

LIST OF PUBLICATIONS

1. Saarikoski, S., Carbone, S., Cubison, M.J., Hillamo, R., Keronen, P., Sioutas, C., Worsnop, D.R. & Jimenez, J.L. 2014; Evaluation of the performance of a particle concentrator for on-line instrumentation. *Atmos. Meas. Tech.* 7, 2121–2135.
2. Carbone, S., Aurela, M., Saarnio, K., Saarikoski, S., Frey, A., Timonen, H., Sueper, D., Ulbrich, I., Jimenez, J.-L., Kulmala, M., Worsnop D. & Hillamo, R. 2014; Wintertime aerosol chemistry in sub-arctic urban air. *Aerosol Sci. Technol.* 48:312–322.
3. Timonen, H., Aurela, M., Carbone, S., Saarnio, K., Frey, A., Saarikoski, S., Teinilä, K., Kulmala, M. and Hillamo R. 2014; Seasonal and diurnal changes in inorganic ions, carbonaceous matter and mass in ambient aerosol particles at an urban, background area. *Boreal. Env. Res.* 19:(suppl. B):71–86.
4. Crippa, M., Canonaco, F., Lanz, V. A., Äijälä, M., Allan, J. D., Carbone, S., Capes, G., Dall’Osto, M., Day, D.A., DeCarlo, P. F., Di Marco, C.F., Ehn, M., Eriksson, A., Freney, E., Hildebrandt Ruiz, L., Hillamo, R., Jimenez, J.-L., Junninen, H., Kiendler-Scharr, A., Kortelainen, A.-M., Kulmala, M., Mensah, A.A., Mohr, C., Nemitz, E., O’Dowd, C., Ovadnevaite, J., Pandis, S.N., Petäjä, T., Poulain, L., Saarikoski, S., Sellegri, K., Swietlicki, E., Tiitta, P., Worsnop, D. R., Baltensperger, U. & Prévôt, A.S. 2014; Organic aerosol components derived from 25 AMS datasets across Europe using a newly developed ME-2 based source apportionment strategy. *Atmos. Chem. Phys.* 14:6159-6176.
5. Paglione, M., Saarikoski, S., Carbone, S., Hillamo, R., Facchini, M.C., Finessi, E., Giulianelli, L., Carbone, C., Fuzzi, S., Moretti, F., Tagliavini, E., Swietlicki, E., K. Eriksson Stenström, K., Prevot, A. S. H., Massoli, P., Canagaratna, M., Worsnop, D. & Decesari, S. 2014; Primary and secondary biomass burning aerosols determined by proton nuclear magnetic resonance (1H-NMR) spectroscopy during the 2008 EUCAARI campaign in the Po Valley (Italy). *Atmos. Chem. Phys.* 14:5089-5110.
6. Happonen, M., Mylläri, F., Karjalainen, P., Frey, A., Saarikoski, S., Carbone, S., Hillamo, R., Pirjola, L., Häyrinen, A., Kytömäki, J., Niemi, J., Keskinen, J. & Rönkkö, T. 2013; Size distribution, chemical composition and hygroscopicity of fine particles emitted from an oil-fired heating plant. *Environ. Sci. Technol.*, 47:14468–14475.
7. Carbone, S, Saarikoski, S., Frey, A., Reyes, F., Reyes, P., Castillo, M., Gramsch, E., Oyola, P., Jayne, J., Worsnop, D.R. & Hillamo, R. 2013; Chemical characterization of submicron aerosol particles in Santiago de Chile. *Aerosol and Air Quality Research*, 13: 462–473.
8. Timonen, H., Carbone, S., Aurela, M., Saarnio, K., Saarikoski, S., Ng, N.L., Canagaratna, M.R., Kulmala, M., Kerminen, V.-M., Worsnop, D.R. & Hillamo, R. 2013; Characteristics, sources and water-solubility of ambient submicron organic aerosol in springtime in Helsinki, Finland. *J. Aerosol Sci.* 56:61–77.
9. Saarnio, K., Teinilä, K., Saarikoski, S., Carbone, S., Gilardoni, S., Timonen, H., Aurela, M. & Hillamo, R. 2013; Online determination of levoglucosan in ambient aerosols with Particle-into-Liquid Sampler – High-Performance Anion-Exchange Chromatography – Mass Spectrometry (PILS–HPAEC–MS). *Atmos. Meas. Tech.*, 6:2839–2849
10. Genberg, J., Denier van der Gon, H.A.C., Simpson, D., Swietlicki, E., Areskoug, H., Beddows, D., Ceburnis, D., Fiebig, M., Hansson, H.C., Harrison, R.M., Jennings, S.G., Saarikoski, S., Spindler, G., Visschedijk, A.J.H., Wiedensohler, A., Yttri, K.E. &

