

Riinu Ots

Curriculum Vitae

May 2018

PERSONAL DETAILS

Email	R.Ots@ed.ac.uk
Website	https://riinu.me/
Presentations	https://speakerdeck.com/riinuots/
GitHub	https://github.com/riinuots/

EDUCATION

PhD Environmental Chemistry

2012 - 2016

University of Edinburgh

Thesis: "High resolution modelling of particulate matter air quality over the UK"

Supervisors: Dr. Mathew R. Heal, Dr. Massimo Vieno, Dr. Stefan Reis

BSc Physics (First class equivalent)

2009 - 2012

University of Tartu

WORK AND TEACHING EXPERIENCE

Data Manager

2016 - current

Clinical Surgery, Deanery of Health Sciences, University of Edinburgh

Demonstrator and tutor

2013 - 2016

School of Geosciences, University of Edinburgh

Specialist in numerical modelling (Part-time: 0.1)

2012 - 2015

Laboratory of Atmospheric Physics, University of Tartu

Lab assistant in numerical modelling (Part-time: 0.4)

2012 - 2015

Laboratory of Atmospheric Physics, University of Tartu

Intern in air quality modelling

Aug-Oct 2011

NERC Centre for Ecology & Hydrology, Edinburgh

Field Biologist

Jun-Aug 2010

Estonian Fund for Nature, Estonia

GRANTS AND AWARDS

Principal's Teaching Award Scheme	2017
<i>University of Edinburgh: For further development of www.shinystats.org</i>	
£5,000	
Estonian Students Fund in USA	2013
<i>PhD travel bursary</i>	
\$3,000	
Estonian Students Fund in USA	2013
<i>PhD travel bursary</i>	
\$2,000	
PhD stipend	2012-2016
<i>NERC-CEH fully funded studentship</i>	
£60,000	
III award - Young researchers	2012
<i>32nd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, Work: "Scale-dependent and seasonal performance of SILAM model in Estonia"</i>	
\$350	
II award in Environmental Sciences	2009
<i>Intel International Science and Engineering Fair, Work: "Implementation of Thermal Plume Rise in SILAM Atmospheric Dispersion Model":</i>	
\$1,500	
The award included the naming of an asteroid after me: 25616_Riinuots.	

REVIEWING

Grant proposals: Cancer Innovation Challenge	2017- ...
<i>Organiser: The Data Lab</i>	
Peer-review	2016
<i>Journal: Palgrave Communications</i>	
Peer-review	2016
<i>Journal: Environmental Pollution</i>	
Students' Research Projects Competition	2012 - 2014
<i>Organiser: Estonian Research Council</i>	

PRESENTATIONS AT INTERNATIONAL CONFERENCES

Plenary presentation	2017 New York, US
<i>"Reporting Apps"</i>	
REDCapCon - Research Electronic Data Capture conference	

Poster presentation

2017
Helsinki,
Finland

“ShinyStats: A new, interactive and engaging way to tutor trainee surgeons in statistics”

Association for Medical Education in Europe (AMEE) conference

Demonstration

2017
Manchester,
UK

“HealthyR: R for healthcare data analysis”

Informatics for Health

Oral presentation

2015
Montpellier,
France

“Model-measurement comparisons of speciated primary and secondary organic aerosol in London”

34th International Technical Meeting on Air Pollution Modelling and its Application

Poster presentation

2013
Miami, US

“Modelling Past and Future Changes in Secondary Inorganic Aerosol Concentrations in the UK.”

33rd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application

Poster presentation

2012
Utrecht,
Netherlands

“Scale-Dependent and Seasonal Performance of SILAM Model in Estonia”

32nd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application

Oral presentation

2011
Kos, Greece

“Atmospheric transport model applied to understand the effect of biogenic emissions to secondary atmospheric aerosol in hemiboreal zone.”

11th conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos, Greece

Poster presentation

2010
Turin, Italy

“A Wintertime Local-to-Regional Scale Test Case Study of SILAM Model”

31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application

JOURNAL PAPERS

Ots R., Heal, M. R., Young, D. E., Williams, L. R., Allan, J. D., Nemitz, E., Di Marco, C., Detournay, A., Xu, L., Ng, N. L., Coe, H., Herndon, S. C., Mackenzie, I. A., Green, D. C., Kuenen, J. J. P., Reis, S., and Vieno, M.: Modelling carbonaceous aerosol from residential solid fuel burning with different assumptions for emissions, *Atmospheric Chemistry and Physics*, doi:[10.5194/acp-2017-568](https://doi.org/10.5194/acp-2017-568), 18: 4497–4518, 2018.

GlobalSurg Collaborative: Surgical site infection after gastrointestinal surgery in high-income, middle-income, and low-income countries: a prospective, international, multicentre cohort study, *The Lancet Infectious Diseases*, doi:[10.1016/S1473-3099\(18\)30101-4](https://doi.org/10.1016/S1473-3099(18)30101-4), 18: 516–525, 2018.

McLean, K. A., Camilleri-Brennan, J., Knight, S. R., Drake, T. M., **Ots R.**, Shaw, C. A., Wigmore, S. J. and Harrison, E. M.: Decision modeling in donation after circulatory death liver transplantation., *Liver Transplantation*, 23: 594–603 doi:[10.1002/lt.24715](https://doi.org/10.1002/lt.24715), 2017.

