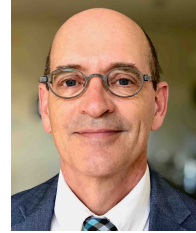


PETER M ANDERSON

Peter M. Anderson is Professor in the Department of Materials Science and Engineering at The Ohio State University. He received his ScB degree in Engineering from Brown University (1981) and ScM and PhD degrees in Applied Sciences from Harvard University (1982, 1986). Following a postdoctoral fellowship at Cambridge University (UK), he joined The Ohio State University. He has authored/coauthored over one hundred fifty articles on mechanical behavior of bulk and thin film materials, a comprehensive set of PowerPoint lecture slides for the introductory textbook, *Materials Science and Engineering: An Introduction*, and most recently, the 3rd edition of *Theory of Dislocations* (with John Hirth and Jens Lothe). He has held visiting positions at Brown University, National Institute of Standards and Technology, Ruhr-Universität Bochum, and Los Alamos National Laboratory, where he was Bernd T. Matthias Scholar. He is a recipient of an Office of Naval Research Young Investigator Award, the OSU Boyer Award for Teaching Innovation, the OSU Lumley Research Award, and is an ASM Fellow. He recently completed a 4-year term as Chair of the Department of Materials Science and Engineering at The Ohio State University and a two-year assignment as Program Director at the National Science Foundation (US).



(A) PROFESSIONAL PREPARATION

Brown Univ.	Engineering	Sc.B.,	1981
Harvard Univ.	Appl. Sci. (JR Rice)	Sc.M.,	1982
Harvard Univ.	Appl. Sci. (JR Rice)	Ph.D.,	1986
Cambridge Univ. (UK)	Engineering (KL Johnson, NA Fleck)	PD	1986-1988

(B) APPOINTMENTS

9/05-present	Professor , Materials Science and Engineering, and Participating Faculty, Biomedical Engineering, The Ohio State University.
9/20-8/22	Program Director (Rotator) , Division of Materials Research, National Science Foundation.
6/15-5/19	Department Chair , Materials Science and Engineering, The Ohio State University.
7/09-8/09	Visiting Faculty , Ruhr University, Bochum, Germany.
9/95-9/08	Adjunct Staff , Cleveland Clinic Foundation.
9/01-6/02	Bernd T. Matthias Scholar , Materials Science and Technology Division, Los Alamos National Labs (on sabbatical from The Ohio State University).
9/94-9/05	Associate Professor , Materials Science and Engineering, The Ohio State University.
7/88-9/94	Assistant Professor , Materials Science and Engineering, The Ohio State University.
10/86-6/88	Postdoctoral Assistant , Engineering Department, Cambridge University (England).
9/81-8/86	Research Assistant , Harvard University.

(C) PUBLICATIONS

Sample Publications (out of 150+)

1. Zeleznik N, Hinojos A, Gao X, Nematollahi M, Moghaddam S, Saedi A, Zhang W, Elahinia M, Karaca H, Cawley JM, Mills M, Anderson PM, "Modeling the pseudoelastic design space of NiTi fabricated by laser powder bed fusion", **Additive Manufacturing** 66: 103472 (2023).
2. Anderson PM, Hirth JP, Lothe J, "Theory of Dislocations", 3rd ed., Cambridge Univ. Press (2017) [~600 citations].
3. Zhu Y, Ameyama K, Anderson PM, Beyerlein IJ, et al., "Heterostructured materials: superior properties from hetero-zone interaction", **Mater. Res. Ltrs.** 9: 1-31 [~400 citations].

4. Paranjape HM, Manchiraju S, Anderson PM, "A phase field-finite element approach to model the interaction between phase transformations and plasticity in shape memory alloys," **Int. J. Plasticity** **80**: 1-18 (May 2016) [70+ citations].
5. Bowers ML, Chen X, DeGraef M, Anderson PM, Mills MJ, "Characterization and modeling of defects generated in pseudoelastically deformed NiTi microcrystals", **Scripta Mater.** **78**: 69-72 [50 citations].
6. Manchiraju S, Gaydos D, Benafan O, Noebe R, Vaidyanathan R, Anderson PM, "Thermal cycling and isothermal deformation response of polycrystalline NiTi: Simulations vs. experiment", **Acta Mater.** **59**: 5238-5249 (2011) [50+ citations].
7. Manchiraju S, Anderson PM, "Coupling between martensitic phase transformations and plasticity: A microstructure-based finite element model," **Int. J. Plasticity** **26**(10): 1508-1526 (2010) [125+ citations].
8. Norfleet DM, Sarosi PM, Manchiraju S, Wagner MFX, Uchic MD, Anderson PM, Mills MJ, "Transformation-induced plasticity during pseudoelastic deformation in Ni-Ti microcrystals", **Acta Mater.** **57**(12) 3549-3561 (2009) [250+ citations].
9. Anderson PM, Bingert JF, Misra A, Hirth JP, "Rolling texture in nanoscale Cu/Nb multilayers", **Acta Mater.** **51**: 6059-6075 (2003) [145+ citations].
10. Gerberich WW, Nelson JC, Lilleodden ET, Anderson P, Wyrobek JT, "Indentation-induced dislocation nucleation: the initial yield point," **Acta Metall. et Mater.** **44**(9), 3585-3598 (1996) [450+ citations].

(D) SYNERGISTIC ACTIVITIES

Education

- Julia and Johannes Weertman Educator Award, TMS, 2023. [website](#).
- Faculty Innovator of the Year Award, Ohio Board of Regents, 2011. [website](#)
- Boyer Award for Excellence in Teaching Innovation, 2015.

Research

- Lumley Research Award, The Ohio State University, 2005.

Professional

- Fellow, ASM International (2021)
- Member, International Steering Committee, International Conference on Strength of Materials (2018-present).
- Program Manager, US National Science Foundation, Designing Materials to Revolutionize and Engineering Our Future (DMREF) Program, 9/2020-8/2022.
- Lead Organizer, 18th International Conference on Strength of Materials, Columbus, OH (15-19 July, 2018). See www.icsma18.org.
- Member, University Materials Council (2015-2019)