

JULIAN D. MARSHALL
Professor, University of Washington

Professional Preparation

Princeton University	Princeton, NJ	B.S.E. (High Honors)	1996	Chemical Engineering
University of California	Berkeley, CA	M.S.	2002	Energy and Resources
University of California	Berkeley, CA	Ph.D.	2005	Energy and Resources
University of British Columbia	Vancouver, BC	Postdoctoral	2005-6	Environmental Health

Appointments

2016-present	Professor, University of Washington, Seattle, WA
2016-present	John R. Kiely Professor of Environmental Engineering (since February 2016)
2013-2016	Associate Professor of Environmental Engineering, Univ of Minnesota, Minneapolis, MN
2007-2013	Assistant Professor of Environmental Engineering, Univ of Minnesota, Minneapolis, MN
2005-2006	Postdoctoral Research Fellow, Univ of British Columbia, Vancouver, Canada
2000-2005	Independent Contract Researcher, Berkeley, CA. Conducted research on energy and the environment for the California Air Resources Board (Sacramento, CA), Environmental Defense (Oakland, CA), United Nations University (Tokyo, Japan), and the U.S. Agency for International Development (Jakarta, Indonesia)
2001-2005	Student Researcher, Lawrence Berkeley National Lab, Berkeley, CA
1999	Volunteer, Ladakh Ecological Development Group, Kashmir, India
1998-1999	Lecturer and International Fellow, Temasek Polytechnic, Singapore
1996-1997	Environmental Consultant, Environ Corporation, Emeryville, CA

Products

- Five articles most closely related (out of 64 peer-reviewed articles published and 6 submitted for review)
- CW Tessum, JD Marshall, J Hill, "A spatially and temporally explicit life cycle inventory of air pollutants from gasoline and ethanol in the United States," *Environmental Science & Technology*, 46(20), 11408-11417, (2012).
- DB Millet, E Apel, DK Henze, J Hill, JD Marshall, HB Singh, CW Tessum, "Natural and anthropogenic ethanol sources in North America and potential atmospheric impacts of ethanol fuel use," *Environmental Science & Technology*, 46(15), 8484-8492, (2012).
- S Ji, C Cherry, MJ Bechle, Y Wu, JD Marshall, "Electric vehicles in China: emissions and health impact," *Environmental Science & Technology*, 46(4), 2018-2024, (2012). *Listed as a "most-read article."*
- JS Apte, E Bombrun, JD Marshall, WW Nazaroff, "Global intraurban intake fractions for primary air pollutants from vehicles and other distributed sources," *Environmental Science and Technology*, 46(6), 3415-3423, 2012.
- LP Clark, DB Millet, JD Marshall, "Air quality and urban form in U.S. urban areas: evidence from regulatory monitors," *Environmental Science & Technology*, 45(16), 7028-7035, (2011).

Five other significantly related articles

- JD Marshall, "Environmental equality: air pollution exposures in California's South Coast Air Basin," *Atmospheric Environment*, 42(21), 5499-5503, 2008.
- JD Marshall, E Nethery, M Brauer, "Within-urban variability in ambient air pollution: comparison of estimation methods," *Atmospheric Environment*, 42(6), 1359-1369, 2008. *Listed as a "most-downloaded" article.*
- JD Marshall, E Behrentz, "Vehicle self-pollution intake fraction: children's exposure to school bus emissions," *Environmental Science & Technology*, 39(8), 2559-2563, 2005. *Widely reported in media, including The New York Times and L.A. Times.*

JD Marshall, TE McKone, EA Deakin, WW Nazaroff, "Inhalation of motor vehicle emissions: effects of urban population and land area," *Atmospheric Environment*, 39(2), 283-295, 2005. *Listed as a "most-downloaded article."*

JD Marshall, MW Toffel, "Framing the elusive concept of sustainability: a sustainability hierarchy," *Environmental Science & Technology*, 39(3), 673-682, 2005. *Listed as a "most-downloaded article."*

Synergistic Activities

- Co-founded and co-directed the Acara Program for social entrepreneurship at University of Minnesota. Worked with students to start for-profit and not-for-profit ventures to address global grand challenges in low-income communities of developing countries.
- Co-founded and co-directed the Peace Corps Masters International program in environmental engineering at University of Minnesota. Program included 2 semesters at UMN, and 27 months service to the Peace Corps.
- Developed multiple publicly-available databases on air pollution, including z.umn.edu/no2map (NO₂ concentrations), spatialmodel.com (air pollution concentrations and models), and <http://people.hbs.edu/mtoffel/datasets> (environmental performance datasets).