

RAFAELLA - ELENI P. SOTIROPOULOU

Assistant Professor

Department of Mechanical Engineering

University of Western Macedonia

Curriculum Vitae

CONTACT INFORMATION

Rafaella P. Sotiropoulou
Assistant Professor
University of Western Macedonia
Department of Mechanical Engineering
Bakola & Sialvera Str.
Kozani, 50132, GR

Phone: +30 2461056645

Fax: +30 2461056646

E-mail: rsotiropoulou@uowm.gr

Website: <http://users.uowm.gr/rsotiropoulou/>

PERSONAL INFORMATION

Date of Birth: November 12, 1976

Marital Status: Married with two children

Place of Birth: Mytilene, Lesvos, GR

EDUCATIONAL BACKGROUND

2005 – 2006 **Postdoctoral Fellow**, Georgia Institute of Technology, School of Earth and Atmospheric Sciences, Atlanta, GA, USA

1999 – 2005 **Ph.D** in Atmospheric Sciences, Environmental Engineering and Science Sector, Department of Environment, University of the Aegean, Greece

Thesis: Simulation of physicochemical processes of biogenic aerosols: Their impact on air quality and climate change in the Mediterranean area (in Greek).

1995 – 1999 **Diploma:** University of the Aegean, Department of Environment, Greece

Thesis: Anaerobic Processes in landfill sites – Model for the prediction of biogas production rate from landfills, (in Greek).

ACADEMIC APPOINTMENTS

12/2019-today **Assistant Professor** (GOV appointment 2279/Γ'/04-12-19)
Department of Mechanical Engineering, University of Western Macedonia, GR

12/2013 – 12/2019 **Lecturer** (GOV appointment 1402/04-12-2013)

Department of Mechanical Engineering, University of Western Macedonia, GR

LANGUAGES

Greek (Native Language)

English

German

French

RESEARCH BACKGROUND

- 2009 - 2013 **Research Scientist**, Institute of Nuclear & Radiological Sciences and Technology, Energy & Safety, N.C.S.R. "DEMOKRITOS", Greece
- 2006 - 2009 **Research Scientist II**, Georgia Institute of Technology, School of Earth and Atmospheric Sciences, Atlanta, GA, USA
- 2005 - 2006 **Postdoctoral Scholar**, Georgia Institute of Technology, School of Earth and Atmospheric Sciences, Atlanta, GA, USA
- 2005 **Postdoctoral Scholar**, University of the Aegean, Department of Environment, Greece
- 2002 - 2005 **Associate Research Scientist**, University of the Aegean, Department of Environment, Greece
- 2001 - 2004 **Associate Research Scientist**, N.C.S.R. "DEMOKRITOS", Greece

TEACHING EXPERIENCE

Undergraduate Courses:

Department of **Mechanical Engineering**, University of Western Macedonia

- Atmospheric Pollution (2016 – today)
- Numerical Analysis and Simulation (2014 – today)
- Computational Mechanics I (2019 – today)
- Computational Mechanics II (2014 – today)
- Emissions and Transport of Air Pollutants (2014 – 2015)
- Environmental Management (2014)

Department of **Chemical Engineering** (Former Environmental Engineering Dept.),

University of Western Macedonia

- Environmental Engineering Principles (2015 – 2018)
- Atmospheric Dynamics (2016 – today)
- Numerical Analysis and Simulation (2016 – today)

Department of **Informatics and Telecommunication Engineering**, University of Western Macedonia.

- Mathematical Modelling and Numerical Analysis (2015 – 2017)

Graduate Courses:

MSc Postgraduate Program “**Energy Resources Technologies and Management**”, Department of **Mechanical Engineering**, University of Western Macedonia

- Pollution Control Technologies in Energy Production (2017-Today, 19/39Hr)

SUPERVISION OF PhD , MSc AND UNDERGRADUATE THESIS

Supervision of PhD Thesis: 1

Supervision of MSc Thesis:

- Completed: 7
- In preparation: 4

Supervision of Undergraduate Thesis:

- Completed: 25
- In preparation: 9
- Member of Undergraduate examination committees (2016-today): ≥ 30

