

Curriculum vitae

Name

- Dr. Paul Martin Winkler

Education

- 6/1994 General qualification for university entrance at the Austrian St. George College Istanbul, Turkey
- 1995 – 2001 Study of meteorology at the University of Vienna, title of the master thesis: *The influence of ammonia on the heterogeneous nucleation of nanoparticles.*
- 8/2001 Graduation to Master of Sciences at the Faculty for Sciences and Mathematics of the University of Vienna.
- 2001 – 2004 Dissertation at the Institute for Experimental Physics, title of PhD thesis: *Experimental study of condensation processes in systems of water and organic vapors employing an expansion chamber.* Adviser: Prof. P. E. Wagner
- 6/2004 Graduation to PhD at the Faculty for Sciences and Mathematics of the University of Vienna. Opponent: Prof. M. Kulmala (University of Helsinki)

Professional appointments and scientific career

- 10/2001 – 7/2004 PhD student-researcher, employed by University of Helsinki.
- 8/2004 – 7/2007 Postdoc co-worker at project P16958-N02 sponsored by the Austrian Science Fund (FWF).
- 8/2007 – 8/2009 Postdoc co-worker at project P19546-N20 sponsored by the Austrian Science Fund (FWF).
- 9/2009 – 8/2012 Postdoctoral fellow at the National Center for Atmospheric Research (NCAR), Boulder, CO, USA.
- 9/2012 – 3/2013 Postdoctoral fellow at the University of Vienna.
- 3/2013 – 6/2014: Postdoc, employed by University of Vienna.
- 7/2014 – current: tenure track position at University of Vienna.
- 12/2014 Promotion to Assistant Professor
- 6/2015 Habilitation in Experimental Physics at University of Vienna.
- 10/2015 – current: Spokesperson of the Aerosol Physics and Environmental Physics Group

Current main areas of interest

- Heterogeneous nucleation processes
- Condensation processes
- Chemical characterization of nanoparticles
- Instrumentation development

International cooperations

- University of Helsinki: Cooperation with Prof. Markku Kulmala
- CERN/Geneva: Cosmics Leaving Outdoor Droplets CLOUD/CLOUD-ITN collaboration
- National Center for Atmospheric Research: Prof. James N. Smith
- University of Minnesota: Cooperation with Prof. Peter H. McMurry.
- Stockholm University: Cooperation with Prof. Ilona Riipinen

Top 5 Reviewing activities

- National Science Foundation
- Journal of Colloid and Interface Science
- Journal of Chemical Physics
- Geophysical Research Letters
- Proceedings of the National Academy of Sciences

Self-acquired Funding

- Postdoctoral Fellowship of the Advanced Study Program at the National Center for Atmospheric Research: Sum \$ 135.000,00, duration 24 months (September 2009 – August 2011)
- Erwin-Schrödinger-Fellowship of the Austrian Science Fund (FWF): Sum € 79.760,00, duration 18 months (September 2011 – March 2013)
- European Research Council (ERC) Consolidator Grant: Sum € 1.810.696,00, duration 5 years (March 2014 – March 2019)

Memberships in professional societies and committees

- Gesellschaft für Aerosolforschung (GAeF)
- American Association for Aerosol Research (AAAR)
- Board member of the Chemisch-Physikalische Gesellschaft (CPG)
- Österreichische Meteorologische Gesellschaft (ÖMG)
- Member of the Committee on Nucleation and Atmospheric Aerosols (CNAA)
- Advisory Board Member of the Environmental Sciences Research Network of the University of Vienna

Awards

- Diploma thesis award sponsored by the NAWI-CLUB (Natural Sciences Club) of the University of Vienna (2002).
- Recognition award for Science sponsored by the State Government of Lower Austria (2010).
- Consolidator Grant awarded by the European Research Council (ERC) (2013).

