Luxi Zhou, NRC Research Associate, in EPA's National Exposure Research Laboratory

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Area of Expertise: My work in the Atmospheric Model Application and Analysis Branch involves the development and application of source apportionment technique ISAM to Community Multiscale Air Quality model (CMAQ). My current research focuses on the multiple impacts of open fires.

Select Publications:

L. Zhou, R. Gierens, A. Sogachev, D. Mogensen, J. Ortega, J. N. Smith, P. C. Harley, A. J. Prenni, E. J. T. Levin, A. Turnipseed, A. Rusanen, S. Smolander, A. B. Guenther, M. Kulmala, T. Karl and M. Boy. C*ontribution from biogenic organic compounds to particle growth during the 2010 BEACHON-ROCS campaign in a Colorado temperate needle leaf forest.* Atmos. Chem. Phys., 15, 8643-8656, 2015.

L. Zhou, T. Nieminen, D. Mogensen, S. Smolander, A. Rusanen, M. Kulmala and M. Boy. *SOSAA – A new model to simulate the concentrations of organic vapours, sulphuric acid and aerosols inside the ABL – Part 2: Aerosol dynamics.* Boreal Env. Res., 19 (suppl. B): 237–256, 2014.

M. Boy, D. Mogensen, S. Smolander, **L. Zhou**, T. Nieminen, P. Paasonen, C. Plass-Dülmer, M. Sipilä, T. Petäjä, L. Mauldin, H. Berresheim and M. Kulmala. *Oxidation of SO2 by stabilized Criegee intermediate (sCI) radicals as a crucial source for atmospheric sulfuric acid concentrations.* Atmos. Chem. Phys., 13, 3865–3879, 2013.

T. Kurtén, **L. Zhou**, R. Makkonen, J. Merikanto, P. Räisänen, M. Boy, N. Richards, A. Rap, S. Smolander, A. Sogachev, A. Guenther, G. W. Mann, K. Carslaw, and M. Kulmala. *Large methane releases lead to strong aerosol forcing and reduced cloudiness.* Atmos. Chem. Phys., 11, 6961-6969, 2011.

M. Boy**,** A. Sogachev, J. Lauros, **L. Zhou**, A. Guenther, and S. Smolander. *SOSA – a new model to simulate the concentrations of organic vapours and sulphuric acid inside the ABL – Part 1: Model description and initial evaluation*. Atmos. Chem. Phys., 11, 43-51, 2011.

P. Zhou, L. Ganzeveld, Ü. Rannik, **L. Zhou**, R. Gierens, D. Taipale, I. Mammarella and M. Boy. *Simulating ozone dry deposition at a boreal forest with a multi-layer canopy deposition model*. Atmos. Chem. Phys., 17, 1361-1379, 2017

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Education:

- B.S. in Physics, University of Helsinki, Finland, 2011
- M.S. in Physics, University of Helsinki, Finland, 2012
- Ph.D. in Physics, University of Helsinki, Finland, 2015

Professional Experience:

- National Research Council (NRC) Research Associate, U.S. Environmental Protection Agency, Research Triangle Park, NC, USA, 2016 – Present
- Business Development Manager, Air Quality Education Program, University of Helsinki Center for Continuing Education, Helsinki, Finland, 2015.
- Graduate Visiting Student, National Center for Atmospheric Research, Boulder, CO, USA, 2012
- Research Assistant, University of Helsinki, 2009-2015