielinski, T. Petelski, A.K. Jagodnicka, K.M. Markowicz, M. Posyniak, M. Gausa, S. Blindheim, A.E. Kardas, W. Kumala, I. Stachlewska, J. Piskozub, 2008.
46. Atmospheric studies on board of r/v Oceania, *ALOMAR User Meeting*; T. Zielinski, J. Piskozub, T. Petelski, V. Drozodwska, A. Ponczkowska, J. Kowalczyk, 2008.
47. MACRON – Maritime Aerosol, Clouds and Radiation Observation in Norway; *ALOMAR User Meeting*; E. Kardas, K. M. Markowicz, S. P. Malinowski, A. K. Jagodnicka, M. Posyniak, T. Stacewicz, W. Kumala, I. Stachlewska, T. Zieliński, J. Piskozub, T. Petelski, M. Gausa, S. Blindheim, 2008.
48. Physical studies from board of r/v Oceania, *Physicochemical problems of natural water ecology Conference*; Szczecin, Poland; T. Zielinski, 2008.
49. Remote sensing studies of aerosol transport to different parts of Europe, *EAC 2008 Abstracts*; T06A136; T. Zielinski, J. Piskozub, T. Petelski, A. Ponczkowska, S. Malinowski, T. Stacewicz, K. Markowicz, A. K. Jagodnicka, M. Posyniak, A. Kardas, I. Stachlewska, M. Gausa, S. Blindheim, V. Ulevicius, 2008.
50. Studies of aerosol optical properties over the European Arctic seas, *EAC 2008 Abstracts*; T11A005O; T. Zielinski, T. Petelski, J. Piskozub, J. Kowalczyk, A. Smirnov, B. Holben, 2008.
51. Atmospheric studies at the IOPAS, *DELICE Meeting*; Romania; T. Zielinski, 2009.
52. Studies of aerosol optical properties in the European Arctic, *Marine Impact on Aerosol Physical Properties Workshop materials*, Sopot, Poland, T. Zielinski, T. Petelski, J. Piskozub, J. Kowalczyk, A. Ponczkowska, A. Smirnov, B. Holben, 2009.
53. Aerosol measurements over the coastal area of the southern Baltic Sea, *Marine Impact on Aerosol Physical Properties Workshop materials*, Sopot, Poland; B. Pflug, T. Zielinski, 2009.
54. Aerosol optical depth measured at different coastal sites and its connection with macrometeorological features, *Marine Impact on Aerosol Physical Properties Workshop materials*, Sopot; A. Ponczkowska, T. Zielinski, K. Markowicz, G. Chourdakis, 2009.
55. Investigation of maritime aerosol during MACRON campaign, *Marine Impact on Aerosol Physical Properties Workshop materials*, Sopot, Poland; K. Jagodnicka, A. Kardas, K. Markowicz, S. Malinowski, M. Posyniak, T. Stacewicz, W. Kumala, I. Stachlewska, T. Zielinski, J. Piskozub, T. Petelski, S. Blindheim, M. Gausa, 2009.
56. Maritime Aerosol Network (MAN) as a component of AERONET – first results, [*EGU2009-A-09205*](#); A. Smirnov, B. Holben, I. Slutsker, D. Giles, C. McClain, T. Eck, S. Sakerin, A.

- Macke, P. Croot, G. Zibordi, P. Quinn, J. Sciare, S. Kinne, M. Harvey, T. Smyth, S. Piketh, T. Zielinski, A. Proshutinsky, J. Goes, N. Nelson, P. Larouche, V. Radionov, P. Goloub, K. Krishna Moorthy, R. Matarrese, E. Robertson, F. Jourdin, 2009.
57. Cleaning Role of Marine Aerosol in Arctic Boundary Layer, *Nucleation and Atmospheric Aerosols, 18th ICNAA Conference*; 797 – 799, T. Petelski, A. Rozwadowska, T. Zielinski, M. Stock, R. Neuber, R. Treffeisen, 2009.
 58. Aerosol Optical Properties Measured In The European Arctic, *Nucleation and Atmospheric Aerosols, 18th ICNAA Conference*, 387 – 389, T. Zielinski, T. Petelski, A. Rozwadowska, J. Piskozub, A. Ponczkowska, J. Kowalczyk, A. Smirnov, B. Holben, 2009.