Media appearance

- Der Standard, 6.4.2011, “Woher die Wolken kommen”
<http://derstandard.at/1301873936521/Geistesblitz-Woher-die-Wolken-kommen>
- Press release by the University of Vienna, 12.12.2013,
<http://medienportal.univie.ac.at/presse/aktuelle-pressemeldungen/detailansicht/artikel/erc-consolidator-grant-fuer-aerosolphysiker-paul-winkler/>
<http://www.uni-online.de/presse.php?id=566239>
<http://derstandard.at/1385170806860/Hoch-dotierter-EU-Foerderpreis-fuer-Wiener-Aerosolphysiker>
- Format/Trend Extra, March 2014, “Exzellente Forschung made in Austria“
http://nanodynamite.at/docs/junge_forscher_prazak_format_trend_innovation_maerz_2014.pdf
- ORF 2, 30.05.2016, „Wie Wolken entstehen“, in „Heute mittag“

Other publications

- P. M. Winkler, “Planning career steps with a family”, NCAR Fellows News (February 2011)
http://www.asp.ucar.edu/asp_update/11/February-Newsletter.pdf

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Vienna, May 30th, 2016

List of Publications

A) Peer-reviewed Journals

- A1. L. Wind, L. Hofer, A. Nagy, P. Winkler, A. Vrtala, W.W. Szymanski, "Light scattering from droplets with inclusions and the impact on optical measurement of aerosols", *J. Aerosol Sci.*, **35**, 1173, (2004).
- A2. P. M. Winkler, A. Vrtala, P. E. Wagner, M. Kulmala, K. E. J. Lehtinen, T. Vesala, "Mass and Thermal Accommodation during Gas-Liquid Condensation of Water", *Phys. Rev. Lett.* **93**, 075701-1 (2004).
- A3. P. Davidovits, D. R. Worsnop, J. T. Jayne, C. E. Kolb, P. Winkler, A. Vrtala, P. E. Wagner, M. Kulmala, K. E. J. Lehtinen, T. Vesala, M. Mozurkewich, "Mass Accommodation Coefficient of Water Vapor on Liquid Water", *Geophys. Res. Lett.* **31**, L22111 (2004).
- A4. A. Laaksonen, T. Vesala, M. Kulmala, P. M. Winkler, P. E. Wagner, "Commentary on Cloud Modelling and the Mass Accommodation Coefficient of Water", *Atmos. Chem. Phys.* **5**, 461 (2005).
- A5. A. I. Gaman, I. Napari, P. M. Winkler, H. Vehkamäki, P. E. Wagner, R. Strey, Y. Viisanen, M. Kulmala, „Homogeneous Nucleation of n-Nonane and n-Propanol Mixtures. A Comparison of Classical Nucleation Theory and Experiments", *J. Chem. Phys.*, **123**, 244502 (2005).
- A6. P. M. Winkler, A. Vrtala, R. Rudolf, P. E. Wagner, I. Riipinen, T. Vesala, K. E. J. Lehtinen, Y. Viisanen, M. Kulmala, "Condensation of Water Vapor: Experimental Determination of Mass and Thermal Accommodation Coefficients", *J. Geophys. Res.* **111**, D19202, (2006).
- A7. A. I. Hienola, P. M. Winkler, P. E. Wagner, H. Vehkamäki, A. Lauri, I. Napari, M. Kulmala, „Estimation of Line Tension and Contact Angle from Heterogeneous Nucleation Experimental Data", *J. Chem. Phys.* **126**, 094705 (2007).
- A8. M. Kulmala, G. Mordas, T. Petäjä, T. Grönholm, P. P. Aalto, H. Vehkamäki, A. I. Hienola, E. Herrmann, M. Sipilä, I. Riipinen, H. E. Manninen, K. Hämeri, F. Stratmann, M. Bilde, P. M. Winkler, W. Birmili, P. E. Wagner, "The Condensation Particle Counter Battery (CPCB): A New Tool to Investigate the Activation Properties of Nanoparticles", *J. Aerosol Sci.*, **38**, 289-304 (2007).
- A9. H. Vehkamäki, A. Määttänen, A. Lauri, M. Kulmala, P. M. Winkler, A. Vrtala, P. E. Wagner, "Heterogeneous Multicomponent Nucleation Theorems for the Analysis of Nanoclusters", *J. Chem. Phys.*, **126**, 174707 (2007).
- A10. P. M. Winkler, G. Steiner, A. Vrtala, H. Vehkamäki, M. Noppel, K. E. J. Lehtinen, G. P. Reischl, P. E. Wagner, M. Kulmala, „Heterogeneous Nucleation Experiments Bridging the Scale from Molecular Ion Clusters to Nanoparticles", *Science*, 319, 1374-1377 (2008).