- Bergström, R. 2013; Light absorbing carbon in Europe. Measurement and modelling, with a focus on residential wood combustion emissions. *Atmos. Chem. Phys.*, 13:8719-8738.
11. Bougiatioti, A., Zampas, P., Koulouri, E., Antoniou, M., Theodosi, C., Kouvarakis, G., Saarikoski, S., Mäkelä, T., Hillamo R., Mihalopoulos, N. 2013; Organic, elemental and water-soluble organic carbon in size segregated aerosols, in the marine boundary layer of the Eastern Mediterranean. *Atmos. Environ.* 64:251-262.
 12. Saarikoski, S., Carbone, S., Decesari, S., Giulianelli, L., Angelini, F., Teinilä, K., Canagaratna, M., Ng, N.L., Trimborn, A., Facchini, M.C., Fuzzi, S., Hillamo, R. & Worsnop, D. 2012; Chemical characterization of springtime submicrometer aerosol in Po Valley, Italy. *Atmos. Chem. Phys.* 12:8401–8421.
 13. Karjalainen, P., Rönkkö, T., Lähde, T., Rostedt, A., Keskinen, J., Saarikoski, S., Aurela, M., Hillamo, R., Malinen A., Pirjola, L., Amberla, A. 2012; Reduction of Heavy-Duty Diesel Exhaust Particle Number and Mass at Low Exhaust Temperature Driving by the DOC and the SCR. *SAE Int. J. Fuels Lubr.* 5, doi:10.4271/2012-01-1664
 14. Saarnio, K., Niemi, J.V., Saarikoski, S., Aurela, M., Timonen, H., Teinilä, K., Myllynen, M., Frey, A., Lamberg, H., Jokiniemi, J. and Hillamo, R. 2012; Using monosaccharide anhydrides to estimate the impact wood combustion on fine particles in the Helsinki Metropolitan area. *Boreal Env. Res.* 17:163–183.
 15. Finessi, E., Decesari, S., Paglione, M., Giulianelli, L., Carbone, C., Gilardoni, S., Fuzzi, S., Saarikoski, S., Raatikainen, T., Hillamo, R., Allan, J., Mentel, Th.F., Tiitta, P., Laaksonen, A., Petäjä, T., Kulmala, M., Worsnop, D.R., and Facchini, M.C. 2012; Determination of the biogenic secondary organic aerosol fraction in the boreal forest by NMR spectroscopy. *Atmos. Chem. Phys.* 12:941–959
 16. Aurela, M., Saarikoski, S., Timonen, H., Aalto, P., Keronen, P., Saarnio, K., Teinilä, K., Kulmala, M. & Hillamo, R. 2011; Carbonaceous aerosol at a forested and an urban background sites in Southern Finland. *Atmos. Environ.* 45:1394–1401.
 17. Kerminen, V.-M., Niemi, J.V., Timonen, H., Aurela, M., Frey, A., Carbone, S., Saarikoski, S., Teinilä, K., Hakkarainen, J., Tamminen, J., Vira, J., Prank, M., Sofiev, M. and Hillamo, R. 2011; Characterization of a volcanic ash episode in southern Finland caused by the Grimsvötn eruption in Iceland in May 2011. *Atmos. Chem. Phys.* 11:12227-12239.
 18. Saarnio, K., Aurela, M., Timonen, H., Saarikoski, S., Teinilä, K., Mäkelä, T., Sofiev, M., Koskinen, J., Aalto, P.P., Kulmala, M., Kukkonen, J. & Hillamo, R. 2010; Chemical composition of fine particles in fresh smoke plumes from boreal wild-land fires in Europe. *Sci. Total Environ.* 408:2527-2542.
 19. Timonen, H., Aurela, M., Carbone, S., Saarnio, K., Saarikoski, S., Mäkelä, T., Kulmala, M., Kerminen, V.-M., Worsnop, D. R. & Hillamo, R. 2010; High time-resolution chemical characterization of the water-soluble fraction of ambient aerosols with PILS-TOC-IC and AMS. *Atmos. Meas. Tech.* 3:1063–1074.
 20. Frey, A.K., Tissari, J., Saarnio, K.M., Timonen, H.J., Tolonen-Kivimäki, O., Aurela, M.A., Saarikoski, S.K., Makkonen, U., Hytönen, K., Jokiniemi, J., Salonen, R.O. & Hillamo, R.E.J. 2009; Chemical composition and mass size distribution of fine particulate matter emitted by a small masonry heater. *Boreal Env. Res.* 14:255–271.
 21. Niemi, J.V., Saarikoski, S., Aurela, M., Tervahattu, H., Hillamo, R., Westphal, D.L., Aarnio, P., Koskentalo, T., Makkonen, U., Vehkamäki, H., & Kulmala, M. 2009; Long-range transport episodes of fine particles in southern Finland during 1999-2007. *Atmos. Environ.* 43:1255–1264.

