**TAREK I. ZOHDI**
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**PERSONAL BACKGROUND:**

- Place of Birth Lawrence, Kansas, USA.
- Personal: Elementary, primary and secondary education in Baton Rouge, Louisiana, USA.

**EDUCATION:**

- 2002: Habilitation-General Mechanics, Gottfried Wilhelm Leibniz Universitaet,Hannover, Germany.
- 1997: Ph. D. in Computational and Applied Mathematics, The University of Texas at Austin.
- 1991: Master of Science in Mechanical Engineering, Louisiana State University.
- 1989: Bachelor of Science in Mechanical Engineering, Louisiana State University.

**ACADEMIC APPOINTMENTS:**

- 7/2016-present: Will C. Hall Family Endowed Chair in Engineering, UC Berkeley.
- 7/2014-6/2020: Chancellor's Professor, UC Berkeley.
- 7/2009-present: Professor, Dept. of Mechanical Engineering, UC Berkeley.
- 7/2004-6/2009: Associate Professor, Dept. of Mechanical Engineering, UC Berkeley.
- 7/2001-6/2004: Assistant Professor, Dept. of Mechanical Engineering, UC Berkeley.
- 12/1998-6/2001: Lecturer, Inst. fuer Baumech. und Num. Mech., Leibniz Univ. Hannover.
- 5/1997-12/1998: Post-doctoral Researcher, Inst. fuer Mech., Tech. Univ. Darmstadt

**ACADEMIC ADMINISTRATIVE APPOINTMENTS:**

- 11/2020-present Academic Director, Sutardja Center for Entrepreneurship & Technology (SCET), UC Berkeley, https://scet.berkeley.edu/scet-names-tarek-zohdi-as-new-academic-director/
- 7/2020-present Associate Dean for Post Baccalaureate Programs, College of Eng., UC Berkeley. https://engineering.berkeley.edu/about/leadership-team/
- 7/2019-present: Director of the UCB-DEWA Program: https://engineering.berkeley.edu/2019/05/dubai-electricity-and-water-authority-partnership-advances-future-energy-educational-program
- 7/2018-6/2020: Chief Technology Officer of the Fung Institute, UC Berkeley https://funginstitute.berkeley.edu/about-us/our-people/staff/
- 7/2018-6/2020: Elected Chair of the Faculty, College of Engineering, UC Berkeley.
- 7/2012-present: Chair, Computational and Data Science and Eng. Program, UC Berkeley.
- 7/2009-6/2012: Vice-Chair for Instruction, Dept. of Mech. Eng., UC Berkeley.
- 7/2008-6/2012: Chair, Engineering Science Program, UC Berkeley.
- 7/2008-11/2008: Acting Assoc. Dean, Interim Eng. Sci. Prog. Exec. Comm., UC Berkeley.

**PROFESSIONAL APPOINTMENTS:**

- 9/2020-present: Director, UC Berkeley Center for Next Generation Food Systems https://food-manufacturing.berkeley.edu/ https://engineering.berkeley.edu/news/2020/08/uc-berkeley-team-advances-food-systems-research-in-new-20m-nsf-center/
- 6/2020-present: Elected to the Executive Council of the International Association for Computational Mechanics (seven were elected worldwide in 2020) https://iacm.info/about-iacm/executive-council/
- 10/2018-present: Founder and Director of the Fire Research (https://frg.berkeley.edu/) Group:
  (a) https://medium.com/the-coleman-fung-institute/fire-research-group-launched-to-explore-effective-engineering-solutions-for-uncontrolled-wildfires-339916cbaa2a
  (b) http://www.dailycal.org/tag/fire-research-group/
- 5/2018-10/2022: Elected Member-At-Large by the U. S. National Academy of Sciences and the National Research Council of U.S. National Com. for Theoretical and Applied Mechanics (USNCTAM): https://www.nationalacademies.org/our-work/us-national-committee-for-theoretical-and-applied-mechanics-usnc-iutam
- 3/2018-present: Appointed to the Medical Advisory Board of the American Melanoma Foundation https://www.myamf.org/board-of-directors/