Member of PhD Supervising Committees: 1

Member of PhD Examination Committees: 1

PUBLICATIONS

A. REFEREED PUBLICATIONS IN JOURNALS

- A1. Tagaris, E., **R.E.P. Sotiropoulou**, C. Pilinis and C.P. Halvadakis (2003), Atmospheric Methane Transport near landfill Sites, *Waste Manage. Res.*, **21** (1), 62-73.
- A2. Tagaris, E., **R.E.P. Sotiropoulou**, C. Pilinis and C.P. Halvadakis (2003), A Methodology to Estimate Odors around Landfill Sites: The Use of Methane as an “Odor Index” and Its Utility in Landfill

- Siting, *J. Air Waste Manage.*, **53** (5), 629-634.
- A3. **Sotiropoulou, R.E.P.**, E. Tagaris and C. Pilinis (2004), An estimation of the spatial distribution of agricultural ammonia emissions in the Greater Athens Area, *Sci. Total Environ.*, **318**, 159-169.
- A4. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, S. Andronopoulos, A. Sfetsos and J.G. Bartzis (2004), The BOND project: Biogenic aerosols and air quality in Athens and Marseille Greater Areas, *J. Geoph. Res.*, **109**, D05205, doi:10.1029/2003JD003955.
- A5. Vlachogiannis, D., A. Sfetsos, A. Stubos, **R.E.P. Sotiropoulou**, E. Tagaris, C. Pilinis, W. Zhong, J.D. Haigh, D.O. Eriksen, S. Hartvig, C. Chatzichristos, J. Muller and R. Kleven (2005), Assessment of the Impact of SF₆ and PFCs Reservoir Tracers on Global Warming, the AEOLUS study, *Environ. Sci.*, **2**, (2-3) 263 – 272, doi: 10.1080/15693430500396170.
- A6. **Sotiropoulou, R.E.P.**, J. Medina, and A. Nenes (2006), CCN predictions: Is theory sufficient for assessment of the indirect effect?, *Geophys. Res. Lett.*, **33**, L05816, doi:10.1029/2005GL025148.
- A7. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, T. Anttila and M. Kulmala (2006), Modeling New Particle Formation During Air Pollution Episodes: Impacts on Aerosol and Cloud Condensation Nuclei, *Aeros. Sci. Tech.*, **40**, 557–572.
- A8. Medina, J., A. Nenes, **R.E.P. Sotiropoulou**, L.D. Cottrell, L.D. Ziemba, P.J. Beckman, and R.J. Griffin (2007), Cloud condensation nuclei closure during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign: Effects of size-resolved composition, *J. Geophys. Res.*, **112**, D10S31, doi:10.1029/2006JD007588.
- A9. **Sotiropoulou, R.E.P.**, A. Nenes, P.J. Adams, and J.H. Seinfeld (2007), Cloud condensation nuclei prediction error from application of Köhler theory: Importance for the aerosol indirect effect, *J. Geophys. Res.*, **112**, D12202, doi:10.1029/2006JD007834.
- A10. Meskhidze, N., **R.E.P. Sotiropoulou**, A. Nenes, J. Kouatchou, B. Das and J. M. Rodriguez (2007), Aerosol - cloud interactions in the NASA GMI: Model development and indirect forcing assessments for sulfate aerosol, *Atmos. Chem. Phys. Discuss.*, **7**, 14295-14330, doi: 10.5194/acpd-7-14295-2007
- A11. Barahona, D., **R.E.P. Sotiropoulou** and A. Nenes (2011), Global distribution of cloud droplet number concentration, autoconversion rate and aerosol indirect effect under diabatic droplet activation, *J. Geophys. Res.*, **116**, D09203, doi:10.1029/2010JD015274.
- A12. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis (2013), Air quality over Europe: modelling gaseous and particulate pollutants, *Atmos. Chem. Phys.*, **13**, 9661-9673, doi:10.5194/acp-13-9661-2013.
- A13. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis (2014), Impact of biogenic emissions on ozone and fine particles over Europe: Comparing effects of temperature increase and a potential anthropogenic NO_x emissions abatement strategy, *Atmos. Environ.*, **98**, 214-223.
- A14. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis (2015), Effect of the Standard Nomenclature for Air Pollution (SNAP) Categories on Air Quality over

Europe. *Atmosphere*, 6, 1119-1128.

