

JAN SCHROERS

Education and Training:

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|--------------------------------------|-------------------|---------------------|-----------|
| • University of Cologne, Germany | Physics | B.S. | 1992 |
| • University of Cologne, Germany | Physics | Diploma (~M.S) | 1994 |
| • RWTH Aachen, Germany | Physics | Ph.D | 1997 |
| • California Institute of Technology | Materials Science | Postdoctoral Fellow | 1998-2002 |

Research and Professional Experience:

- June 2012- present: Professor, Department of Materials Science and Mechanical Engineering, Yale
- June 2013 – Dec 2013, Visiting Professor, EPFL Lausanne
- July 2006-May 2012: Associate Professor, Department of Mechanical Engineering, Yale
- Dec 2002- July 2006: Director of Research, Liquidmetal Technologies, *Lake Forest, CA*
- Jan 1998- Present: Visiting Associate, Senior Research Fellow, Materials Science Department, California Institute of Technology

Publications: out of 103 publications and 11 patents, h = 34

Related to project:

- G. Kumar, H. Tang, J. Schroers, “*Nanomoulding with amorphous metals*” *Nature*, **457**, 868 (2009)
- G. Kumar, A. Desai and J. Schroers, “*Bulk Metallic Glass: The Smaller the Better*”, *Advanced Materials* **23** (4), 461-476 (2011).
- S. Ding, Y. Liu, S. Sohn, F. Walker, and J. Schroers, *Rapid Development of Metallic Glasses*. *Nature Materials*, 2014. **in press**.
- B. Sarac and J. Schroers, “*Designing tensile ductility into metallic glasses*” *Nature Communications*, 4, 2158 2013
- J. Schroers and W. L. Johnson, “*Ductile bulk metallic glass*” *Physical Review Letters* **93**, 255506 (2004)

Other significant:

- J. Schroers, T.M. Hodges, G. Kumar, H. Raman, A.J. Barnes, P. Quoc, and T.A. Waniuk, “*Thermoplastic blow molding of metals*”, *Materials Today* 14, 14-19 (2011)
- J. Schroers, “*Processing of bulk metallic glass*” *Advanced Materials*, **23**, 1566 (2010)
- M. Carmo, R.C. Sekol, S.Y. Ding, G. Kumar, J. Schroers, and A.D. Taylor, “*Bulk Metallic Glass Nanowire Architecture for Electrochemical Applications*”, *Acs Nano* **5** (2011) 2979-2983
- R. C. Sekol, M. Carmo, G. Kumar, A. D. Taylor and J. Schroers, “*Microfuel cells made through thermoplastic forming of metallic glasses*” *Small*, 9, 2081 (2013).
- G. Kumar, P. Neibecker, L. Yanhui and J. Schroers, “*Critical fictive temperature for ductility in metallic glasses*” *Nature Communications* 4, 1536 (2013)

Synergistic Activities:

- Reviewer for: *Nature*, *Science*, *Nature Materials*, *Nature Communications*, *Physical Review Letters*, *Physical Review B*, *ACS nano*, *Materials Today*, *Nano Letters*, *Philosophical Magazine*, *Applied Physics Letters*, *Journal of Applied Physics*, *Journal of Materials Research*, *Acta Materialia*, *Scripta Materialia*, *Metallurgical and Materials Transaction*, *Materials Science and Engineering*

- Organizer of the 2007 Bulk Metallic Glass Symposium held at the MRS fall meeting in Boston, Organizer of the 2011 Processing of Bulk Metallic Glass Symposium held at THERMEC 2011, Quebec, Organizer of the 2013 Bulk Metallic Glass Symposium held at the MRS fall meeting in Boston
- Presented various invited colloquia and seminars (39) including: *MIT, Northwestern University, Stanford, UC Davis, GTech, Harvard (2x), UMass Amherst (2x), UCLA, Yale, Washington University Saint Louis, Univ. Goettingen (2x), Caltech, Chinese Academy of Science, Forschungszentrum Karlsruhe, Max Planck Institut, CSEM (Neuchatel) (3x), EPFL (Lausanne) (2x) Tohoku University, Riso (Denmark), Postech (Korea), ETH Zuerich, U. Amsterdam, Katholieke Universiteit Leuven*
- Invited presentation at scientific meetings (27 Invited and 5 Keynotes) including: *MRS Fall Meeting 2000, 2003, 2007, 2011; TMS spring meeting 2007, 2008, 2009, 2010, 2011, 2012; 1st International Conference on Mechanics and Mechanical Properties of non-crystalline Materials I: Amorphous Metals, Beijing 2006, 12th Intl. Conference on Rapidly Quenched and Metastable Materials (RQ12) 2005, BMG 7 (Korea) 2009, ICSAM (Seattle) 2009, Nanomanufacturing summit (Boston) 2009, SNMR (Ithaca) 2010, WPI-AIMR (Japan) 2010, ISMANAM (Zuerich) 2010*

Collaborators and Co-Editors:

Mark Asta (UC. Berkeley), Andreas Blatter (PX Group, Switzerland), Jerzy Blawdziewicz (Texas Tech U), Ralf Busch (U. Saarlandes, Germany), Amish Desai (Tanner Research), Hans Fecht (U. Ulm, Germany), Daniel Gianola (U. Penn), John Gregoire (Caltech), Julia Greer (Caltech), Jamie Guest (Johns Hopkins), Hendrik Holscher (KIT, Germany), Peter Hoseman (UC Berkeley), Sungtaek Ju (UC LA), Golden Kumar (Texas Tech U), Mo Li (GTech), Robert M'Closkey (UC LA), Sundeep Mukherjee (U. Northern Texas), Robert Ritchie (UC Berkeley), Chris Schuh (MIT), Joost Vlassak (Harvard), Donghua Xu (UT Knoxville)

Thesis Advisor:

Prof. Dieter Herlach (DLR, German Aerospace Agency)

Prof. Knut Urban (RWTH Aachen, Germany)

Postdoctoral Advisors:

Prof. William Johnson (California Institute of Technology)

Students:

Ph.D students: Jittisa Ketkaew, Michael Kanik, Wen Shen, Emily Kinser, Yanglin Li, Punnathat Bordeenithikasem, Yingbei Liu, Shiyang Ding (McKinsey Consulting), Baran Sarac (Fraunhofer Institute, Geesthacht)

Postdocs: Yanhui Liu, Ze Liu, Sungwoo Sohn, Pan Gong, Golden Kumar (faculty Texas Tech University), Sundeep Mukherjee (faculty Northern Texas University)