- 1/2017-7/2020: Appointed Director of the Northern California Regional Smart Clean Manufacturing Demonstration Center: see
  (a) http://engineering.berkeley.edu/2016/06/california-new-headquarters-smart-manufacturing-institute
  (b) http://www.me.berkeley.edu/about/news/president-obama-announces-winner-new-smart-manufacturing-innovation-institute-competition
- 1/2017-7/2020: Appointed Director of the Northern California Regional Robotics and Manufacturing Center: see
  (a) https://www.me.berkeley.edu/about/news/dod-announces-award-new-advanced-robotics-manufacturing-arm-innovation-hub
  (b) http://engineering.berkeley.edu/2017/01/berkeley-regional-center-new-robotics-manufacturing-consortium
- 6/2015-present: Appointed External Advisory Board Member for the National San Diego Supercomputing Center (SDSC).
- 4/2014-present: Appointed by the U. S. National Academy of Sciences and the National Research Council as national coordinator of AmeriMech: http://sites.nationalacademies.org/pga/biso/iutam/pga_086043
- 4/2014-present: Appointed by the U. S. National Academy of Sciences and the National Research Council as member of U. S. National Com. for Theoretical and Applied Mechanics (USNCTAM) https://www.nationalacademies.org/our-work/us-national-committee-for-theoretical-and-applied-mechanics-usnc-iutam
- 7/2012-7/2014: President, United States Association for Computational Mechanics: https://www.usacm.org/executive-committee
- 9/2011-present: Faculty Scientist, Lawrence Berkeley National Lab: http://www.lbl.gov/
- 9/2006-present: Adjunct Scientist, Children's Hospital Oakland Research Institute (CHORI).

**AWARDS:**

- 2020-Humboldt-Forschungspreis(Humboldt Research Prize): given by the Alexander von Humboldt Foundation of the German Government and recognizes renowned researchers outside of Germany whose "fundamental discoveries, new theories or insights have had a significant impact on their own discipline and who are expected to continue producing cutting-edge achievements in the future." Received in the area of Mechanics in recognition of lifetime achievements; see
  - https://www.humboldt-foundation.de/web/humboldt-award.html
  - https://en.wikipedia.org/wiki/Humboldt_Prize
  - https://medium.com/the-coleman-fung-institute/tarek-zohdi-receives-prestigious-humboldt-research-prize-in-the-area-of-mechanics-5db0e8f52320
  - https://me.berkeley.edu/news/me-professor-tarek-zohdi-receives-prestigious-humboldt-research-prize-in-the-area-of-mechanics/
  - https://www.uni-due.de/2020-07-21-humboldt-forschungspreistraeger-tarek-i-zohdi-kommt

- 2019-Inducted as a Fellow of the American Academy of Mechanics(AAM): only one new Fellow is inducted in the nation and the Americas into the AAM each year: https://medium.com/the-coleman-fung-institute/tarek-zohdi-named-2019-aam-fellow-d4df374246e1
- 2019-2020 Lindbergh Lecture: The Department of Mechanical Engineering at the University of Wisconsin–Madison, named for the aviation pioneer Charles Lindbergh x'24
- 2017: University of California, Berkeley Distinguished Teaching Award. The Distinguished Teaching Award is a campus-wide recognition for faculty that have established a sustained and varied record of teaching excellence. This is the highest award for teaching in the University:
  (a) http://teaching.berkeley.edu/node/240
  (b) https://www.youtube.com/watch?v=ntzkn71r2Sg
- 2016-present Will C. Hall Family Endowed Chair in Engineering, UC Berkeley.
- 2014-2020 Chancellor's Professor, UC Berkeley.
- 2014: Best Visual Display of 2014 Society of Petro Eng. International Oil Field Corrosion Conf. and Exhibition (UK). Authors: Mukherjee, D., Zaky, Z., Zohdi, T. I., Salama, A. and Sun, S.
- 2011: LSU Mechanical Engineering Alum of the Year 2011. Citation: A special honor reserved for one Louisiana State University (LSU) ME alumnus per year for an exceptional level of achievement.
- 2009: Fellow of the United States Association for Computational Mechanics (USACM). The Fellow Award recognizes individuals for contributions to computational mechanics. The Fellow Award was presented at the United States National Congress for Computational Mechanics in Columbus, Ohio, 2009.
- 2008: Fellow of the International Association for Computational Mechanics (IACM). The Fellow Award recognizes individuals with a distinguished record of research, accomplishment and publication in areas of computational mechanics. The Fellow Award was presented at the World Congress for Computational Mechanics in Venice, Italy in 2008.
- 2008: Excellence in Teaching Award, Pi Tau Sigma, The University of California (Berkeley) Mechanical Engineering Honor Society. This is given to one instructor that has shown dedication and support for student learning.
- 2003: Junior Achievement Award of the American Academy of Mechanics. The award is given once a year, to one post-graduate researcher, to recognize outstanding research during the first decade of a professional career. The award was presented

at a ceremony in Washington D. C. during the annual ASME Winter Conference.