 59. Dependence of aerosol optical properties on air mass origin in Hornsund, Spitsbergen-cluster analysis of back trajectories, *Nucleation and Atmospheric Aerosols, 18th ICNAA Conference*; 926 – 929, A. Rozwadowska, T. Petelski, P. Sobolewski, T. Zielinski, 2009.
 60. Aerosol optical depth and its connection with macrometeorological features, *EAC 2009 Abstracts*; T076A04, A. Ponczkowska, T. Zielinski, T. Petelski, J. Piskozub, G. Chourdakis, S. Malinowski, T. Stacewicz, K. Markowicz, A. K. Jagodnicka, M. Posyniak, A. Kardas, I. Stachlewska, M. Gausa, S. Blindheim, A. Smirnov, B. Holben, 2009.
 61. Impact of marine aerosols on Arctic Haze, *EAC 2009Abstracts*; T160A04, T. Petelski, A. Rozwadowska, T. Zielinski, M. Stock, R. Neuber, R. Treffeisen, 2009.
 62. Impact of air mass history on aerosol optical thickness at Hornsund station, Spitsbergen, *EAC 2009Abstracts*; T160A05, A. Rozwadowska, T. Petelski, P. Soboloweski, T. Zielinski, 2009.
 63. Maritime Aerosol Network as a component of AERONET – first steps, *IGARSS/International Geoscience and Remote Sensing Symposium Abstracts*; A. Smirnov, B. Holben, A. Macke, P. Croot, S. Sakerin, Y. Courcoux, T. Zielinski, , G. Zibordi, M. Harvey, R. Losno, J. Sciare, V. Radionov, P. Quinn, N. Nelson, J. Goes, K. Krishna Moorthy, C. Duarte, K. Voss, D. Covert, N. Nally, S. Gulev, I. Slutsker, D. Giles, N. O’Neil, T. Eck, 2010.
 64. Aerosol physical properties studied in the Arctic, *International Polar Year Oslo Science Conference Abstracts* 0120; T. Zielinski, T. Petelski, A. Rozwadowska, J. Piskozub, P. Makuch, A. Ponczkowska, J. Kowalczyk, K. Markowicz, Sz. Malinowski, T. Stacewicz, A. K. Jagodnicka, M. Posyniak, A. Kardas, I. Stachlewska, M. Gausa, S. Blindheim, A. Smirnov, B. Holben, 2010.
 65. Impact of marine aerosol on Arctic AOT, *International Polar Year Oslo Science Conference Abstracts*; T. Petelski, A. Rozwadowska, T. Zielinski, J. Piskozub, P. Makuch, J. Kowalczyk, A. Ponczkowska, V. Drozdowska, R. Neuber, M. Stock, R. Treffeisen, 2010.
 66. Maritime Aerosol Network as a Component of AERONET – Relevance to Ocean Color Remote Sensing, *Oceans from Space Conference Abstracts*; A. Smirnov, B. Holben, A. Macke, Y. Courcoux, P. Croot, S. Sakerin, T. Smyth, G. Zibordi, T. Zielinski, M. Harvey, J.

- Goes, N. Nelson, P. Quinn, V.Radionov, R. Losno, J. Sciare, C. Duarte, K. Voss, K.Krishna Moorthy, N. Nalli, E. Joseph, G. Milinevsky, S. Gulev, D. Covert, I. Slutsker, N. O'Neill, D. Giles, T. Eck, 2010.
67. Impact of aerosol optical properties on climate change processes. The Baltic case study, *BALTEX Conference Abstracts* No. 65; A. Ponczkowska, P. Makuch, J. Kowalczyk, T. Zielinski, T. Petelski, J. Piskozub, A. Smirnov, B. Holben, J. Pasnicki, K. Zielinski, 2010.
68. Observation of Eyjafjallajökull volcano ash over Poland, *EGU2010-15741*, P. Makuch, M. Posyniak, T. Zielinski, T. Petelski, J. Kowalczyk, A. Rozwadowska, V. Drozdowska, K. Markowicz, S. Malinowski, A. Kardas, A. K. Jagodnicka, T. Stacewicz, J. Piskozub, 2010.
69. Studies of aerosol optical properties in the Arctic, *37th Annual European Meeting on Atmospheric Studies by Optical Methods*, T.Petelski, T.Zielinski, J.Piskozub, A.Rozwadowska, S.Malinowski, T.Stacewicz, K.Markowicz, A.K.Jagodnicka, M.Posyniak, M.Gausa, S.Blindheim, R.Neuber, Ch.Ritter, 2010.
