

## Jonathan Fink – Curriculum Vita

- Personal: Born May 2, 1951 in New York City (U.S. citizen)  
Married, with two children, ages 15 and 11
- Education: 1973 B.A. Geology-Biology Colby College, Waterville, Maine  
1979 Ph.D. Geology Stanford University, Stanford, California
- Administrative positions  
*University administration, Arizona State University*
- Julie Wrigley Director, Global Institute of Sustainability (2007- )  
University Sustainability Officer, Office of the President (2007- )
- Oversee and coordinate all of ASU's sustainability research, teaching, outreach and business initiatives, including Decision Theater and School of Sustainability.
- Vice President for Research and Economic Affairs (2002-2007)  
Vice Provost for Research (1999-2002), Interim VPR (1997-1999)
- Run 120-member organization across four ASU campuses. Responsible for regulatory compliance, proposal submittal, grants management, technology transfer, business development, research publications, economic affairs, corporate relations. Administer annual (2004) state budget of \$3M, indirect funds pool of \$26M, tech transfer licensing revenue of \$2M, and sales tax driven research account of \$25M. Help set strategic research agenda for ASU and region. Participate in President's cabinet and Provost's Deans' council. Oversee interdisciplinary research institutes in biomedicine, sustainability, nanotechnology, computing, religion and conflict, affordable housing.
- Department administration, Department of Geology*  
Chair (1995-97), Acting Chair (90-91), Associate Chair (89-90, 93-95)
- Managed the most research-active and highest ranked (1994 NRC) department at ASU, with (2001) annual budget of \$1.5M, operations budget of \$150K, research awards of \$10.5M, expenditures of \$8.7M, head count of 150. Oversaw septennial review and recruitment of five faculty members including two targeted hires. Department was also the highest ranked at ASU for matriculated undergraduate majors' satisfaction.
- Director, Petrology and Geochemistry Program, National Science Foundation 1992-93*  
Ran NSF program with two annual panels, 180 proposals, and annual budget of \$14M.
- Academic positions  
*Faculty member, ASU Geology Department (now School of Earth and Space Exploration)*  
Full Professor (1991-present), Associate (87-91), Assistant (83-87), Visiting (82-83)  
Visiting Fellow, Research School Earth Sciences, Australian National University 1988-90  
Adjunct Professor, Chemical Engineering Department, University of Colorado 1985-87  
Postdoctoral Research Associate, Planetary Geology, Arizona State University 1980-82  
Postdoctoral Research Associate, Applied Math, Weizmann Institute, Israel 1979
- Administrative Service  
Governor's Council on Innovation and Technology 2003-present  
Arizona Mental Health Research Institute Board of Advisors 2002-2006  
Board on Oceans and Atmospheres, NASULGC 1998-present  
Arizona State University Research Park, Board of Directors 1997-2007  
Association of Western Universities, Board of Directors 1999-2007  
Organizer, AAAS Symposium on Future of Science and Technology in Arizona 1998
- Research Interests: Volcanology, planetary geology, structural geology, isotope geochemistry, urban ecology

Courses taught: Physical geology, Mineralogy, Optical mineralogy, Volcanology, Advanced volcanology, Field camp, Advanced field geology, Legal aspects of geology, Geological fluid dynamics

Graduate theses/dissertations advised: 13 M.S., 10 Ph.D., 8 Post-docs.

Panels, Advisory Committees and Review Boards (selected):

US National Committee for International Union of Geological Sciences	2006-present
NRC Review of future of Biosphere 2	2005
NRC Panel on research at the Smithsonian Institution (Chair)	2002
NRC Panel on Future of the USGS Volcanic Hazard Program (Chair)	1998-2000
NSF Science and Technology Centers Review Panel	1998
Associate Editor, <i>Journal of Geophysical Research-Solid Earth</i>	1990-1995
Associate Editor, <i>Journal of Volcanology and Geothermal Research</i>	1992-1998
Associate Editor, <i>Bulletin of Volcanology</i>	1994-1999

Symposia organized at national/international meetings: seven for AGU, AAAS, IAVCEI, IUGG, and GSA

Professional Society memberships:

American Association for Advancement of Science (elected Fellow, 2004)	1983-present
American Geophysical Union	1975-present
Geological Society of America (elected Fellow, 1997)	1973-present

Extramural Research Grants: NASA, NSF, DOE: \$2.5M as P.I.; \$185K as co-I.

Books edited:

1. Fink, J.H., ed., 1987. The emplacement of silicic domes and lava flows. *Geol. Soc. America Special Paper 212*.
2. Fink, J.H., ed., 1990. Lava flows and domes: Emplacement mechanisms and hazard implications. *IAVCEI Proceedings in Volcanology*, 2, Springer Verlag, Heidelberg.
3. Mouginiis-Mark, P.J., Crisp, J.A. and Fink, J.H. 2000. Remote sensing of active volcanoes. *American Geophysical Union Monograph 116*.

Publications: 68 articles in refereed journals; 165 published abstracts; 4 published book/film reviews (all in *Science* or *Nature*); 6 Op-Eds in *Arizona Republic*

Selected articles:

- Fink, J. H. and Pollard, D. D., 1985. Inyo Dike rotation. *Science* 228, 1382-1383.
- Anderson, S.W. and Fink, J.H., 1989. Hydrogen isotope evidence for extrusion mechanisms of the Mount St. Helens lava dome. *Nature* 341, 521-523.
- Fink, J.H. and Griffiths, R.W., 1990. Radial spreading of viscous gravity currents with solidifying crust. *Journal of Fluid Mechanics* 221, 485-509.
- Fink, J.H., Malin, M.C. and Anderson, S.W., 1990. Intrusive and extrusive growth of the Mount St. Helens lava dome. *Nature* 348, 435-437.
- Fink, J.H., 1991. Volcano warning needed. *Nature* 351, 611.
- Fink, J.H., 1991. Volatile behaviour of volcanoes. *Nature* 352, 188.
- Fink, J.H., 1992. Mount Unzen rumbles on. *Nature* 357 119.
- Fink, J.H., 1992. What comes up could come down. *Nature* 359, 102-103.
- Fink, J.H. and Kieffer, S.W., 1993. Explosive decompression of lava domes: Estimates of pyroclastic flow velocities *Nature* 363, 612-615.
- Griffiths, R.W. and Fink, J.H., 1993. The dynamics of lava flows with solidifying crusts. *Jour. Fluid Mechanics* 252, 667-702.
- Fink, J.H., 1993. Down under the volcano. *Nature* 366, 108.
- Fink, J.H., 1995. Exploding volcanic myths. *Nature* 373, 660-661.
- Griffiths, R.W. and Fink, J.H., 1997. Solidifying Bingham extrusions: a model for the growth of silicic lava domes. *J. Fluid Mech.* 347, 13-36.
- Fink, J.H., and Anderson, S.W., 1999. Lava domes and coulees, in Sigurdsson, H. (editor), *Encyclopedia of Volcanology*, 307-319, Academic Press.
- Fink, J.H., Steiner, F., Redman, C.L., and Grimm, N.B., 2003. Greater Phoenix 2100: Building a national urban environmental research agenda, in Heiken, G. and Fakundiny (eds.), "Earth Sciences in the Cities", *American Geophysical Union Special Publication Series 56*, 413-426.
- Allenby, B.A., and Fink, J.H., 2005. Toward inherently secure and resilient societies. *Science* 309, 1034-1036.