- 2002: Best Paper of the Year 2001. Awarded in London at the Lord's Cricket Ground by the Literati Club for Modeling and simulation of the decohesion of particulate aggregates in a binding matrix (Co-author: P. Wriggers). Journal: Engineering Computations.
- 2000: The Zienkiewicz Prize and Medal. The prize and medal are awarded once every two years, to one post-graduate researcher under the age of 35, by The Institution of Civil Engineers in London, to commemorate the work of Professor O. C. Zienkiewicz, for research which contributes most to the field of numerical methods in engineering.
- 1994-1997: University of Texas Computational and Applied Mathematics Fellowship. The CAM Fellowship is a full scholarship awarded to recognize achievement and commitment to computational and applied mathematics.
- 1992: Southwest AIAA Best Student Technical Lecture Award. The award is given once every year from a southwest regional oral paper presentation competition on graduate research problems.

**PROFESSIONAL SERVICE**

**(1) SERVICE AS AN EDITOR OR REVIEWER FOR SCHOLARLY JOURNALS/OTHER PUBLICATIONS:**

**(A) EDITORIAL JOURNAL/BOOK BOARDS (11 Journals and 2 Book Series):**

1. (2021-present) Appointed :Managing Editor for Comp. Meth. in Appl. Mech.and Eng.(Elsevier)
2. (2018-present) Appointed :Editorial Board, Archives of Comp. Methods in Eng. (Springer-Nature)
3. (2018-present) Appointed: Editorial Board,book series: Mathematical Engineering(Springer-Nature)
4. (2013-present) Co-founder/Co-Ed.-in-Chief: Comp. Part. Mech. (with P. Wriggers, E. Onate).
5. (2012-present) Appointed: Editorial Adv. Board of journal Adv. Mod. And Sim. in Eng. Sci.
6. (2012-present) Appointed: Editorial Board of journal Comp. and Math. with Applications
7. (2010-present) Appointed: Wiley (book) Series Advisor in Computational Mechanics
8. (2009-present) Appointed: Editorial Advisory Board of Computers and Structures
9. (2008-present) Appointed: Editor of the journal Computational Mechanics
10. (2008-2014) Appointed: Editor of the quarterly newsletter of U S. Assoc. for Comp. Mech.
11. (2008-present) Appointed: Editorial Adv. Board of The Int. Journal of Num. Meth.in Eng.
12. (2007-present) Appointed: Editorial Advisory Board of The Int. Journal of Eng. Science
13. (2007-present) Appointed: Editorial Advisory Board of the journal Computational Mechanics
14. (2005-present) Appointed: Editorial Advisory Board of Comp. Meth. in Appl. Mech.and Eng.
15. (2002-present) Appointed: Editorial Advisory Board of The Journal of Multiscale Comp. Eng.

**(B) GUEST EDITORIAL POSITIONS (9):**

(1) (2020) Appointed: Guest Editor. Special Issue Modeling and Simulation of Infectious Diseases-Propagation, decontamination and mitigation Guest Editors: T. I. Zohdi and E. Kuhl for the journal Computational Mechanics

(2) (2017) Appointed: Guest Editor. Special Issue-Advances in Computational Mechanics and Scientific Computation—the Cutting Edge-Honoring J. T. Oden for the journal Computer Methods in Applied Mechanics and Engineering

(3) (2017) Appointed: Guest Editor. Special Issue of Physical Modeling for Virtual Manufacturing Systems and Processes in the journal Computational Particle Mechanics

(4) (2016) Appointed: Guest Editor of a special issue entitled Particle Modeling and Simulation of Powder-based Processes in Advanced Manufacturing in the journal Computational Particle Mechanics

(5) (2014) Appointed: Guest Editor of a special issue entitled Modeling and Simulation of Advanced Manufacturing Processes in the journal Computational Mechanics

(6) (2012) Appointed: Guest Editor of a special issue entitled Materials for modern energy applications in the journal Computational Mechanics (with S. Schmauder)

(7) (2009) Appointed: Guest Editor of a special issue of the journal Computer Methods in Applied Mechanics and Engineering: Advances in Simulation-Based Engineering Sciences-Honoring J. T. Oden (with L. Demkowicz and P. Papadopoulos)

(8) (2007) Appointed: Guest Editor of a special issue of the journal Modelling and simulation in materials science and engineering on complex materials (with J. LLorca and H. B• ohm).