70. Studies of aerosol optical properties in different regions of Europe, *37th Annual European Meeting on Atmospheric Studies by Optical Methods*, T. Zielinski, J. Piskozub, T. Petelski, A. Ponczkowska, P. Makuch, J. Kowalczyk, S. Malinowski, T. Stacewicz, K. Markowicz, A. K. Jagodnicka, M. Posyniak, A. Kardas, S. Blindheim, V. Ulevicius, A. Smirnov, B. Holben, K. Zielinski, 2010.
71. Aerosol optical thickness studied over the Baltic within the framework of the NASA Maritime Aerosol Network, *International Aerosol Conference*, T. Zielinski, T. Petelski, J. Piskozub, A. Ponczkowska, P. Makuch, J. Kowalczyk, V. Drozdowska, A. Smirnov, B. Holben, J. Pasnicki, K. Zieliński, 2010.
72. Studies of the impact of aerosol optical properties on climate change processes, *OTEM 2010* conference, Cluj, T. Zielinski, A. Ponczkowska, P. Makuch, J. Kowalczyk, T. Petelski, J. Piskozub, A. Strzałkowska, A. Smirnov, B. Holben, J. Pasnicki, K. Zielinski, 2010.
73. Przejawy chemicznych i fizycznych zmian oceanosfery w rejonach podbiegunowych i ich skutki, *IGBP Conference*, Warsaw, T. Zieliński, J. Pempkowiak, T. Petelski, A. Zaborska, J. Bełdowski, 2011 (in Polish).
74. Studies of aerosols in coastal areas, *OTEM 2011*, T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, G. Georgoussis, G. Chourdakis, Bucharest, 2011.
75. Studies of marine aerosols, *OTEM 2011*, T. Petelski, T. Zielinski, P. Makuch, A. Strzalkowska, Bucharest, 2011.
76. Maritime Aerosol Network as a component of AERONET – A useful tool for satellite remote sensing validation and ocean color studies, *2012 Ocean Sciences Meeting*, A. Smirnov, et al., 2012.

77. Aerosol particle distribution in the Baltic Sea marine boundary layer with the enlarged continental outflows and ship exhaust emissions, *EAC 2012*, K. Plauškaitė, N. Špirkauskaitė, S. Kecorius, T. Petelski, T. Zielinski, V. Ulevicius, 2012.
78. Retrieval of aerosol optical properties from the synergy of polar nephelometer, aethalometer, multifilter rotating shadowband radiometer and ceilometer data, *Radiation Symposium, Berlin 2012*, K. Markowicz, O. Zawadzka, P. Makuch, T. Petelski, A. Rozwadowska, I. Stachlewska, T. Zielinski, A. Strzalkowska, 2012.
79. Validation of aerosol optical properties obtained from MODIS and MSG/SEVIRI within the framework of the Poland-AOD network, *EUMETSAT Satellite Conference*, Sopot 2012, K. Markowicz, O. Zawadzka, P. Makuch, T. Petelski, A. Rozwadowska, I. Stachlewska, T. Zielinski, A. Strzalkowska, 2012.
80. Lidar studies of aerosols over Poland, *26ILRC, Greece*, A. Strzalkowska, P. Makuch, O. Zawadzka, T. Zielinski, T. Petelski, K. M. Markowicz, I. Stachlewska, A. Ponczkowska, M. Wicherowski, 2012.
81. Aerosol optical properties studied in coastal areas with use of remote techniques, *26ILRC, Greece*, T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, A. Ponczkowska, M. Wicherowski, K. M. Markowicz, G. Chourdakis, G. Georgouassis, 2012.
82. Studies of aerosols advected to coastal areas with use of remote techniques, *EGU2012/EGU2012-10230-1*, T. Zielinski, T. Petelski, J. Piskozub, P. Makuch, A. Strzałkowska, A. Ponczkowska, J. Kowalczyk, V. Drozdowska, D. Gutowska, M. Darecki, 2012.
83. Impact of aerosol optical properties on climate change processes, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, T. Zielinski, T. Petelski, A. Strzalkowska, P. Makuch, J. Piskozub, V. Drozdowska, D. Gutowska, A. Rozwadowska, 2012.
84. Studies of the optical properties of Arctic aerosols, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, T. Zielinski, T. Petelski, A. Rozwadowska, J. Piskozub, P. Makuch, A. Strzalkowska, A. Rozwadowska, 2012.
