

# **Curriculum Vitae of Marc Meyers**

## (I) Education & Training

UNIVERSITY OF DENVER, Denver, Colorado. Ph.D. in Physical Metallurgy, 1974. M.S. in Materials Science, 1972. FEDERAL UNIVERSITY OF MINAS GERAIS, Brazil Diploma of Mechanical Engineer, 1969.

## (II) Research & Professional Experience

| 2010-present   | Distinguished Professor, UC San Diego   |
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| July 1988-2010 | Professor of Materials Science, UC San Diego.                                 |
| 1992-1997      | Associate Director and Director (7/96-12/97), NSF Institute for Mechanics and |
|                | Materials, UC San Diego   |
| October 1985 - | Adviser to the Director (IPA), Materials Science Division, U. S. Army         |
| January 1987   | Research Office, Durham, North Carolina.                                      |
| July 1983-1988 | Associate Director, Center for Explosives Technology Research; planning,      |
|                | implementation, and Associate Director of center funded for five years at 1.3 |
|                | million/year.   |

#### (III) Selected publications (540 total, 3 books; google scholar H index:114; 60,000 citations)

- 1. C.-H. Lu, B. A. Remington, B. R. Maddox, B. Kad, H. S. Park, S.T. Prisbrey, and M. A. Meyers, Laser Compression of Monocrystalline Tantalum, Acta Materialia 60 (19), 6601-6620. 2012.
- 2. C.-H. Lu, E.N Hahn, B.A. Remington, B.R. Maddox, E.M. Bringa, M.A. Meyers, Phase Transformation in Tantalum under Extreme Laser Deformation. Scientific Reports 5, 15064. (2015)
- 3. S. Zhao, B. Kad, E.N. Hahn, B.A. Remington, C.E. Wehrenberg, C. Huntington, M.A. Meyers, Pressure and shear-induced amorphization of silicon. Extreme Mechanics Letters, 5, 74-80. (2015).
- 4. S. Zhao, E.N. Hahn, B. Kad, B.A. Remington, C.E. Wehrenberg, E.M. Bringa, M.A. Meyers, Amorphization and nanocrystallization of silicon under shock compression. Acta Materialia, 103, 519-533. 2016.
- 5. S. Zhao, E.N Hahn, B. Kad, B.A. Remington, E. Bringa, M.A. Meyers, Shock compression of [001] single crystal silicon, European Physical Journal, 225, 335-341,2016.
- 6. E.N. Hahn, S. Zhao, E.M. Bringa, M.A. Meyers, Supersonic dislocation bursts in silicon. Scientific Reports, 6, 26977. 2016.
- 7. S. Zhao, B. Kad, B.A. Remington, J. C. La Salvia, C. Wehrenberg, K.D. Behler, M.A. Meyers
- Directional Amorphization of Boron Carbide Subjected to Laser Shock Compression, PNAS, 113, 12088-12093, 2016.
- 8. S. Zhao, B. Kad, C.E. Wehrenberg, B.A. Remington, E.N. Hahn, K.L. More, M.A. Meyers, Generating

Gradient Germanium Nanostructures by Shock Induced Amorphization and Crystallization, PNAS, 1, 1-6, 2017.

- S. Zhao, R. Flanagan, E. N. Hahn, B. Kad, B. A. Remington, C. E. Wehrenberg, R. Cauble, K. More, M. A. Meyers, Shock-induced amorphization in silicon carbide, Acta Materialia, Vol. 158, Pages 206-213, 2018.
- T. P. Remington, E. N. Hahn, S. Zhao, R. Flanagan, J. C. E. Mertens, S. Sabbaghianrad, T. G. Langdon, C. E. Wehrenberg, B. R. Maddox, D. C. Swift, Spall strength dependence on grain size and strain rate in tantalum, Acta Materialia, Vol. 158, Pages 313-329, 2018.

# (IV) Synergistic Activities

- As a graduate student, M. Meyers was actively engaged as a tutor at the U. of Denver in a program entitled Spanish Surnamed Students Engineering program (SSSEP). He tutored a group of undergraduate students, all of whom successfully graduated.
- M. A. Meyers and K. K. Chawla are the authors of a successful textbook that is used worldwide. This text has evolved from mechanical metallurgy to mechanical behavior of materials and a new edition is in preparation. It was translated into Chinese as well as its predecessor, Mechanical metallurgy.
- Associate Director, then Director (1992-1997) NSF-funded Institute for Mechanics and Materials,
- Dynamic Behavior of Materials, J. Wiley, 1994: author. This book has been translated into Chinese.
- Life Member, Clare Hall, Cambridge, UK
- M. Meyers has made several seminal contributions to Materials Science:
  - 1. Proposed model for annealing twin formation;
  - 2. Developed constitutive description of slip-twinning transition;
  - 3. Developed process of forging ceramics produced by combustion synthesis;
  - 4. Proposed concept of "transformation wave" in martensitic transformation;
  - 5. Showed that athermal martensite is an ultrafast isothermal martensite;
  - 6. Established the mechanism of microstructural evolution in shear bands;
  - 7. Proposed mechanism for plastic deformation at shock front;
  - 8. Proposed mechanism for grain-size dependence of yield stress;
  - 9. Demonstrated the self-organization in shear band growth.

#### (V) Honors and Awards

2025 Acta Materialia Gold Medal

- 2024 Hubertus Colpaert Award, ABM Brazil
- 2022 Leadership Award, TMS

2019 Grand Prix des Sciences, Luxembourg

2018 Robert Franklin Mehl Award, TMS

- 2017 George Duvall Award in Shock Compression Science, APS
- 2016 Charles Barrett Silver Medal, ASM
- 2015 Albert White Distinguished Teacher Award, ASM
- 2015 Morris Cohen Award, TMS

2015 Materials Science and Engineering A Journal Award

2014 Heyn Medal, German Materials Society

2013 Educator Award, TMS

- 2012 Fellow, TMS
- 2011 Corresponding member, Brazilian Academy of Sciences

2011 Fellow, APS

2011 Albert Sauveur Achievement Award, ASM

2010 Acta Materialia Materials and Society Award

2010 Best Paper Award JOM

2009 John Rinehart Award, EURODYMAT Association

2008 Lee Hsun Lecture Award, Institute for Metal Research, China

2008 Distinguished Service Award, SMD/TMS

- 2003- Distinguished Scientist/Engineer Award, SMD/TMS
- 1997- Humboldt Senior Scientist Award, Germany
- 1996- Fellow, ASM International
- 1980, 1985, 1990, 1995, 2000 Co-Founder, Co-Chair (w/ L. E. Murr) EXPLOMET Conf.