(9) (2005) Appointed: Guest Editor of a special issue of the journal Mechanics of Materials on disordered media

**(C) JOURNAL AND BOOK REVIEWER:**

Computer Methods in Applied Mechanics and Engineering, The International Journal of Numerical Methods in Engineering, Communications in Numerical Methods in Engineering, Zeitschrift f• ur Angewandte Mathematik und Physik, The Philosophical Transactions of the Royal Society, The Proceedings of the Royal Society, The International Journal of Engineering Science, ASME Journal of Applied Mechanics, ASCE Journal of Engineering Mechanics, Computers and Structures, The Journal of Multiscale Computational Engineering, The Journal of Elasticity, Computational Mechanics, The International Journal of Heat and Mass Transfer, The International Journal of Fracture, Mechanics of Cohesive-frictional Materials, Continuum Mechanics and Thermodynamics, Journal of Biomechanics, ASME Journal of Biomechanics, ASME Journal of Fluids Engineering, Geophysics, Modelling and

Simulation in Materials Science and Engineering, Proceedings of the Institution of Mechanical Engineers, Part H, Journal of Engineering in Medicine, Annals of Biomedical Engineering, Cambridge University Press Books, Springer Verlag Books, Journal of Composite Materials, Journal of Impact Engineering, Mechanics of Materials, Mathematics and Mechanics of Solids, ASME Journal of Manufacturing Science and Engineering, Biomechanics and Modeling in Mechanobiology, Journal of Thin Solid Films, Wear, ASME Journal of Mechanical Design, ASME Journal of Biomechanical Engineering, IDETC/CIE 2012 conference, Institute of Physics Journal, Computers and Mathematics with Applications, International Journal of Rock Mechanics and Mining Sciences, Crystal Growth and Design, Journal of Vibration and Acoustics, The International Journal of Numerical Methods in Fluids, Engineering with Computers, The International Journal of Fracture, Advances in Engineering Software, Technische Mechanik, Proceedings of the National Academy of Sciences, Computers, Materials and Continua, Computational Materials Science, The Proceedings of the Royal Society Interface, PLOS-ONE, Philosphical Mag, Journal of Mechanics of Materials and Structures, ASME Journal of Engineering Materials and Technology, Medical and Biological Engineering and Computing, Mathematical Problems in Engineering, Advanced Modelling and Simulation in Engineering Sciences, The International Journal of Thermal Sciences, Journal of Chemical Eng. and Materials Science.

**(2) SERVICE TO SCHOLARLY OR PROFESSIONAL SOCIETIES:**

**(A) ELECTED POSITIONS (7):**

1. 6/2020-present: Elected to the Executive Council of the International Association for Computational Mechanics (seven were elected worldwide in 2020)
2. 7/2018-present: Chair of the Faculty, College of Engineering, UC Berkeley.
3. (2012-2014) Elected: President of the United States Association for Computational Mechanics. The USACM is the primary computational mechanics organization in the United States.
4. (2010-2012) Elected: Vice-President of the United States Association for Computational Mechanics.
5. (2008-2010) Elected: Secretary/Treasurer of the United States Association for Computational Mechanics.
6. (2009-2015) Elected: Member of the General Council of the International Association of Computational Mechanics (IACM). The IACM is the primary international organization worldwide.
7. (2006-2010) Elected: Executive Council of the United States Association for Computational Mechanics. Eight people are elected nation-wide every four years.