85. Aerosol optical properties studied at different marine environments, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, T. Zielinski, T. Petelski, M. Wicherowski, P. Makuch, A. Strzalkowska, A. Ponczkowska, A. Smirnov, B. Holben, 2012.
86. Impact of urban pollution emitted in Warsaw on aerosol properties, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, O. Zawadzka, K.M. Markowicz, A. Pietruszuk, T. Zielinski, J. Jaroslawski, 2012.
87. Preliminary results of the measurements of aerosol scattering coefficient and black carbon concentration over the Baltic Sea, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, T. Zielinski, A. Strzalkowska, A. Ponczkowska, A. Smirnov, B. Holben, 2012.

Optical Methods, A. Rozwadowska, V. Drozdowska, D. Gutowska, J. Kowalczyk, P. Makuch, T. Petelski, A. Strzalkowska, T. Zielinski, 2012.

88. Impact of aerosol emitted over Poland on aerosol optical properties, *39 Annual European Meeting on Atmospheric Studies by Optical Methods*, K. M. Markowicz, P. Makuch, T. Petelski, A. Rozwadowska, I.S. Stachlewska, A. Strzałkowska, O. Zawadzka, T. Zielinski, 2012.
89. Impact of Aerosol Optical Properties on Remote Sensing over Different Coastal Regions, *The XIX Symposium on High Power Laser Systems and Applications, Istanbul*, T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, 2012.
90. The variation of the total aerosol particle number concentration in fog in southern and south-eastern regions of the Baltic Sea, *EAC 2013*, K. Plauškaitė, N. Špirkauskaitė, T. Zielinski, T. Petelski, V. Ulevicius, 2013.
91. PAHs and ALKs in the Arctic (Svalbard Island) aerosol: results from the AREX2011 oceanographic campaign, *EAC 2013*, E. Bolzacchini, L. Ferrero, F. Marazzi, A. Molinelli, M.G. Perrone, G. Sangiorgi, S. Becagli, R. Traversi, R. Udisti, W. Walczowski, T. Zielinski, 2013.
92. Ionic composition and metal content of PM10 samples collected along longitudinal and latitudinal transects in the Norwegian and Greenland Seas during the AREX 2011 cruise, *EAC 2013*, R. Udisti, S. Becagli, E. Bolzacchini, G. Calzolai, M. Chiari, D. Frosini, M. Marconi, M.G. Perrone, G. Sangiorgi, M. Severi, R. Traversi, W. Walczowski, R. Zanini, T. Zielinski, T. Petelski, 2013.
93. Optical properties of Arctic aerosols studied within the framework of the NASA Maritime Aerosol Network, *ASSW 2013*, T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, A. Rozwadowska, D. Gutowska, P. Pakszys, P. Markuszewski, B. Holben, A. Smirnov, 2013.
94. Aerosol physical properties studied in the European Arctic, *ASSW 2013*, P. Makuch, T. Zielinski, T. Petelski, A. Rozwadowska, J. Piskozub, A. Strzalkowska, P. Pakszys, P. Markuszewski, 2013.
95. Studies of ship emissions and particles in the Svalbard fjords with use of the passive remote sensing, *ASSW 2013*, A. Strzalkowska, K. Stebel, T. Zielinski, T. Petelski, A. Rozwadowska, P. Makuch, J. Piskozub, P. Pakszys, P. Markuszewski, 2013.
96. Sea Spray Emission from the surface of the open Arctic Seas, *ASSW 2013*, T. Petelski, P. Makuch, T. Zielinski, P. Markuszewski, J. Piskozub, T. Neumann, A. Strzalkowska, D. Gutowska, J. Kowalczyk, 2013.
97. Aerosol Size Distribution over European Arctic Seas, *ASSW 2013*, P. Makuch, T. Zielinski, T. Petelski, A. Rozwadowska, J. Piskozub, A. Strzalkowska, P. Pakszys, P. Markuszewski, 2013.

98. Aerosol optical properties and their impact on climate change processes, *RSCy 2013*, T. Zielinski, T. Petelski, A. Strzalkowska, P. Makuch, P. Pakszys, P. Markuszewski, J. Piskozub, V. Drozdowska, D. Gutowska, A. Rozwadowska, 2013.
99. Aerosol optical properties studied with remote sensing techniques over the Baltic coastal regions, *RSCy 2013*, A. Strzalkowska, P. Makuch, P. Pakszys, P. Markuszewski, T. Zielinski, T. Petelski, J. Piskozub, A. Rozwadowska, K. Markowicz, O. Zawadzka, I. Stachlewska, 2013.