- A15. Tagaris, E., I. Stergiou and **R.E.P. Sotiropoulou** (2017), Impact of shipping emissions on ozone levels over Europe: assessing the relative importance of the Standard Nomenclature for Air Pollution (SNAP) categories. *Environ. Sci. Pollut. Res.*, 24: 14903. doi:10.1007/s11356-017-9046-x.
- A16. Sotiropoulou R.E.P., M. Serafidou, G. Skodras (2019), Thermal mercury removal from coals: Effect of pyrolysis conditions and kinetic analysis. *Fuel*, 238, 44-50, <https://doi.org/10.1016/j.fuel.2018.10.073>.

B. BOOK CHAPTERS

- B1. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, T. Anttila, and M. Kulmala, Modeling new particle formation in the Greater Athens Area, Report Series in Aerosol Science, Eds. M. Kulmala and T.M. Ruuskanen, 73, pp. 288-292, 2004
- B2. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, Assessing impacts of meteorology and climate on invasive mosquitoes in S.E. Europe during LIFE CONOPS Project: Preliminary results, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, ebook of proceedings, Crete University Press, Eds. M. Kanakidou, N. Mihalopoulos, P. Nastos, Vol. 3, pp 170, ISBN: 978-960-524-430-9, 2014
- B3. Tagaris E., **R.E.P. Sotiropoulou**, N Gounaris, S. Andronopoulos, and D. Vlachogiannis, Modeling air pollution in Europe and the role of anthropogenic and biogenic emissions, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, ebook of proceedings, Crete University Press, Eds. M. Kanakidou, N. Mihalopoulos, P. Nastos, Vol. 3, pp 186, ISBN: 978-960-524-430-9, 2014
- B4. Megaritis A.G., C. Fountoukis, E. Tagaris, **R.E.P. Sotiropoulou**, A. Sfetsos, D. Vlachogiannis, and S.N. Pandis, Effects of climate change on summertime air quality in Greece, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, ebook of proceedings, Crete University Press, Eds. M. Kanakidou, N. Mihalopoulos, P. Nastos, Vol. 2, pp 226, ISBN: 978-960-524-430-9, 2014
- B5. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, Regional estimates of global climate change: a dynamical downscaling approach to Southeast Europe, In: Energy, Transportation and Global Warming, ISBN 978-3-319-30127-3, edited by Springer Editions, 2016. (see more details in <http://www.springer.com/gp/book/9783319301266>).
- B6. **Sotiropoulou R.E.P.**, E. Tagaris, Impact of shipping emissions on European air quality, Perspectives on Atmospheric Sciences, ISBN 978-3-319-35094-3, Eds. T. Karacostas, A. Bais, P. T. Nastos, edited by Springer Editions, 2017
- B7. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, Climate change impact on the establishment of the Invasive Mosquito Species (IMS), Perspectives on

Atmospheric Sciences, ISBN 978-3-319-35094-3, Eds. T. Karacostas, A. Bais, P. T. Nastos, edited by Springer Editions, 2017

C. CONFERENCE PROCEEDINGS

2001

- C1. **Sotiropoulou, R.E.P.** and C. Pilinis. *Modeling of photochemical pollution in Athens, Greece – Application of the UAM-AERO and CALGRID modeling systems*. Proceedings of the 7th International Conference of Environmental Science and Technology, Ermoupolis, Syros Island, Greece, 2001.
- C2. Tagaris, E., **R.E.P. Sotiropoulou**, C. Pilinis and C.P. Halvadakis. *Methane as Odor Index in Landfill Sites*, 7th International Conference on Environmental science and Technology, Ermoupolis, Syros Island, Greece, September 2001.

2003

- C3. **Sotiropoulou R.E.P.**, E. Tagaris, C. Pilinis, S. Andronopoulos, N. Gounaris, A. Sfetsos, J.G. Bartzis, *Application of the UAM-AERO model in the Greater Athena Area*, 4th International Conference on Urban air Quality – Measurements, Modelling and Management, Prague, March 2003
- C4. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, S. Andronopoulos, N. Gounaris, A. Sfetsos, J.G. Bartzis, *Estimation of particulate matter concentrations in the Greater Athens Area by means of the UAM-AERO model*, 8th International Conference on Environmental science and Technology, Limnos Island, Greece, September 2003
- C5. Tagaris, E., **R.E.P. Sotiropoulou**, C. Pilinis and C.P. Halvadakis, *Methane production and dispersion around landfill sites*, 8th International Conference on Environmental science and Technology, Limnos Island, Greece, September 2003