**(B) APPOINTED SCIENTIFIC BOARD POSITIONS (45):**

1. (2020-2021) Appointed: Scientific Committee for the United States National Congress for Computational Mechanics, July 25-29, Chicago Illinois.
2. (2019-2021) Appointed: Scientific Committee for Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2021) Crete, Greece on 21-23 June 2021, in conjunction with the 7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2021).
3. (2019-2020) Appointed: US National Academies Review Committee for the M. B. Rashid Medal for Scientific Distinguishment.
4. (2019-2020) Appointed: Scientific Committee on the 5th African Conference on Computational Mechanics (AfriComp2020), Cape Town, South Africa, November 30-December 2, 2020.
5. (2018-2019) Appointed: Scientific Committee Member. Sim-AM 2019: II International Conference on Simulation for Additive Manufacturing [ Pavia (Italy), September 11-13, 2019
6. (2018-2020) Appointed: Scientific Committee of Contact Mechanics International Symposium (CMIS), Chexbres, Switzerland, May 13-15, 2020.
7. (2017-pres) Appointed: Judge-Journal Computers and Structures Best Paper Comp. (since 2012)
8. (2017-2019) Appointed: Scientific Committee for Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2019) Crete, Greece on 22-24 June 2019, in conjunction with the 7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019).
9. (2017-2018) Appointed: Scientific Committee for 28th International Workshop on Computational Mechanics of Materials (IWCMM) in Glasgow, UK, September 10-12, 2018.
10. (2017-2018) Appointed: Conference Editorial Board for the Thirteenth International Conference on Computational Structures Technology (CST2018), Barcelona, Spain, September 4-6, 2018
11. (2017-2018) Appointed: Scientific Committee for the 13th World Congress on Computational Mechanics (WCCM XIII) / 2nd Pan American Congress on Computational Mechanics (PANACM II), New York City, July 22-27, 2018.
12. (2017-2018)Appointed: Scientific Committee member of the 9th International Conference of the Croatian Society of Mechanics, Split, Croatia, September 18-22 2018
13. (2017-2018) Appointed: Scientific Committee 18th US national Congress for Theoretical and Applied Mechanics June 4-9, 2018, Evanston Illinois.
14. (2016-2017)Appointed: Scientific Committee member of the 5rd International Conference on Computational Contact Mechanics (ICCCM 2017), Lecce, Italy, July 4-7, 2017
15. (2016-2017)Appointed: Scientific Committee member of the ECCOMAS thematic conference entitled Simulation for Additive Manufacturing (Sim-AM), October 11-13, 2017, Munich, Germany.