- A11. P. M. Winkler, A. Vrtala, P. E. Wagner, "Condensation Particle Counting Below 2 nm Seed Particle Diameter and the Transition from Heterogeneous to Homogeneous Nucleation", *Atmos. Res.*, **90**, 125-131 (2008).
- A12. P. M. Winkler, A. Hienola, G. Steiner, G. Hill, A. Vrtala, G. P. Reischl, M. Kulmala, P. E. Wagner, „Effects of Seed Particle Size and Composition on Heterogeneous Nucleation of n-Nonane”, *Atmos. Res.*, **90**, 187-194 (2008).
- A13. M. Kulmala, V.-M. Kerminen, A. Laaksonen, I. Riipinen, M. Sipilä, T. M. Ruuskanen, T. Kurtén, A. Lauri, L. Sogacheva, P. Hari, J. Bäck, H. Lihavainen, K. E. J. Lehtinen, H. Hakola, Y. Viisanen, M. Bilde, B. Svenningsson, M. Lazaridis, K. Torseth, K. E. Yttri, P. Tunved, E. D. Nilsson, S. Pryor, L.-L. Sørensen, S. Larsen, U. Hörrak, P. M. Winkler, P. E. Wagner, E. Swietlicki, M.-L. Riekkola, K. Hartonen, A. Ekman, R. Krejci, A. Grini, C. Hoyle, Ø. Hov, H.-C. Hansson, "Overview of the Biosphere-Aerosol-Cloud-Climate Interactions (BACCI) Studies", *Tellus B*, **60**, 300-317 (2008).
- A14. J. Duplissy, M. B. Enghoff, K. L. Aplin, F. Arnold, H. Aufmhoff, M. Avngaard, U. Baltensperger, T. Bondo, R. Bingham, K. Carslaw, J. Curtius, A. David, B. Fastrup, S. Gagné, F. Hahn, R. G. Harrison, B. Kellelt, J. Kirkby, M. Kulmala, L. Laakso, A. Laaksonen, E. Lillestol, M. Lockwood, J. Mäkelä, V. Makhmutov, N. D. Marsh, T. Nieminen, A. Onnela, E. Pedersen, J. O. P. Pedersen, J. Polny, U. Reichl, J. H. Seinfeld, M. Sipilä, Y. Stozhkov, F. Stratmann, H. Svensmark, J. Svensmark, R. Veenhof, B. Verheggen, Y. Viisanen, P. E. Wagner, G. Wehrle, E. Weingartner, H. Wex, M. Wilhelmsson, and P. M. Winkler, „Results from the CERN pilot CLOUD experiment“, *Atmos. Chem. Phys.*, **10**, 1635-1647 (2010).
- A15. C. E. Kolb, R. A. Cox, J. P. D. Abbatt, M. Ammann, E. J. Davis, D. J. Donaldson, B. C. Garrett, C. George, P. T. Griffiths, D. R. Hanson, M. Kulmala, G. McFiggans, U. Poschl, I. Riipinen, M. J. Rossi, Y. Rudich, P. E. Wagner, P. M. Winkler, D. R. Worsnop, and C. D. O'Dowd, „An overview of current issues in the uptake of atmospheric trace gases by aerosols and clouds“, *Atmos. Chem. Phys.*, **10**, 10561-10605 (2010).
- A16. V.-M. Kerminen, T. Petäjä, H. E. Manninen, P. Paasonen, T. Nieminen, M. Sipilä, H. Junninen, M. Ehn, S. Gagné, L. Laakso, I. Riipinen, H. Vehkamäki, T. Kurten, I. K. Ortega, M. Dal Maso, D. Brus, A. Hyvärinen, H. Lihavainen, J. Leppä, K. E. J. Lehtinen, A. Mirme, S. Mirme, U. Hörrak, T. Berndt, F. Stratmann, W. Birmili, A. Wiedensohler, A. Metzger, J. Dommen, U. Baltensperger, A. Kiendler-Scharr, T. F. Mentel, J. Wildt, P. M. Winkler, P. E. Wagner, A. Petzold, A. Minikin, C. Plass-Dülmer, U. Pöschl, A. Laaksonen, and M. Kulmala. „Atmospheric nucleation: highlights of the EUCAARI project and future directions“, *Atmos. Chem. Phys.*, **10**, 10829-10848 (2010).