2004

- C6. **Sotiropoulou, R.E.P.**, E. Tagaris and C. Pilinis, *Evaluation of the UAM-AERO and CAMx air quality models using the BOND study database*, Protection and Restoration of the Environment VII, Mykonos, Greece, June 2004
- C7. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, D. Vlachogiannis, A. Sfetsos, N. Gounaris, A. Stubos, C. Chatzichristos and R. Kleven. *Estimation of the effects of SF6 and PFCs reservoir tracers on atmospheric quality in the North Sea using data from the AEOLOS study*, 13th World Clean Air Congress, London, UK, August 2004
- C8. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, S. Andronopoulos, A. Sfetsos and J.G. Bartzis, *The BOND project: Contribution of biogenic emission to the aerosol budget in the Mediterranean*

area, European Aerosol Conference (EAC'2004), Budapest, Hungary, September 2004

- C9. Sfetsos, A., D. Vlachogiannis, N. Gounaris, A. Stubos, **R.E.P. Sotiropoulou**, E. Tagaris, C. Pilinis, C. Chatzichistos and R. Kleven, *A methodology for the identification and prediction of weather types using data mining methodologies*, 18th International Conference Informatics for the Environmental Protection, Geneva, Switzerland, October 2004
- C10. Tagaris E., **R.E.P. Sotiropoulou**, and C.P. Halvadakis, *Methodology for estimating types and quantity of landfilled solid waste: the case of Mytilene Municipality (Greece)*, ISWA World Environment Congress and Exhibition, Rome, Italy, October 2004

2005

- C11. Vlachogiannis, D., **R.E.P. Sotiropoulou**, A. Sfetsos, W. Zhong, J. D. Heigh, D. Erisken, S. Hartving, C. Chatzichistos, E. Tagaris, C. Pilinis, R. Kleven, A. Stubos, and J. Muller, *Assessment of the Impact of SF6 and PFCs Reservoir Tracers on Global Warming, the AEOLOS study*, 4th International Symposium on Non-CO2 Greenhouse Gases (NCGG-4) Science, Control, Policy and Implementation, Utrecht, The Netherlands, July 2005
- C12. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, T. Anttila and M. Kulmala, *Estimation of new particle formation in Greater Athens Area*, European Aerosol Conference (EAC'2005), Ghent, Belgium, August 2005
- C13. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, *How biogenic emissions affect aerosol concentrations and radiative forcing in the Mediterranean area*, 24th Annual Conference American Association for Aerosol Research (AAAR 2005), Austin, Texas, USA, October 2005
- C14. **Sotiropoulou, R.E.P.**, E. Tagaris, C. Pilinis, T. Anttila and M. Kulmala, *Modeling new particle formation in the Mediterranean area*, 24th Annual Conference, American Association for Aerosol Research (AAAR 2005), Austin, Texas, USA, October 2005
- C15. **Sotiropoulou, R.E.P.**, J. Medina, and A. Nenes, *CCN predictions: is theory sufficient for indirect forcing calculations?*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2005

2006

- C16. **Sotiropoulou, R.E.P.**, A. Nenes, P.J. Adams and J.H. Seinfeld, *Uncertainty in Aerosol Indirect Effect from CCN prediction errors: a Global Modeling Assessment*, 7th International Aerosol Conference, American Association for Aerosol Research (IAC 2006), St. Paul, Minnesota, USA, October 2006
- C17. Hsieh, W.C, **R.E.P. Sotiropoulou** and A. Nenes, *Parameterization of cloud droplet formation and autoconversion in large-scale models*, 7th International Aerosol Conference, American Association for Aerosol Research (IAC 2006), St. Paul, Minnesota, USA, October 2006

- C18. **Sotiropoulou, R.E.P.**, N. Meskhidze and A. Nenes, *Sensitivity of aerosol indirect forcing and autoconversion to cloud droplet parameterization: an assessment with the NASA Global Modeling Initiative*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2006