16. (2016-2017)Appointed: Scientific Committee member of the ECCOMAS thematic conference entitled Computational modeling of complex materials across the scales (CMCS), November 7-9, 2017, Paris, France.
17. (2016-2018)Appointed: Scientific Committee member of Contact Mechanics Int. Symposium, Oropo, Italy, May 16-17, 2018
18. (2015-2017)Appointed: Scientific Committee member of the UNCECOMP 2017, the 2nd International Conference on Uncertainty Quantification in Computational Sciences and Engineering, 15-17 June 2017, Rhodes Island, Greece
19. (2015-2016) Appointed: Scientific Committee member of the symposium on Additive Manufacturing. 12th edition of NUMIFORM conferences (Numerical Methods in Industrial Forming Processes), University of Technology of Troyes, France, July 4-7, 2016.
20. (2015-2016)Appointed: Scientific Committee member of the 12th World Congress on Computational Mechanics, Seoul, Korea, July 24-29, 2016.
21. (2015-2016)Appointed: Scientific Committee member of the 8th Contact Mechanics International Symposium, Warsaw, Poland, May 11-13, 2016.
22. (2015-2016)Appointed: Scientific Committee member of the 6th Asia-Pacific Congress on Computational Mechanics (APCOM VI), July 24-29, 2016.
23. (2014-2015)Appointed: Scientific Committee for the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing: Civil-Comp 2015 (CC2015), Prague, Czech Republic from September 1-4, 2015.
24. (2014-2015)Appointed: Scientific Committee for ECCOMAS Thematic Conference on Multiscale Computational Methods for Solids and Fluids (ECCOMAS MSF 2015), July 20-23, 2015, Sarajevo, Bosnia and Herzegovina.
25. (2014-2015)Appointed: Scientific Committee for the Thematic Conference on Uncertainty Quantification in Computational Sciences and Engineering (UNCECOMP 2015) to be held on the Island of Crete, Greece on 25-27 May 2015.
26. (2013-2014)Appointed: Scientific Committee for the Contact Mechanics International Symposium (CMIS2014), Abu Dhabi, February 3-5, 2014.
27. (2013-2014)Appointed: International Scientific Committee for the Twelfth International Conference on Computational Structures Technology (CST2014), Naples, Italy, September 2-5, 2014.
28. (2013-2015)Appointed: International Scientific Committee for the First Pan American Congress on Computational Mechanics, Buenos Aires, Argentina, April 27-29, 2015.
29. (2012-2014)Appointed: United States Representative for the Organizing Committee of the 11$^{th}$ World Congress on Computational Mechanics, Barcelona, Spain, July 20-25, 2014
30. (2012-2014)Appointed: Scientific Committee member of the 11th World Congress on Computational Mechanics, Barcelona, Spain, July 20-25, 2014
31. (2012-2014)Appointed: Scientific Committee member of the 6th European Conference on Computational Fluid Dynamics, Barcelona, Spain, July 20-25, 2014
32. (2012-2014)Appointed: Scientific Committee member of the 5th European Conference on Computational Mechanics, Barcelona, Spain, July 20-25, 2014
33. (2012-2013)Appointed: Scientific Committee member of the 3rd International Conference on Computational Contact Mechanics (ICCCM 2013), Lecce, Italy, July 10-12, 2013
34. (2011-2012)Appointed: Conference Organizing Committee. 22nd International Workshop on Computational Mechanics of Materials. Sept. 24-26, 2012, Baltimore, Maryland.
35. (2011-2012)Appointed: Conference Editorial Board for The Eleventh International Conference on Computational Structures Technology, September 4-7, 2012, Dubrovnic, Croatia.
36. (2011-2013) Appointed: USACM-Scientific Program Committee for the Twelfth United States National Congress on Comp. Mechanics (USNCCM) in Raleigh, North Carolina (July, 2013)
37. (2010-2011) Appointed: International Scientific Committee for the conference ICCM2: The Second International Conference on Material Modelling, Paris, France (August, 2011)
38. (2010-2011) Appointed: International Scientific Committee for the conference Trends and Challenges in Computational Mechanics: TCCM 2011, Padua, Italy (September, 2011)
39. (2010-2012) Appointed: Scientific Committee of the 10th World Congress on Computational Mechanics, Sao Paulo, Brazil July 8-13, 2012
40. (2009-2012)Appointed: Scientific Organizing Committee The European Congress on Computational Methods in Applied Sciences and Engineering, Vienna, September 10-14, 2012.
41. (2009-2011) Appointed: USACM-Scientific Program Committee for the Eleventh United States National Congress on Computational Mechanics (USNCCM) in Minneapolis, Minnesota (July 25-28, 2011)
42. (2009-2010)Appointed: Conference Editorial Board for The Tenth International Conference on Computational Structures Technology, September 14-17, 2010, Valencia, Spain.
43. (2008-2010)Appointed: International Advisory Board of ECCM 2010, Fourth European Conference on Computational Mechanics (Solids, Structures and Coupled Problems in Engineering), Paris, May 16-21, 2010.
44. (2007-2009) Appointed: USACM-Scientific Program Committee for the Tenth United States National Congress on Computational Mechanics (USNCCM) in Columbus, Ohio
45. (2004-2005) Appointed: USACM-Scientific Program Committee for the Eighth United States National Congress on Computational Mechanics (USNCCM) in Austin, Texas