22. Saarikoski, S., Sillanpää, M., Saarnio, K., Hillamo, R., Pennanen, A. S. & Salonen, R. O. 2008; Impact of biomass combustion on urban fine particulate matter in Central and Northern Europe. *Water Air Soil Pollut.* 191:265–277.
23. Saarikoski, S., Timonen, H., Saarnio, K., Aurela, M., Järvi, L., Keronen, P., Kerminen, V.-M. & Hillamo, R. 2008; Sources of organic carbon in PM1 in Helsinki urban air. *Atmos. Chem. Phys.* 8:6281–6295.
24. Timonen, H., Saarikoski, S., Tolonen-Kivimäki, O., Aurela, M., Saarnio, K., Petäjä, T., Aalto, P., Kulmala, M., Pakkanen, T. & Hillamo, R. 2008; Size distributions, sources and source areas of water-soluble organic carbon in urban background air. *Atmos. Chem. Phys.* 8:5635–5647.
25. Saarikoski, S., Frey, A., Mäkelä, T. & Hillamo, R. 2008; Size distribution measurement of carbonaceous particulate matter using a low pressure impactor with quartz fiber substrates. *Aerosol Sci. Technol.* 42:603–612.
26. Timonen, H., Saarikoski, S., Aurela, M., Saarnio, K. & Hillamo, R. 2008; Water-soluble organic carbon in urban aerosol: concentrations, size distributions and contribution to particulate matter. *Boreal Env. Res.* 13:335–346.
27. Koulouri, E., Saarikoski, S., Theodosi, C., Markaki, Z., Gerasopoulos, E., Kouvarakis, G., Mäkelä, T., Hillamo, R. & Mihalopoulos, N. 2008; Chemical composition and sources of fine and coarse aerosol particles in the Eastern Mediterranean. *Atmos. Environ.* 42:6542–6550.
28. Lihavainen, H., Kerminen, V.-M., Komppula, M., Hyvärinen, A.-P., Laakia, J., Saarikoski, S., Makkonen, U., Kivekäs, N., Hillamo, R., Kulmala, M. & Viisanen, Y. 2008; Measurements of the relation between aerosol properties and microphysics and chemistry of low clouds in northern Finland. *Atmos. Chem. Phys.* 8:6925–6938.
29. Gerasopoulos, E., Koulouri, E., Kalivitis, N., Kouvarakis, G., Saarikoski, S., Mäkelä, T., Hillamo, R. & Mihalopoulos, N. 2007; Size-segregated mass distributions of aerosols over Eastern Mediterranean; seasonal variability and comparison with AERONET columnar size-distributions. *Atmos. Chem. Phys.* 7:2551–2561.
30. Saarikoski, S., Sillanpää, M., Sofiev, M., Timonen, H., Saarnio, K., Teinilä, K., Karppinen, A., Kukkonen, J. & Hillamo, R. 2007; Chemical composition of aerosols during a major biomass burning episode over northern Europe in spring 2006: experimental and modelling assessments. *Atmos. Environ.* 41:3577–3589.
31. Sillanpää, M., Hillamo, R., Saarikoski, S., Frey, A., Pennanen, A., Makkonen, U., Spolnik, Z., Van Grieken, R., Braniš, M., Brunekreef, B., Chalbot, M.-C., Kuhlbusch, T., Sunyer, J., Kerminen, V.-M., Kulmala, M. & Salonen, R. O. 2006; Chemical composition and mass closure of particulate matter at six urban sites in Europe. *Atmos. Environ.* 40S2:212–223.
32. Niemi, J.V., Saarikoski, S., Tervahattu, H., Mäkelä, T., Hillamo, R., Vehkamäki, H., Sogacheva, L. & Kulmala, M. 2006; Changes in background aerosol composition in Finland during polluted and clean periods studied by TEM/EDX individual particle analysis. *Atmos. Chem. Phys.* 6:5049–5066.
33. Virkkula, A., Teinilä, K., Hillamo, R., Kerminen, V.-M., Saarikoski, S., Aurela, M., Koponen, I.K. & Kulmala, M. 2006; Chemical size distributions of boundary layer aerosol over the Atlantic Ocean and at an Antarctic site. *J. Geophys. Res.* 11, D05306, doi:10.1029/2004JD004958.