2007

- C19. **Sotiropoulou, R.E.P.**, N. Meskhidze, and A. Nenes, *Sensitivity of aerosol indirect forcing and autoconversion to cloud formation parameterization, meteorological field and emission scenarios: An assessment with the NASA Global Modeling Initiative (GMI)*, Geophysical Research Abstracts, Vol. 9, 00981, EGU General Assembly, Vienna, Austria, April 2007
- C20. **Sotiropoulou, R.E.P.**, N. Meskhidze, and A. Nenes, *Aerosol – cloud interactions: Sensitivity of indirect effects to cloud formation parameterization, meteorological fields, and emission scenario*, 26th Annual Conference, American Association for Aerosol Research (AAAR 2007), Reno, Nevada, USA, September 2007
- C21. **Sotiropoulou, R.E.P.**, N. Meskhidze, and A. Nenes, *Aerosol – cloud interactions using the NASA Global Modeling Initiative (GMI)*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2007

2008

- C22. **Sotiropoulou, R.E.P.**, N. Meskhidze, J. Kouatchou, L. Oreopoulos, J. M. Rodriguez and A. Nenes, *Aerosol - cloud interactions in the NASA GMI: Sensitivity of indirect effects to cloud formation parameterization and meteorological fields*, European Aerosol Conference (EAC'2008), Thessaloniki, Greece, August 2008
- C23. **Sotiropoulou, R.E.P.**, J. Kouatchou, L. Oreopoulos, N. Meskhidze, J. M. Rodriguez and A. Nenes, *Sensitivity of indirect effects to cloud formation parameterization and meteorological fields*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2008
- C24. Barahona, D., R.E.P. Sotiropoulou and A. Nenes, *The Importance of Entrainment on Cloud Droplet Number and Indirect Forcing*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2008

2009

- C25. **Sotiropoulou, R.E.P.**, N. Meskhidze, J. Kouatchou, L. Oreopoulos, J. M. Rodriguez and A. Nenes, *Sensitivity of indirect effects to cloud formation parameterizations and meteorological fields*, 18th International Conference on Nucleation and Atmospheric Aerosols (ICNAA), Prague, Czech Republic, August 2009

2010

- C26. Tagaris E., A. Sfetsos, D. Vlachogiannis, S. Andronopoulos, **R.E.P. Sotiropoulou** and N.

Gounaris, *Sensitivity of Ozone and Particulate Matter Concentrations in Greater Athens Area, Greece*, 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (HARMO13), Paris, France, June 2010

- C27. **Sotiropoulou, R.E.P.**, N. Meskhidze, J. Kouatchou, L. Oreopoulos, J. M. Rodriguez and A. Nenes, *Aerosol - cloud interactions in the NASA GMI: Sensitivity of the first aerosol indirect effect to cloud formation parameterization under three different meteorological fields*, International Aerosol Conference (IAC), Helsinki, Finland, August 2010
- C28. Karydis, V., P. Kumar, D. Barahona, I. Sokolik, A. Nenes and **R.E.P. Sotiropoulou**, *On the effect of insoluble dust particles on global CCN and droplet number*, 29th Annual Conference, American Association for Aerosol Research (AAAR 2010), Portland, Oregon, USA, October 2010
- C29. Karydis, V., P. Kumar, D. Barahona, **R.E.P. Sotiropoulou**, I. Sokolik, and A. Nenes, *On the effect of insoluble dust particles on global CCN and droplet number*, American Geophysical Union (AGU), Fall Meeting, San Francisco, California, USA, December 2010

2011

- C30. Sotiropoulou, R.E.P., N. Meskhidze, J. Kouatchou, L. Oreopoulos, J. M. Rodriguez and A. Nenes, *Sensitivity of cloud radiative forcing to cloud formation parameterization under three different meteorological fields*, European Aerosol Conference (EAC), Manchester, UK, September 2011
- C31. Barahona, D., **R.E.P. Sotiropoulou**, A. Nenes, *Global distribution of cloud droplet number concentration, autoconversion rate and first aerosol indirect effect under diabatic droplet activation*, European Aerosol Conference (EAC), Manchester, UK, September 2011
- C32. Tagaris E., **R.E.P. Sotiropoulou**, N. Gounaris and S. Andronopoulos, *Modelling PM_{2.5} concentrations over Europe*, European Aerosol Conference (EAC2011), Manchester, UK, September 2011
- C33. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris and S. Andronopoulos, *Air quality over Europe: application of CMAQ modelling system*, 14th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos, Greece, October 2011

