Ashok Gadgil, Ph.D.
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Education and Training:

Institution	Major	Degree	Year
University of Bombay	Physics	B.Sc.	1971
IIT Kanpur	Physics	M.Sc.	1973
UC Berkeley	Physics	M.A., Ph.D.	1975, 1979

Research and Professional Experience:

2008-present **Professor**, Civil and Environmental Engineering, UC Berkeley

2010-present **Faculty Senior Scientist and Area Deputy for Science and Technology**, LBNL
(Responsibilities include technology innovation, ensuring high quality of scientific output across the Area, selecting new ideas for seed funding)

2005-2008 **Adjunct Professor**, Energy and Resources Group, UC Berkeley

1988-2010 **Staff-Scientist and then Senior Scientist**, LBNL
(Responsibilities include proposing research, competing for research funding, and successfully executing research projects within time and budget.)

Publications:

1. van Genuchten, C. M., J. Pena, S. Amrose and **A. J. Gadgil** (2014). Structure of Fe(III) precipitates generated by the electrolytic dissolution of Fe(0) in the presence of groundwater ions. Geochimica et Cosmochimica Acta 127: 285-304
2. **Gadgil, A. J.**, S. Amrose, S. R. S. Bandaru, C. Delaire, A. A. Torkelson and C. M. van Genuchten (2014). Addressing Arsenic Mass Poisoning in South Asia with Electrochemical Arsenic Remediation. In Water Reclamation and Sustainability, S. Ahuja (Ed), pp 115-154, Elsevier, New York.
3. Amrose, S., **A. Gadgil**, V. Srinivasan, K. Kowolik, M. Muller, J. Huang and R. Kostecki (2013). Arsenic removal from groundwater using iron electrocoagulation: effect of charge dosage rate. Journal of Environmental Science and Health, Part A 48(9): 1019-1030.
4. Amrose, S., S. R. S. Bandaru, C. Delaire, C. M. v. Genuchten, A. Dutta, A. DebSarkar, C. Orr, J. Roy, A. Das and **A. Gadgil** (2014). Electro-Chemical Arsenic Remediation: Field Trials in West Bengal. Science of the Total Environment 488-489: 539-546.
5. van Genuchten, C. M., S. Addy, E. A., J. Pena and **A. J. Gadgil** (2012). Removing arsenic from synthetic groundwater with iron electrocoagulation: an Fe and As K-Edge EXAFS study. Environmental Science and Technology 46(2): 986-994.
6. Li, L., C. M. van Genuchten, S. E. A. Addy, J. Yao, N. Gao and **A. J. Gadgil** (2012). Modeling As(III) oxidation and removal with iron electrocoagulation in groundwater. Environmental Science and Technology 46(21): 12038-12045.
7. **Gadgil, A. J.**, J. Roy, S. E. A. Addy, A. Das, S. Miller, A. Dutta and A. Deb-Sarkar (2012). Addressing Arsenic Poisoning in South Asia. Solutions 5(3): 40-45.
8. Booker, K., **A. J. Gadgil** and D. Winickoff (2012). Engineering for the Global Poor: The Role of Intellectual Property. Science and Public Policy: 1-12.

9. **Gadgil, A. J.**, D. Fridley, N. Zheng, A. Sosler, T. Kirchstetter and A. Phadke (2011). Energy in the Developing World. Physics of Sustainable Energy II. D. Hafemeister, D. Kammen, B. Levi and P. Schwartz (Eds). Melville, NY, American Institute of Physics. 1401: 54-74. New York.
10. **Gadgil, A. J.** (2008). Safe and Affordable Drinking Water for Developing Countries. Physics of Sustainable Energy. D. Hafemeister, B. Levi, M. D. Levine and P. Schwartz.(Eds) Melville, NY, American Inst. of Physics: 176-191.

Synergistic Activities:

1. Developed and taught, a new graduate-level team-project based pedagogical method and lecture course, "Design for Sustainable Communities," for engineering and science grad students at UC Berkeley, addressing problems of resource-poor communities.
2. Advisor to the Lemelson Foundation (www.lemelson.org) for spurring inventions and innovations in the developing countries to improve livelihoods.
3. Developed and founded LBNL Institute for Globally Transformative Technologies (LIGTT), an institute at LBNL for innovation for globally transformative technologies based on advanced science and engineering, for the bottom 4 billion people on the Earth .
4. Editor, Annual Reviews of Environment and Resources (www.annualreviews.org) to invite, review and present authoritative reviews of issues in environment and resources.
5. Conducting current research on development of a low-cost high-efficiency technology for removal of arsenic from drinking water, appropriate to Bangladesh communities, and development of Berkeley-Darfur Cookstove, a fuel-efficient cookstove which is tailored to Darfur's climate and cooking and requires less than half the fuel of traditional cooking methods, decreases women's exposure to violence while collecting firewood, and decreases their need to trade food rations for fuel; the cookstove research is being extended to other regions (e.g., Ethiopia and Haiti).