

## Matthew M. Coggon – Curriculum Vitae

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Cooperative Institute for Research in Environmental Sciences  
Chemical Sciences Division, National Oceanic and Atmospheric Administration  
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**Interests** Chemistry of volatile organic compounds, emissions from anthropogenic and natural sources, secondary organic aerosol formation, heterogeneous aerosol chemistry.

**Education** B.S. Chemical Engineering, University of Massachusetts, 2010  
PhD. Chemical Engineering, California Institute of Technology, 2015

**Appointments**

<i>Research Scientist II</i> CIRES, University of Colorado, Boulder, CO	<b>2019 – Present</b>
<i>Research Scientist I</i> CIRES, University of Colorado, Boulder, CO	<b>2016 – 2019</b>
<i>CIRES Visiting Postdoctoral Researcher</i> CIRES, University of Colorado, Boulder, CO	<b>2015 – 2016</b>
<i>Graduate Research Assistant</i> California Institute of Technology, Pasadena, CA.	<b>2010 – 2015</b>

**Awards** CO-LABS Governors Award for High-Impact Research, 2018  
(Honorable Mention)

CIRES Visiting Postdoctoral Fellowship, 2015–2016

**Synergistic Activities** *Science Outreach:* (i) Colorado Science Fair judge (2016). (ii) University of Colorado Science Ambassador, 2017-2018. (iii) Co-organizer for monthly NOAA science seminars (2018–present) (iv) Co-organizer for local Science on Tap seminars (2018–present).

*Mentoring:* (i) Resident associate at Caltech with responsibilities including mentoring undergraduate students, responding to mental health emergencies, and serving as a liaison to Student Affairs Office (2011–2014)

*Teaching:* (i) Teaching assistant for Chemical Engineering classes, with 5 lectured classes, in Separation Processes, Dynamics and Control of Chemical Systems, and Thermodynamics (Caltech, 2011-2014). (ii) Guest lecturer for atmospheric science classes at University of Denver and CU Boulder.

**Select Publications** **Coggon, M.M.** Gaktzelis, G.I., McDonald, B.C., Gilman, J.B., Abuhassan, N., Aikin, K., Arend, M., Berkoff, T., Campos, T., Gronoff, G., Hurley, J., Isaacman-VanWertz, G., Koss, A.R., Li, M., McKeen, S.A., Moshary, F., Peischl, J., Pospisilova, V., Wilson, A., Wu, Y., Brown, S., Trainer, M., Warneke, C. (2020). The human forest: Volatile chemical products enhance urban ozone. in review.

**Coggon, M.M.**, Lim, C., Koss, A.R., Sekimoto, K., Yuann, B. Gilman, J.B., Hagan,

D.H., Selimovic, V., Zarzana, K.J., Brown, S.S., Roberts, J.M., Muller, M., Yokelson, R., Wisthaler, A., Krechmar, J., Jimenes, J., Cappa, C., Kroll, J., de Gouw, J., and Warneke, C. (2019). OH chemistry of non-methane organic gases (NMOGs) emitted from laboratory and ambient biomass burning smoke: evaluating the influence of furans and oxygenated aromatics on ozone and secondary NMOG formation, *Atmos. Chem. Phys.*, 19, 14875-14899, DOI:10.5194/acp-19-14875-2019.

**Coggon, M.M.**, McDonald, B., Vlasenko, A., Veres, P., Bernard, F., Koss, A., Yuan, B., Gilman, J., Peischl, J., Aikin, K., DuRant, J., Warneke, C., Li, S-M., and de Gouw, J.A. (2018). Diurnal variability and emission pattern of decamethylcyclopentasiloxane (D5) from the application of personal care products in two North American cities. *Environ. Sci. Technol.*, 52, 5610-5618.

Yuan, B., Koss, A.R., Warneke, C., **Coggon, M.M.**, Sekimoto, K., and de Gouw, J.A. (2017). Proton-transfer-reaction mass spectrometry: Applications in atmospheric sciences. *Chem. Rev.*, 117 (12), 13187-13229.

Sekimoto, K., Li, S-M., Yuan, B., Koss, A.R., **Coggon, M.M.**, Warneke, C. and de Gouw, J.G. (2017). Calculation of the sensitivity of proton-transfer-reaction mass spectrometry (PTR-MS) for organic trace gases using molecular properties. *Int. J. Mass. Spec.*, 421, 71-94.

**Coggon, M.M.**, Veres, P., Yuan, B., Koss, A., Warneke, C., Gilman, J., Lerner, B., Peischl, J., Aikin, K., Stockwell, C., Hatch, L., Ryerson, T., Roberts, J., Yokelson, R., and de Gouw, J. (2016). Emissions of nitrogen-containing organic compounds from the burning of herbaceous and arboraceous biomass: fuel composition dependence and the variability of commonly used nitrile tracers. *Geophys. Res. Lett.*, 43.

*Total Publications:* 42

*H-Index:* 18

*ResearcherID:* I-8604-2016

## Presentations

National Center for Atmospheric Research, April 2018, seminar  
University of Wyoming, Department of Atmospheric Sciences, April 2018, seminar  
American Geophysical Union Conference, December 2017, oral presentation  
Colorado School of Mines, Civil & Env. Engineering, March 2017, seminar  
IGAC Conference, September 2016, poster presentation  
Environmental Health Association Conference, September 2016, oral presentation  
University of California Irvine, AirUCI, March 2015, seminar  
American Geophysical Union Conference, December 2014, oral presentation  
American Association for Aerosol Research, October 2012, poster presentation  
Institute of Biological Engineering Conference, April 2010, oral presentation  
University of South Florida, Civil & Env. Engineering, December 2010, seminar

## Other Service

Caltech Title IX graduate representative	2014-2015.
Caltech Paddling Club co-founder and president	2012-2015.
Kayaking instructor for Colorado Whitewater	2015-present.
Volunteer, Boulder Shelter for the Homeless	2016-present.