2012

- C34. **Sotiropoulou, R.E.P.**, E. Tagaris, N. Meskhidze, J. Kouatchou, L. Oreopoulos, J. M. Rodriguez, and A. Nenes, *Sensitivity of cloud radiative forcing to emission inventory and cloud formation parameterization*, 8th International Conference on Air Quality – Science and Application, Athens, Greece, March 2012
- C35. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris and S. Andronopoulos, *Atmospheric pollution in Europe: Modelling setup and evaluation*, 8th International Conference on Air Quality – Science

and Application, Athens, Greece, March 2012

- C36. **Sotiropoulou, R.E.P.**, E. Tagaris, N. Meskhidze, J. Kouatchou, L. Oreopoulos, J.M. Rodriguez and A. Nenes, *Are indirect forcing estimates sensitive to cloud formation parameterizations, emission scenarios and meteorological fields?* European Aerosol Conference (EAC), Granada, Spain, September 2012
- C37. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris and S. Andronopoulos, *Effect of precursor emissions to PM_{2.5} concentrations over Europe*, European Aerosol Conference (EAC), Granada, Spain, September 2012

2013

- C38. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris and S. Andronopoulos, *Impact of biogenic emissions on air quality over Europe*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2013
- C39. **Sotiropoulou, R.E.P.** and E. Tagaris, *The importance of organic compounds for the first aerosol indirect effect: sensitivity to cloud formation parameterizations and meteorological fields*. European Aerosol Conference (EAC), Prague, Czech Republic, September 2013
- C40. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis, *Impact of biogenic emissions on PM_{2.5} concentration over Europe*, European Aerosol Conference (EAC), Prague, Czech Republic, September 2013

2014

- C41. Michaelakis, A., A. Sotiropoulos, I. Spanos, P. Milonas, **R.E.P. Sotiropoulou** and E. Tagaris, *LIFE CONOPS: Development and demonstration of management plans against -the climate change enhanced- invasive mosquitoes in S. Europe*, International Conference: Adapt to Climate, Nicosia, Cyprus, March 2014
- C42. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos, and D. Vlachogiannis, *Impact of biogenic emissions on ozone and fine particles over Europe: Assessing the effect of temperature increase and the role of anthropogenic NO_x emissions reduction*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2014
- C43. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, and A. Michaelakis, *Impact of climate change on invasive mosquito species in S.E. Europe*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2014
- C44. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Assessing impacts of meteorology and climate on invasive mosquitoes in S.E. Europe during LIFE CONOPS Project: Preliminary results*, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Heraklion, May 2014

- C45. Tagaris E., **R.E.P. Sotiropoulou**, N Gounaris, S. Andronopoulos, and D. Vlachogiannis, *Modeling air pollution in Europe and the role of anthropogenic and biogenic emissions*, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Heraklion, May 2014
- C46. Megaritis A.G., C. Fountoukis, E. Tagaris, **R.E.P. Sotiropoulou**, A. Sfetsos, D. Vlachogiannis, and S.N. Pandis, *Effects of climate change on summertime air quality in Greece*, 12th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Heraklion, May 2014
- C47. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Climate change impact on invasive mosquito species in S.E. Europe*, 12th International Conference on Protection and Restoration of the Environment, Skiathos Island, Greece, June 2014
- C48. Tagaris E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis, *Assessment of ambient air quality in European countries using CMAQ*, PRE12 International Conference “Protection & Restoration of the Environment”, Skiathos Island, June 2014