- A17. S. Schobesberger, P. M. Winkler, T. Pinterich, A. Vrtala, M. Kulmala, and P. E. Wagner, „Experiments on the temperature dependence of heterogeneous nucleation upon nm-sized NaCl and Ag particles.” *Chem. Phys. Chem.*, **11**, 3874-3882 (2010).
- A18. P. M. Winkler, G. Steiner, A. Vrtala, G. P. Reischl, M. Kulmala, and P. E. Wagner, Unary and binary heterogeneous nucleation of organic vapours on monodisperse WO_x seed particles with diameters down to 1.4 nm. *Aerosol Sci. Technol.*, **45**, 493-498 (2011).
- A19. T. Pinterich, P. M. Winkler, A. Vrtala, P. E. Wagner, „Experiments on the Contact Angle of n-Propanol on Differently Prepared Silver Substrates at Various Temperatures and Implications for the Properties of Silver Nanoparticles.“, *Atmos. Res.*, **101**, 510-518 (2011).
- A20. J. Kirkby, J. Curtius, J. Almeida, E. Dunne, J. Duplissy, S. Ehrhardt, A. Franchin, S. Gagné, L. Ickes, A. Kürten, A. Kupc, A. Metzger, F. Riccobono, L. Rondo, S. Schobesberger, G. Tsagkogeorgas, D. Wimmer, A. Amorim, F. Bianchi, M. Breitenlechner, A. David, J. Dommen, A. Downard, M. Ehn, R. C. Flagan, S. Haider, A. Hansel, D. Hauser, W. Jud, H. Junninen, F. Kreissl, A. Kvashin, A. Laaksonen, K. Lehtipalo, J. Lima, E. R. Lovejoy, V. Makhmutov, S. Mathot, J. Mikkilä, P. Minginette, S. Mogo, T. Nieminen, A. Onnela, P. Pereira, T. Petäjä, R. Schnitzhofer, J. H. Seinfeld, M. Sipilä, Y. Stozhkov, F. Stratmann, A. Tome, J. Vanhanen, Y. Viisanen, A. Vrtala, P. E. Wagner, H. Walther, E. Weingartner, H. Wex, P. M. Winkler, K. S. Carslaw, D. R. Worsnop, U. Baltensperger, M. Kulmala, „Role of sulfuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation.“, *Nature*, **476**, 429-433 (2011).
- A21. P. M. Winkler, A. Vrtala, G. Steiner, D. Wimmer, H. Vehkamäki, K. E. J. Lehtinen, G. P. Reischl, M. Kulmala, P. E. Wagner, „Quantitative characterization of critical nanoclusters nucleated on large single molecules”, *Phys. Rev. Lett.* **108**, 085701 (2012).
- A22. L. Cappellin, T. Karl, M. Probst, O. Ismailova, P. M. Winkler, C. Soukoulis, E. Aprea, T. D. Märk, F. Gasperi, F. Biasioli, “On Quantitative Determination of Volatile Organic Compound Concentrations Using Proton-transfer-reaction-time-of-flight-mass-spectrometry”, *Environ. Sci. Technol.* **46**, 2283-2290 (2012).
- A23. P. M. Winkler, J. Ortega, T. Karl, L. Cappellin, H. R. Friedli, K. Barsanti, P. H. McMurry, J. N. Smith, "Identification of the biogenic compounds responsible for size-dependent nanoparticle growth", *Geophys. Res. Lett.* **39**, L20815 (2012).
- A24. A. Kupc, P. M. Winkler, A. Vrtala, P. E. Wagner, “Unusual temperature dependence of heterogeneous nucleation of water vapor on Ag particles”, *Aerosol Sci. Technol.* **47**, i-iv (2013).
- A25. M. Noppel, H. Vehkamäki, P. M. Winkler, M. Kulmala, P. E. Wagner, “Heterogeneous nucleation in multi-component vapor on a partially wettable charged conducting seed particle. I. Formulation of general equations: Electrical surface and line excess quantities”, *J. Chem. Phys.* **139**, 134107 (2013).