**(C) CONFERENCE ORGANIZATION (65):**

1. (2022) Co-Organizer: Minisymposium on Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others.with Sergio Idelsohn, E. Campello, P. Wriggers, E. Onate World Congress for Computational Mechanics (WCCM 17), Tokyo, Japan July 31 to August 5, 2022.
2. (2021) Co-Organizer: Minisymposium on Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others.with E. Campello, P. Wriggers, E. Onate, and C. Yee. CILAMCE-PANACM-2021, Rio, Brazil.
3. (2020) Co-Organizer: Workshop on Modeling and Simulation of Infectious Diseases-Propagation, Decontamination and Mitigation, with Ellen Kuhl (Stanford) August 14, 2020, Berkeley, California
4. (2019-2020) Co-Organizer: Multiscale Multiphysics Methods for Additive Manufacturing Processes and Materials with J. G. Michopoulos (US-NRL), R. M. Ferencz (LLNL) and A. Lew (Stanford U.). mmm2020] Call for Symposium Proposals - 10th Int. Conf. on Multiscale Materials Modeling, October 18-23, 2010, Baltimore
5. (2019-2020) AmeriMech Administrator: Conference on Experimental and Computational Fracture Mechanics: Validating peridynamics and phase field models for fracture prediction and experimental design, P. Diehl, S. Prudhomme, P. Seleson. February 26-28, 2020.
6. Non-reciprocal and Topological Wave Phenomena in Solids and Fluids (Organizers: A. Norris, G. Huang, M. Haberman and C. Seepersad). AmeriMech Sponsored Conference. Columbia, Missouri, May 28-31, 2019.
7. (2019) Co-Organizer: UC Berkeley/Sandia National Laboratories Research Collaboration Workshop with N. Teclemariam (LLNL), November 8, 2019, Berkeley, Ca.
8. (2019-2020) Co-Organizer: Multiscale Multiphysics Methods for Additive Manufacturing Processes and Materials with J. G. Michopoulos (US-NRL), R. M. Ferencz (LLNL) and A. Lew (Stanford U.). mmm2020] Call for Symposium Proposals - 10th Int. Conf. on Multiscale Materials Modeling, October 18-23, 2010, Baltimore, Maryland.
9. (2018-2019) Co-Organizer: Modeling and simulation of wildfires. (with I.Altintas), NAS/IUTAM/AmeriMech Conf. Berkeley, California, October 7-8, 2019
10. (2018-2019) Co-Organizer: The intersection of advanced additive manufacturing, mechanics, and materials (with C. Spadaccini), NAS/IUTAM/AmeriMech Conf. Berkeley, California, June 4-5, 2019
11. (2018-2019) Co-organizer: Berkeley Fire Research Workshop-Fire in the Environment, with M. Torn and Scott Stephens. UC Berkeley. May 9, 2019
12. (2019-2020) Co-organizer: Minisymposium Advances of Machine Learning in Material Design, Modeling and Processing, with C.T. Wu, Chuin-Shan Chen, Wing-Kam Liu, Zeliang Liu and Waiching Sun, World Congress on Computational Mechanics, Paris, France, 2020
13. (2019-2020) Co-organizer: 2020 Workshop on Meshfree and Novel Finite Element Methods with Applications, with C.T. Wu, Zhen Chen, Armando Duarte, Shaofan Li and John Koeste, Berkeley, 2020
14. (2018-2019) Co-organizer: Minisymposium Particle-Based Methods (DEM; PFEM; SPH; MPM; MPSI and others), with Sergio Idelsohn, Eugenio Onate, Tarek Zohdi. United States National Congress on Computational Mechanics, Austin Texas, July 28-August 1, 2019
15. (2018-2019) AmeriMech Administrator: Conference on Non-reciprocal and Topological Wave Phenomena in Solids and Fluids (Organizers: A. Norris, G. Huang, M. Haberman and C. Seepersad). AmeriMech Sponsored Conference. Columbia, Missouri, May 28-31, 2019.
16. (2017-2019) Co-Organizer: The sixth Conference on Particle-Based Methods (PARTICLES 2019, with E. Onate, R. Owen, P. Wriggers and M. Bischoff), Barcelona, Spain, September 28-30
17. (2017-2018) Co-Organizer: COMPFEST-2018 workshop-Computational Mechanics Festival (Co-organizers: C. Linder, C. Farhat, S. Govindjee, A. Lew, P. Marcus, O. Persson and T. I. Zohdi, Palo Alto, California, December 8, 2018.
18. (2017-2018) Co-Organizer: Berkeley-Autodesk Research Symposium (with J. Lee and M. Nourbakhsh). Berkeley, January 31, 2018.
19. (2016-2017) Co-Organizer: Computational Mechanics of Particle-Functionalized Fluid and Solid Materials for Additive Manufacturing and 3D Printing(Processes (with E. Shaqfeh), IUTAM/AmeriMech Conf. Berkeley, California, May 30-31, 2017
20. (2016-2017) Co-Organizer: COMPFEST-2017 workshop-Computational Mechanics Festival (Co-organizers: S. Govindjee, T. Zohdi, C. Linder, A. Lew, Berkeley, California, April 8, 2018.
21. (2016-2017) Co-organizer: Workshop: Advances in Computational Science, Engineering and Mathematics. March 2017, Austin, Texas. (Co-organizers: L. Demkowicz, J. N. Reddy, P. Le Tallec and S. Prudhomme).
22. (2016) Organizer: Advanced Robotics Manufacturing Workshop: Berkeley, Ca., May 25, 2016
23. (2015-2017) Co-Organizer: The fifth Conference on Particle-Based Methods (PARTICLES 2017, with E. Onate, R. Owen, P. Wriggers and M. Bischoff), Hannover, Germany, September 26-28
24. (2015-2016) AmeriMech Administrator: Conference on mechanical behavior of 2D materials grapheme and beyond. (Organizers: R. Huang and K. Leichti). AmeriMech Sponsored Conference. Austin, Texas, April 4-6, 2016
25. (2015) Co-Organizer: Army High Performance Computing Research Center Conference on Additive Manufacturing. (Co-organizers: W. Cai, C Farhat, B. Henz and A. Lew). Adelphi, Maryland, December 15-16, 2015
26. (2015) AmeriMech Administrator: Conference on nonlocal models, computation, science and engineering. (Organizer: P.