2015

- C49. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, and A. Michaelakis, *Estimating climate change for Southeast Europe: a dynamical downscaling approach*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2015
- C50. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis, *The effect of the Standard Nomenclature for Air Pollution (SNAP) categories on ozone and PM2.5 concentrations over Europe*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2015
- C51. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Regional estimates of global climate change: a dynamical downscaling approach to Southeast Europe*, Global Conference on Global Warming (GCGW-15), Athens, Greece, May 2015
- C52. **Sotiropoulou, R.E.P.**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Downscaling of global climate change estimates to regional scales: the case of Greece*, 10th Chemical Engineering National Conference. Patra, Greece, June 2015
- C53. Tagaris, E., **R.E.P. Sotiropoulou**, N. Gounaris, S. Andronopoulos and D. Vlachogiannis, *Anthropogenic emissions and air quality: assessing the effect of the Standard nomenclature for air pollution (SNAP) categories over Europe*, 10th Chemical Engineering National Conference. Patra, Greece, June 2015
- C54. Michaelakis, A., **R.E.P. Sotiropoulou**, E. Tagaris, A. Sotiropoulos, I. Spanos, P. Milonas, *A risk*

database for the future establishment of Invasive Mosquito Species in Greece and Italy, 16th National Entomological Conference, Heraklion, Greece, October 2015

2016

- C55. **Sotiropoulou R.E.P.**, E. Tagaris, *Air pollution from ships over Europe*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2016
- C56. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Development of a risk database for the establishment of invasive mosquito species under impacts of climate change*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2016
- C57. Stergiou J., E. Tagaris, **R.E.P. Sotiropoulou**, *LIFE CLIMATREE project: A novel approach for accounting and monitoring carbon sequestration of tree crops and their potential as carbon sink areas*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2016
- C58. Stergiou, J., E. Tagaris, **R.E.P. Sotiropoulou**, *Sensitivity Analysis of Climate Change Projection to the Grid Size Resolution over Mediterranean*. The 1st International Electronic Conference on Atmospheric Sciences, Sciforum Electronic Conference Series, Vol. 1, 2016, D002; doi:10.3390/ecas2016-D002, July 2016
- C59. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, D. Papachristos, R. Bellini, P. Milonas, and A. Michaelakis. *The distribution of Aedes aldopictus in Greece: current state and future risk maps*, 3rd Conference on Neglected Vectors and Vector-Borne Diseases (EurNegVec): with MC and WG Meeting of the COST Action TD1303, , Zaragoza, Spain, May 2016
- C60. Michaelakis, A., **R.E.P. Sotiropoulou**, E. Tagaris, A. Sotiropoulos, I. Spanos, D. Papachristos, R. Bellini, P. Milonas, *The risk of new Invasive Mosquito Species in southeast Europe: current state and future risk maps*, XXV International Congress of Entomology, Orlando, Florida, USA, September 2016
- C61. **Sotiropoulou R.E.P.**, E. Tagaris, *Impact of shipping emissions on European air quality*, 13th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Thessaloniki, September 2016
- C62. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, P. Milonas, A. Michaelakis, *Climate change impact on the establishment of the Invasive Mosquito Species (IMS)*, 13th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Thessaloniki, September 2016
- C63. Stergiou J., E. Tagaris, **R.E.P. Sotiropoulou**, *Life ClimaTree project: Accounting the tree crops carbon sequestration in S. Europe for current and future climatic conditions*, 13th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Thessaloniki,

September 2016

2017

- C64. **Sotiropoulou R.E.P.**, I. Stergiou, and E. Tagaris, *Projection of future changes in climate in the Mediterranean Region*, European Geosciences Union (EGU), General Assembly 2017, Vienna, Austria, April 2017
- C65. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, P. Milonas, and A. Michaelakis, *Climate change impact on the establishment and seasonal abundance of Invasive Mosquito Species: current state and future risk maps over southeast Europe*, European Geosciences Union (EGU), General Assembly 2017, Vienna, Austria, April 2017
- C66. Stergiou I., **R.E.P. Sotiropoulou** and E. Tagaris, *Effect of shipping emissions on European ground-level ozone*, European Geosciences Union (EGU), General Assembly 2017, Vienna, Austria, April 2017
- C67. **Sotiropoulou R.E.P.**, I. Stergiou, and E. Tagaris, *Estimation of future climate change in the Mediterranean area*, 11th Chemical Engineering National Conference. Thessaloniki, Greece, May 2017
- C68. Tagaris E., **R.E.P. Sotiropoulou**, A. Sotiropoulos, I. Spanos, P. Milonas, and A. Michaelakis, *The impact of climate change on the establishment and seasonal abundance of invasive mosquito species: Current state and future appropriateness of south-eastern European regions*, 11th Chemical Engineering National Conference. Thessaloniki, Greece, May 2017
- C69. Stergiou, J., **R.E.P. Sotiropoulou**, E. Tagaris, *Impact of shipping emissions on ozone concentrations over Europe*, 11th Chemical Engineering National Conference. Thessaloniki, Greece, July 2017
- C70. Georgaki V., V. Toka, I. Stergiou, E. Tagaris, D. Kolokotronis, **R.E.P. Sotiropoulou**, *Impacts of climate change on energy production efficiency*, 2nd HAEE Energy Conference, Athens, May 2017
- C71. Stergiou, J., E. Tagaris, **R.E.P. Sotiropoulou**. *Sensitivity assessment of WRF parameterizations over Europe*. In Proceedings of the 2nd Int. Electron. Conf. Atmos. Sci., 16–31 July 2017; Sciforum Electronic Conference Series, Vol. 2, 2017; doi:10.3390/ecas2017-04138