- A26. M. Noppel, H. Vehkamäki, P. M. Winkler, M. Kulmala, P. E. Wagner, “Heterogeneous nucleation in multi-component vapor on a partially wettable charged conducting seed particle. II. The generalized Laplace, Gibbs-Kelvin, and Young equations and application to nucleation”, *J. Chem. Phys.* **139**, 134108 (2013).
- A27. E. J. T. Levin, A. J. Prenni, B. B. Palm, D. A. Day, P. Campuzano-Jost, P. M. Winkler, S. M. Kreidenweis, P. J. DeMott, J. L. Jimenez, J. N. Smith, “Size-resolved aerosol composition and its link to hygroscopicity at a forested site in Colorado”, *Atmos. Chem. Phys.* **14**, 2657-2667 (2014).
- A28. Y. Y. Cui, A. Hodzic, J. N. Smith, J. Ortega, J. Brioude, H. Matsui, E. J. T. Levin, A. Turnipseed, P. Winkler, B. de Foy, “Modeling ultrafine particle growth at a pine forest site influenced by anthropogenic pollution during BEACHON-RoMBAS-2011”, *Atmos. Chem. Phys.* **14**, 11011-11029 (2014).
- A29. A. Kürten, T. Jokinen, M. Simon, M. Sipilä, N. Sarnela, H. Junninen, A. Adamov, J. Almeida, A. Amorim, F. Bianchi, M. Breitenlechner, J. Dommen, N. M. Donahue, J. Duplissy, S. Ehrhart, R. C. Flagan, A. Franchin, J. Hakala, A. Hansel, M. Heinritzi, M. Hutterli, J. Kangasluoma, J. Kirkby, A. Laaksonen, K. Lehtipalo, M. Leiminger, V. Makhmutov, S. Mathot, A. Onnela, T. Petäjä, A. P. Praplan, F. Riccobono, M. P. Rissanen, L. Rondo, S. Schobesberger, J. H. Seinfeld, G. Steiner, A. Tomée, J. Tröstl, P. M. Winkler, C. Williamson, D. Wimmer, P. Ye, U. Baltensperger, K. S. Carslaw, M. Kulmala, D. R. Worsnop, J. Curtius, “Neutral molecular cluster formation of sulfuric acid-dimethylamine observed in real time under atmospheric conditions”, *Proc. Natl. Acad. Sci.* **111**, 15019-15024 (2014).
- A30. J. L. Fry, D. C. Draper, K. C. Barsanti, J. N. Smith, J. Ortega, P. M. Winkler, M. J. Lawler, S. S. Brown, P. M. Edwards, R. C. Cohen, L. Lee, “Secondary organic aerosol formation and organic nitrate yield from NO₃ oxidation of biogenic hydrocarbons”, *Environ. Sci. Technol.* **48**, 11944-11953 (2014).
- A31. J. Julin, P. M. Winkler, N. M. Donahue, P. E. Wagner, I. Riipinen, “Near-unity mass accommodation coefficient of organic molecules of varying structure”, *Environ. Sci. Technol.* **48**, 12083-12089 (2014).
- A32. F. Bianchi, A. P. Praplan, N. Sarnela, J. Dommen, A. Kürten, I. K. Ortega, S. Schobesberger, H. Junninen, M. Simon, J. Tröstl, T. Jokinen, M. Sipilä, A. Adamov, A. Amorim, J. Almeida, M. Breitenlechner, J. Duplissy, S. Ehrhart, R. C. Flagan, A. Franchin, J. Hakala, A. Hansel, M. Heinritzi, J. Kangasluoma, H. Keskinen, J. Kim, J. Kirkby, A. Laaksonen, M. J. Lawler, K. Lehtipalo, M. Leiminger, V. Makhmutov, S. Mathot, A. Onnela, T. Petäjä, F. Riccobono, M. P. Rissanen, L. Rondo, A. Tomé, A. Virtanen, Y. Viisanen, C. Williamson, D. Wimmer, P. M. Winkler, P. Ye, J. Curtius, M. Kulmala, D. R. Worsnop, N. M. Donahue, U. Baltensperger, “Insight into acid-base nucleation experiments by comparison of the chemical composition of positive, negative and neutral clusters”, *Environ. Sci. Technol.* **48**, 13675-13684 (2014).