34. Virkkula, A., Teinilä, K., Hillamo, R., Kerminen, V.-M., Saarikoski, S., Aurela, M., Viidanoja, J., Paatero, J., Koponen, I.K. & Kulmala, M. 2006; Chemical composition of boundary layer aerosol over the Atlantic Ocean and at an Antarctic site. *Atmos. Chem. Phys.* 6:3407–3421.
35. Saarikoski, S., Mäkelä, T., Hillamo, R., Aalto, P.P., Kerminen, V.-M. & Kulmala, M. 2005; Physico-chemical characterization and mass closure of size-segregated atmospheric aerosols in Hyytiälä, Finland. *Boreal Env. Res.* 10:385–400.
36. Sillanpää, M., Saarikoski, S., Hillamo, R., Pennanen, A., Makkonen, U., Spolnik, Z., Van Grieken, R., Koskentalo, T. & Salonen, R. O. 2005; Chemical composition, mass size distribution and source analysis of long-range transported wildfire smokes in Helsinki. *Sci. Total Environ.* 350:119-135.
37. Lind, T.L., Hokkinen, J., Jokiniemi, J., Saarikoski, S. & Hillamo, R. 2003; Electrostatic precipitator collection efficiency and trace element emissions from co-combustion of biomass and recovered fuel in fluidized-bed combustion. *Environ. Sci. Technol.* 37:2842–2846.

Book sections:

1. Saarikoski, S., Hillamo R. 2012: Wildfires as a source of aerosol particles transported to the northern European regions. *The Handbook of Environmental Chemistry*, Edited by Mar Viana. Springer Berlin Heidelberg, Germany. doi 10.1007/698_2012_169.