

## Faculty - John A. Ochsendorf

### Faculty

[Lecturers](#)[Researchers](#)[Postdocs](#)[Staff](#)[Printer-friendly version](#)

### John A. Ochsendorf

**Class of 1942 Professor of Architecture**

**Professor of Civil and Environmental  
Engineering**

MIT  
Room 5-418C  
77 Massachusetts Avenue  
Cambridge, MA, 02139

*Telephone:* 617.253.4087

*Email:* [jao@mit.edu](mailto:jao@mit.edu)

*Research Website:* <http://web.mit.edu/masonry>

<http://web.mit.edu/structuraldesign>

### Education

- B.Sc. Cornell University, 1996
- M.Sc. Princeton University, 1998
- Ph.D. Cambridge University, 2002

### Research Interests

Professor Ochsendorf conducts research on the mechanics and behavior of historical structures, with a primary focus on the collapse of masonry structures. His group is actively researching the dynamics of masonry buildings, the safety of cracked masonry vaults and domes, displacement loading of structures and the design of more sustainable infrastructure.

### Teaching Interests

Structural design, limit analysis, history of construction, sustainable construction, structural form-finding, graphic static

### Selected Publications

1. Guastavino Vaulting: The Art of Structural Tile, Princeton Architectural Press, 2010.
2. De Lorenzis, L., and Ochsendorf, J., Failure of Rectangular Buttress under Concentrated Loading, *Journal of Structures and Buildings*, Institution of Civil Engineers, Vol. 161, No. 5, pp. 265-275, October 2008.
3. Block, P. and Ochsendorf, J., "Thrust Network Analysis: A new methodology for three-dimensional equilibrium," *Journal of the International Association for Shell and Spatial Structures*, Vol. 48, No. 3, pp. 167-173, December 2007.
4. De Lorenzis, L., DeJong, M, and Ochsendorf, J., "Failure of masonry arches under impulse base motion," *Earthquake Engineering and*

- Structural Dynamics, Vol. 36, pp. 2119-2136, June 2007.
5. Ochsendorf, J. "The Masonry Arch on Spreading Supports," Structural Engineer, Institution of Structural Engineers, London, Vol. 84, No. 2, pp. 29-36, Jan. 2006.



Massachusetts Institute of Technology Department of Civil and Environmental Engineering  
77 Massachusetts Avenue, Room 1-290 ■ Cambridge, MA 02139-4307 ■ (617) 253-7101