100. Transformation of aerosol in Planetary Boundary Layer over the Baltic Sea, *EGU 2013-9730*, P. Makuch, T. Petelski, J. Piskozub, A. Jankowski, T. Zielinski, A. Rozwadowska, P. Markuszewski, O. Zawadzka, 2013.
101. Studies of aerosol optical depth with use of Microtops sun photometers and MODIS detectors, *EGU 2013-10748*, P. Makuch, O. Zawadzka, K.M. Markowicz, T. Zielinski, T. Petelski, A. Strzalkowska, A. Rozwadowska, D. Gutowska, 2013.
102. Aerosol physical properties and their impact on climate change processes, *EGU 2013-12150*, A. Strzalkowska, T. Zielinski, T. Petelski, P. Makuch, P. Pakszys, P. Markuszewski, J. Piskozub, V. Drozdowska, D. Gutowska, A. Rozwadowska, 2013.
103. Sea Salt Source Function over the Baltic Sea, *EGU 2013-12100*, T. Petelski, P. Makuch, P. Markuszewski, A. Jankowski, T. Zielinski, 2013.
104. Progress in global aerosol monitoring, *I conference on the Role of aerosols in climate system*, Warsaw, T. Zielinski, 2013.
105. Research Network Poland-AOD, *I conference on the Role of aerosols in climate system*, Warsaw, T. Zielinski, M. Chilinski, W. Kumala, P. Makuch, K. Markowicz, P. Markuszewski, P. Pakszys, T. Petelski, A. Rozwadowska, I. Stachlewska, A. Strzałkowska, O. Zawadzka, 2013.
106. A new sunphotometer for the studies of AOD and water vapor in the atmospheric column, *I conference on the Role of aerosols in climate system*, Warsaw, M. Chilinski, W. Kardys, M. Waskiewicz, K. Markowicz, T. Zielinski, 2013.
107. Impact of absorbing aerosols on radiative forcing in the European Arctic – Project within the Polish-Norwegian Cooperation, *I conference on the Role of aerosols in climate system*, Warsaw, K. Markowicz, M. Chilinski, M. Gausa, J. Kaminski, P. Makuch, S. P. Malinowski, J. Lisok, T. Petelski, A. Rozwadowska, B. Samset, I. S. Stachlewska, J. Struzewska, T. Stacewicz, O. Zawadzka, T. Zieliński, 2013.
108. Aerosol source function from the Baltic Sea surface, *I conference on the Role of aerosols in climate system*, Warsaw, P. Markuszewski, T. Petelski, P. Makuch, A. Jankowski, T. Zielinski, A. Rozwadowska, 2013.

109. Project SEVA – Studies of aerosols over the Baltic within the NASA Maritime Aerosol Network, *I conference on the Role of aerosols in climate system*, Warsaw, A. Strzalkowska, T. Zielinski, T. Petelski, P. Makuch, P. Pakszys, P. Markuszewski, D. Gutowska, 2013.
110. Spectroscopic measurements of the surface waters for evaluating the fresh-water transport to marine environments in the Southern Baltic, EGU2014-13832, HS10.8, Violetta Drozdowska, Piotr Markuszewski, Jakub Kowalczyk, Przemysław Makuch, Paulina Pakszyc, Agata Strzałkowska, Jacek Piskozub, Tomasz Petelski, Tymon Zieliński, and Dorota Gutowska, 2014.
111. Aerosol Size Distribution in the marine regions, EGU2014-788, AS 3.9, Piotr Markuszewski, Tomasz Petelski, Tymon Zielinski, Paulina Pakszys, Agata Strzalkowska, Przemyslaw Makuch, and Jakub Kowalczyk, 2014.
112. Measurements and determination of the marine coarse aerosol fluxes in near marine boundary layer, EGU2014-793, AS 3.10, Piotr Markuszewski, Tomasz Petelski, Tymon Zielinski, Agata Strzalkowska, Paulina Pakszys, Przemyslaw Makuch, and Jakub Kowalczyk, 2014.
113. Studies of seasonal variations of aerosol optical properties with use of remote techniques, EGU2014-795, AS 3.15, Agata Strzalkowska, Tymon Zielinski, Tomasz Petelski, Paulina Pakszys, Piotr Markuszewski, and Przemyslaw Makuch, 2014.