- A33. A. P. Praplan, S. Schobesberger, F. Bianchi, M. P. Rissanen, M. Ehn, T. Jokinen, H. Junninen, A. Adamov, A. Amorim, J. Dommen, J. Duplissy, J. Hakala, A. Hansel, M. Heinritzi, J. Kangasluoma, J. Kirkby, M. Krapf, A. Kürten, K. Lehtipalo, F. Riccobono, L. Rondo, N. Sarnela, M. Simon, A. Tomé, J. Tröstl, P. M. Winkler, C. Williamson, P. Ye, J. Curtius, U. Baltensperger, N. M. Donahue, M. Kulmala, D. R. Worsnop, “Elemental composition and clustering behaviour of α -pinene oxidation products for different oxidation conditions”, *Atmos. Chem. Phys.* **15**, 4145-4159 (2015).
- A34. J. Kim, L. Ahlm, T. Yli-Juuti, M. Lawler, H. Keskinen, J. Tröstl, S. Schobesberger, J. Duplissy, A. Amorim, F. Bianchi, N. M. Donahue, R. C. Flagan, J. Hakala, M. Heinritzi, T. Jokinen, A. Kürten, A. Laaksonen, K. Lehtipalo, P. Miettinen, T. Petäjä, M. P. Rissanen, L. Rondo, K. Sengupta, M. Simon, A. Tome, C. Williamson, D. Wimmer, P. M. Winkler, S. Ehrhart, P. Ye, J. Kirkby, J. Curtius, U. Baltensperger, M. Kulmala, K. E. J. Lehtinen, J. N. Smith, I. Riipinen, A. Virtanen, “Hygroscopicity of nanoparticles produced from homogeneous nucleation in the CLOUD experiment”, *Atmos. Chem. Phys.* **16**, 293-304 (2016).
- A35. C. R. Hoyle, C. Fuchs, E. Järvinen, H. Saathoff, A. Dias, I. El Haddad, M. Gysel, S. C. Coburn, J. Tröstl, A.-K. Bernhammer, F. Bianchi, M. Breitenlechner, J. C. Corbin, J. Craven, N. M. Donahue, J. Duplissy, S. Ehrhart, C. Frege, H. Gordon, N. Höppel, M. Heinritzi, T. B. Kristensen, U. Molteni, L. Nichman, T. Pinterich, A. S. H. Prevot, M. Simon, J. G. Slowik, G. Steiner, A. Tomée, A. L. Vogel, R. Volkamer, A. C. Wagner, R. Wagner, A. S. Wexler, C. Williamson, P. M. Winkler, C. Yan, A. Amorim, J. Dommen, J. Curtius, M. W. Gallagher, R. C. Flagan, A. Hansel, J. Kirkby, M. Kulmala, O. Möhler, F. Stratmann, D. R. Worsnop, U. Baltensperger, “Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets”, *Atmos. Chem. Phys.* **16**, 1693-1712 (2016).
- A36. E. Järvinen, K. Ignatius, L. Nichman, T. B. Kristensen, C. Fuchs, C. R. Hoyle, N. Höppel, J. C. Corbin, J. Craven, J. Duplissy, S. Ehrhart, I. El Haddad, C. Frege, H. Gordon, T. Jokinen, P. Kallinger, J. Kirkby, A. Kiselev, K.-H. Naumann, T. Petäjä, T. Pinterich, A. S. H. Prevot, H. Saathoff, T. Schiebel, K. Sengupta, M. Simon, J. G. Slowik, J. Tröstl, A. Virtanen, P. Vochezer, S. Vogt, A. C. Wagner, R. Wagner, C. Williamson, P. M. Winkler, C. Yan, U. Baltensperger, N. M. Donahue, R. C. Flagan, M. W. Gallagher, A. Hansel, M. Kulmala, F. Stratmann, D. R. Worsnop, O. Möhler, T. Leisner, M. Schnaiter, “Observation of viscosity transition in α -pinene secondary organic aerosol”, *Atmos. Chem. Phys.* **16**, 4423-4438 (2016).
- A37. T. Petäjä, E. O’Connor, D. Moisseev, V. Sinclair, A. Manninen, R. Väänänen, A. von Lerber, J. Thornton, K. Nicoll, W. Petersen, V. Chandrasekar, J. Smith, P. Winkler, O. Krüger, H. Hakola, H. Timonen, D. Brus, T. Laurila, E. Asmi, M. Riekkola, J. Mona, P. Massoli, R. Engelmann, M. Komppula, J. Wang, C. Kuang, J. Bäck, A. Virtanen, J. Levula, M. Ritsche, N.

- Hickmon, "BAECC: A field campaign to elucidate the impact of biogenic aerosols on clouds and climate." *Bull. Amer. Meteor. Soc.*, DOI: 10.1175/BAMS-D-14-00199.1, in press (2016).
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