Ots R., Vieno, M., Allan, J. D., Reis, S., Nemitz, E., Young, D. E., Coe, H., Di Marco, C., Detournay, A., Mackenzie, I. A., Green, D. C., and Heal, M. R.: Model simulations of cooking organic aerosol (COA) over the UK using estimates of emissions based on measurements at two sites in London, *Atmospheric Chemistry and Physics*, 16: 13 773–13 789, doi:[10.5194/acp-16-13773-2016](https://doi.org/10.5194/acp-16-13773-2016), 2016.

Ots R., Young, D. E., Vieno, M., Xu, L., Dunmore, R. E., Allan, J. D., Coe, H., Williams, L. R., Herndon, S. C., Ng, N. L., Hamilton, J. F., Bergström, R., Di Marco, C., Nemitz, E., Mackenzie, I. A., Kuenen, J. J. P., Green, D. C., Reis, S., and Heal, M. R.: Simulating secondary organic aerosol from missing diesel-related intermediate-volatility organic compound emissions during the Clean Air for London (ClearfLo) campaign, *Atmos. Chem. Phys.*, 16: 6453–6473, doi:[10.5194/acp-16-6453-2016](https://doi.org/10.5194/acp-16-6453-2016), 2016.

V. Toll, K. Reis, **Ots R.**, M. Kaasik, A. Männik, M. Prank, and M. Sofiev. SILAM and MACC reanalysis aerosol data used for simulating the aerosol direct radiative effect with the NWP model HARMONIE for summer 2010 wildfire case in Russia. *Atmospheric Environment*, 121: 75–85, doi:[10.1016/j.atmosenv.2015.06.007](https://doi.org/10.1016/j.atmosenv.2015.06.007), 2015.

M. Vieno, M. R. Heal, M. Twigg, I. A. Mackenzie, C. F. Braban, J. Lingard, S. Ritchie, R. Beck, A. Möring, **Ots R.**, C. Di Marco, E. Nemitz, M. Sutton, and S. Reis. The UK particulate matter air pollution episode of March–April 2014: more than Saharan dust. *Environmental Research Letters*, 11(4): 44004, doi:[10.1088/1748-9326/11/4/044004](https://doi.org/10.1088/1748-9326/11/4/044004), 2015.

A. Loot, **Ots R.**, M. Kaasik, and H. Iher. Atmospheric transport model applied to understand the effect of biogenic emissions to secondary atmospheric aerosol in hemiboreal zone. *International Journal of Environment and Pollution*, 50(1-4): 342–350, doi:[10.1504/IJEP.2012.051205](https://doi.org/10.1504/IJEP.2012.051205), 2012.

- J. Pavlenkova, M. Kaasik, E.-S. Kerner, A. Loot, and **Ots R.**. The Impact of Meteorological Parameters on Sulphuric Air Pollution in Kohtla-Järve. *Oil Shale*, 28(2): 337–352, doi:[10.3176/oil.2011.2.07](https://doi.org/10.3176/oil.2011.2.07), 2011.
- M. Kaasik, T. Ploompuu, **Ots R.**, E. Meier, H. Ohvri, O. Okulov, H. Teral, L. Neiman, V. Russak, A. Kallis, and P. Post. Growth Acceleration of Pinus Sylvestris in Bog Stands Due to Intensified Nutrient Influx from the Atmosphere. *Oil Shale*, 25(1): 75–93, doi:[10.3176/oil.2008.1.08](https://doi.org/10.3176/oil.2008.1.08), 2008.

CONFERENCE PROCEEDINGS

- R. Ots**, A. Dore, Y. S. Tang, C. F. Braban, M. Vieno, and M. Sutton. Modelling Past and Future Changes in Secondary Inorganic Aerosol Concentrations in the UK. In D. G. Steyn and R. Mathur, editors, *Air Pollution Modeling and its Application XXIII*, Springer Proceedings in Complexity, pages 179–182. Springer International Publishing, doi:[10.1007/978-3-319-04379-1_29](https://doi.org/10.1007/978-3-319-04379-1_29), 2014.
- R. Ots**, A. Loot, and M. Kaasik. Scale-Dependent and Seasonal Performance of SILAM Model in Estonia. In D. G. Steyn, P. J. H. Builtjes, and R. M. A. Timmermans, editors, *Air Pollution Modeling and its Application XXII*, NATO Science for Peace and Security Series C: Environmental Security, pages 593–597. Springer Netherlands, doi:[10.1007/978-94-007-5577-2_100](https://doi.org/10.1007/978-94-007-5577-2_100), 2013.
- R. Ots**, A. Loot, and M. Kaasik. A Wintertime Local-to-Regional Scale Test Case Study of SILAM Model. In D. G. Steyn and S. T. Castelli, editors, *Air Pollution Modeling and its Application XXI*, NATO Science for Peace and Security Series C: Environmental Security, pages 539–542. Springer Netherlands, doi:[10.1007/978-94-007-1359-8_90](https://doi.org/10.1007/978-94-007-1359-8_90), 2011.