114. Water vapor analysis with use of sunphotometry and radiosoundings, EGU2014-816, AS 3.15, Paulina Pakszys, Tymon Zielinski, Tomek Petelski, Przemyslaw Makuch, Agata Strzalkowska, Piotr Markuszewski, and Jakub Kowalczyk, 2014.
115. AS27-A001 Maritime Aerosol Network as a Component of AERONET – Recent Developments, AOGS 2014, Alexander SMIRNOV, Sigma Space Corp. /NASA GSFC, United States, Brent HOLBEN, NASA Goddard Space Flight Center, United States, Stefan KINNE, Institute for Meteorology, University of Hamburg, Germany, Stephen BROCCARDO, University of the Witwatersrand, South Africa, Georgiy L. STENCHIKOV, King Abdullah University of Science and Technology, Saudi Arabia, Maija HELLER, University of Southern California, United States, Elizabeth LOBECKER, NOAA Office of Ocean Exploration and Research, United States, Vladimir RADIONOV, Arctic and Antarctic Research Institute, Russian Federation, Sergey SAKERIN, Institute of Atmospheric Optics, Russian Federation, Norm NELSON, Earth Research Institute, UCSB, United States, Nicholas NALLI, NOAA Center for Satellite Applications and Research, United States, Everette JOSEPH, Howard University, United States, Jeffrey REID, Naval Research Laboratory, United States, Scott FREEMAN, Science Systems and Applications /NASA GSFC, United States, Tim SMYTH, Plymouth Marine Laboratory, United Kingdom, Chris GALLIENNE, Plymouth Marine Laboratory, United Kingdom, Robert BREWIN, Plymouth Marine Laboratory, United Kingdom, Alex BAKER, University of East Anglia, United Kingdom, Ernie LEWIS, Brookhaven National Laboratory, United States, Tymon ZIELINSKI, Institute of Oceanology, Poland, Mike HARVEY, National Institute of Water and Atmospheric Research, New Zealand, Giuseppe ZIBORDI, Joint Research Centre, European Commission, Italy, Ilan KOREN, Weizmann Institute of Science, Israel, Thomas

BOYD, Naval Research Laboratory, United States, Maria TZORTZIOU, University of Maryland, United States, Robert DUNN, University of Hawaii, United States, Violeta SLABAKOVA, Institute of Oceanology, Bulgaria, Joaquim GOES, Columbia University, United States, Simon BÉLANGER, Université du Québec à Rimouski, Canada, Yann COURCOUX, Université de la Réunion, Reunion, Chris ROMAN, University of Rhode Island, United States, Allison FUNDIS, Ocean Exploration Trust, United States, Bill LANDING, Florida State University, United States, Nofel LAGROSAS, Ateneo De Manila University, Philippines, Pierre KERMEN, Université Joseph Fourier Grenoble 1, France, Francois DULAC, Laboratoire des Sciences du Climat et de l'Environnement (LSCE), France, Larysa ISTOMINA, Institute of Environmental Physics, University of Bremen, Germany, Leonid YURGANOV, University of Maryland - Baltimore County, United States, Nima PAHLEVAN, University of Massachusetts, United States, Norman O'NEILL, Université de Sherbrooke, Canada, David GILES, Sigma Space Corp. /NASA GSFC, United States, Ilya SLUTSKER, Sigma Space Corp. /NASA GSFC, United States, 2014.

116. Characterization of Aerosol Particles Inorganic Chemical Composition over the South-Eastern Baltic Sea, International Aerosol Conference, AF0730, K. Plauškaitė, N. Špirkauskaitė, T. Zielinski, T. Petelski, V. Ulevicius, 2014.
117. Aerosol optical properties studied in the Svalbard area during the iAREA campaign, REKLIM, Berlin, T. Petelski, P. Makuch, M. Chilinski, J. Lisok, Ch. Ritter, R. Neuber, R. Udisti, M. Mazzola, M. Gausa, J. Struzewska, J. Kaminski, K. Markowicz, T. Zielinski, A. Rozwadowska, 2014.
118. Optical properties of Arctic aerosols studied within the framework of the iAREA research program, REKLIM, Berlin, K. Markowicz, T. Zielinski, T. Petelski, I. Stachiewska, A. Rozwadowska, T. Stacewicz, M. Gausa, S. Blindheim, J. Struzewska, J. Kaminski, Sz. Malinowski, M. Chilinski, J. Lisok, P. Makuch, P. Pakszys, P. Markuszewski, A. Strzalkowska, 2014.