2018

- C72. **Sotiropoulou, R.E.P.**, I. Stergiou., E. Tagaris, *Climate change projection over Mediterranean under RCP4.5 and RCP8.5*, European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2018
- C73. Stergiou I., E. Tagaris, **R.E.P. Sotiropoulou**, *A comprehensive sensitivity analysis of the WRF model parameterizations over Europe*, European Geosciences Union (EGU) General Assembly,

Vienna, Austria, April 2018

- C74. **Sotiropoulou, R.E.P.**, J. Stergiou., E. Tagaris, *High-resolution downscaling of climate projections for temperature and precipitation over the Mediterranean Region*, 14th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Alexandroupoli, September 2018,
- C75. Stergiou, J., E. Tagaris, **R.E.P. Sotiropoulou**, *Calibrating WRF model to surface temperature over Europe*, 14th International Conference on Meteorology, Climatology and Atmospheric Physics, COMECAP, Alexandroupoli, September 2018,

2019

- C76. **Sotiropoulou R.E.P.**, I. Stergiou and E. Tagaris, Comparison of precipitation change projections between two RCPs over Southern Europe, European Geosciences Union (EGU), General Assembly 2019, Vienna, Austria, April 2019
- C77. Tagaris E., I. Stergiou, **R.E.P Sotiropoulou**, Projected Changes in Temperature and Precipitation for the southeast European region, European Geosciences Union (EGU), General Assembly 2019, Vienna, Austria, April 2019

D. TRANSLATIONS IN GREEK OF SCIENTIFIC PUBLICATIONS

- D1. Environmental modeling: Fate and transport of pollutants in water, air, and soil. Jerald L. Schnoor, John A. Wiley & Sons, Inc., New York, NY, (1996), 704 Pages, [ISBN No.: 978-0-471-12436-8]. Translation in Greek, Tziolas Eds. (2016), 800 pages, ISBN: 978-960-418-573-3

E. WORKSHOPS AND INVITED SEMINARS IN SYMPOSIUMS

- E1. **Sotiropoulou, R.E.P.**, and A. Nenes, *Impact of CCN Prediction Uncertainty on the Aerosol Indirect Effect: A Global Modeling Assessment*, 4th Annual UCAR/NCAR Early Career Scientists Assembly (ECSA) Junior Faculty Forum on Future Scientific Directions (JFF), Boulder, Colorado, August 1- 3, 2006
- E2. **Sotiropoulou, R.E.P.**, and A. Nenes, *Understanding aerosol-cloud interactions: A modeling approach*, Gordon Research Conference in Atmospheric Chemistry, Big Sky, MT, August 2007

Z. DISSERTATIONS - MONOGRAPHS

- Z1. **PhD Thesis:** Simulation of physicochemical processes of biogenic aerosols: Their impact on air quality and climate change in the Mediterranean area (in Greek).
- Z2. **Undergraduate Thesis:** Anaerobic Processes in landfill sites – Model for the prediction of biogas production rate from landfills, (in Greek).

H. OTHER PUBLICATIONS

- H1. Stergiou, J., **R.E.P. Sotiropoulou**, E. Tagaris, *Impact of shipping emissions on ozone concentrations over Europe*. Technical Inspection, vol. 278, Sept. – Oct. 2017

SCIENTIFIC MEMBERSHIPS

- European Geophysical Union (EGU)
- Hellenic Association for Aerosol Research (HAAR)
- Hellenic Association of Environmental Scientist