

Mark J. Potosnak

Environmental Science and Studies
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Professional Preparation

Harvard University	BA, Earth & Planetary Science and Physics	1994
Columbia University	MA, Earth & Environmental Sciences	1998
Columbia University	MPhil, Earth & Environmental Sciences	2000
Columbia University	PhD, Earth & Environmental Sciences	2002
	Advisor: Kevin L. Griffin	
National Center for Atmospheric Research	Postdoctoral Fellow	2003

Appointments

2015-present	Associate Professor, DePaul University
2008-2015	Assistant Professor, DePaul University
2007-2008	Visiting Assistant Professor, Boston University
2004-2007	Assistant Research Professor, Desert Research Institute
2002-2003	Advanced Study Program, National Center for Atmospheric Research
1996-2002	Doctoral Research, Lamont-Doherty Earth Observatory, Columbia University
1995-1996	Research Technician, Earth and Planetary Sciences, Harvard University

Products

Five Most Relevant to Project (v represents undergraduate students from my research group)

Bouche v, A., Beck-Winchatz, B., **Potosnak, M.J., 2016.** A high-altitude balloon platform for determining exchange of carbon dioxide over agricultural landscapes. *Atmospheric Measurement Technology*, 9: 5707-5719.

Conry, P., A. Sharma, M.J. Potosnak, L.S. Leo, E. Bensman, J.J. Hellmann and H.J.S. Fernando. **2015.** Chicago's Heat Island and Climate Change: Bridging the Scales via Dynamical Downscaling. *Journal of Applied Meteorology and Climatology*, 54: 1430–1448.

Potosnak, M. J., v L. LeSturgeon, S. G. Pallardy, K. P. Hosman, L. Gu, T. Karl, C. Geron, and A. B. Guenther. 2014. Observed and modeled ecosystem isoprene fluxes from an oak-dominated temperate forest and the influence of drought stress. *Atmospheric Environment*, 84: 314–322.

Potosnak, M. J., v L. LeSturgeon, and v O. Nunez. 2014. Increasing leaf temperature reduces the suppression of isoprene emission by elevated CO₂ concentration. *Science of the Total Environment*, 481: 352–359.

Potosnak, M. J., B. M. Baker, v L. LeSturgeon, S. M. Disher, K. L. Griffin, M. S. Bret-Harte, and G. Starr. 2013. Isoprene emissions from a tundra ecosystem. *Biogeosciences*, 10: 871–889.

Other Significant Products

Kravitz, B., Guenther, A.B., Gu, L., Karl, T., Kaser, L., Pallardy, S.G., Peñuelas, J., **Potosnak, M.J., Seco, R., 2016.** A new paradigm of quantifying ecosystem stress through chemical signatures. *Ecosphere*, 7: e01559.

Potosnak, M.J. 2014. Commentary: Including the interactive effect of elevated CO₂ concentration and leaf temperature in global models of isoprene emission. *Plant, Cell & Environment*, 37:1723–1726.

Unger, N., K. Harper, Y. Zheng, N.Y. Kiang, I. Aleinov, A. Arneth, G. Schurgers, C. Amelynck, A. Goldstein, A. Guenther, B. Heinesch, C.N. Hewitt, T. Karl, Q. Laffineur, B. Langford, K. A. McKinney, P. Misztal, M. **Potosnak**, J. Rinne, S. Pressley, N. Schoon and D. Serça. **2013.** Photosynthesis-dependent isoprene emission from leaf to planet in a global carbon-chemistry-climate model. *Atmospheric Chemistry and Physics*, 13: 10243–10269.

Pacifico, F., S. P. Harrison, C. D. Jones, A. Arneth, S. Sitch, G. P. Weedon, M. P. Barkley, P. I. Palmer, D. Serça, M. **Potosnak**, T.-M. Fu, A. Goldstein, J. Bai and G. Schurgers. **2011.** Evaluation of a photosynthesis-based biogenic isoprene emission scheme in JULES and simulation of isoprene emissions under present-day climate conditions. *Atmospheric Chemistry and Physics*, 11: 4371–4389.

*Papież, M.R., M.J. **Potosnak**, W.S. Goliff, A.B. Guenter, S.N. Matsunaga and W.R. Stockell. **2009.** The impacts of reactive terpene emissions from plants on air quality in Las Vegas, Nevada. *Atmospheric Environment*, 43: 4109–4123.

Synergistic Activities

- Elected as co-vice-chair (in turn to be co-chair) for the Gordon Research Conference on Biogenic Hydrocarbons and the Atmosphere. Elected at 2016 meeting, will be co-vice-chair in 2018 and co-chair in 2020.
- Elected by the faculty of DePaul University's College of Liberal Arts and Sciences to serve of the Faculty Governance Council (1 term: 2010–2012)
- I am a member of a Task Force to incorporate citizen science to assess the environmental impact of a waste transfer station in Evanston, Illinois.
- For the past four years, I have been selected as an adviser in the First-Year Academic Success Program, and in this role I help students transition to the more demanding academic expectations of college. FYAS students are often first-generation and members of underrepresented groups. I also have served as a summer advisor for incoming first-year and transfer students.
- For the past three years, I have been chair of the Scientific Inquiry Domain committee, which is responsible for science learning within DePaul's Liberal Studies Program. During this time, new learning outcomes were adopted and implemented that shifted towards inquiry-based learning and science as a way of knowing.