Seleson) AmeriMech Sponsored Conference, Oakridge Tennessee, October 26-28, 2015.
27. (2015-2016) Co-organizer: Conference on Multiscale Methods and Validation in Medicine and Biology III: Biomechanics and Mechanobiology. (Organizers: W. Klug, K. Garikipati, C. Haselwandter and A. Levine). Los Angeles, February 25-26, 2016.
28. (2014-2015) Co-Organizer: Workshop-Synergy between Computational Mechanics and Manufacturing. (Co-organizers: P. Wriggers, J. Aurich, J. Schroeder and D. Dornfeld), Hannover, Germany. July 13-14, 2015.
29. (2013-2014) Co-Organizer: COMPFEST workshop-Computational Mechanics Festival (Coorganizers: C. Farhat, S. Govindjee, A. Lew, C. Linder (chair), P. Marcus, and P. O. Persson). Palo Alto, California.
30. (2014) Organizer: Conference: UC Berkeley-Brazil (FAPESP) Conference, "FAPESP Week", for fostering UCB and Sao Paulo relations. Berkeley, Ca. November 17-18, 2014.
31. (2014) Organizer: Workshop: UC Berkeley-Norway Workshop on Next-Generation Building efficiency Berkeley, Ca. September 15, 2014.
32. (2013-2015) Organizer: The Fourth Conference on Particle-Based Methods (PARTICLES 2015, with E. Onate, R. Owen and P. Wriggers), Sept. 28-30, Barcelona, Spain.
33. (2013-2014) Organizer: Workshop: Synergy between Computational Mechanics and Manufacturing. (Co-organizers: D. Dornfeld, J. Aurich, P. Wriggers and J. Schroeder) Berkeley, Ca. April 1-2, 2014.
34. (2012-2013) Organizer: Workshop on Computational Methods for Problems With Evolving Domains and Discontinuities. (Co-organizers: C. Farhat and A. Lew). Palo Alto, California.
35. (2012-2013) Organizer: COMPFEST workshop-Computational Mechanics Festival (Co-organizers: D. Mukherjee, P. Marcus, C. Farhat and A. Lew). Berkeley, California.
36. (2012-2014) Organizer: Conference on Multiscale Methods and Validation in Medicine and Biology II: Biomechanics and Mechanobiology. (Co-organizers: E. Kuhl, G. Garikipati and P. Papadopoulos). Berkeley, California.
37. (2012)Organizer: Session organizer for \New Materials for Energy Applications. Modeling and Simulation of Multiphysical Processes in New Materials for Energy-Related Applications." 22nd International Workshop on Computational Mechanics of Materials (IWCMM XXII). September 24-26, 2012 in Baltimore, Maryland.
38. (2011-2012) Organizer: Workshop: Advances in Computational Science, Engineering and Mathematics. January 19-20, Austin, Texas. (Co-organizers: L. Demkowicz, A. Patra, J. N. Reddy, P. Le Tallec and S. Prudhomme).
39. (2010) Organizer: IUTAM/CISM Lecture Series (week long workshop) on modeling and simulation of multiphysical processes in multiscale systems in Udine, Italy (co-organized with P. Papadopoulos)
40. (2005-2007) Organizer: Ninth United States National Congress on Computational Mechanics (USNCCM) in 2007 in San Francisco (co-organized with P. Papadopoulos)
41. (2005) Organizer: CISM (the International Centre For Mechanical Sciences) Lecture Series (week long workshop) on Multiscale modeling and design of new materials in Udine, Italy.
42. (2005) Organizer: Berkeley/Stanford Computational Fest (one day colloquium) co-organized with P. Marcus and C. Farhat. http: // www.me.berkeley.edu / compfest /
43. (2004) Organizer: Prager Symposia (6 sessions) for the Society of Engineering Science (SES)Lincoln, Nebraska, USA (with W. Curtin).
44. (2002) Organizer: CISM (the International Centre For Mechanical Sciences) Lecture Series (week long workshop) on Computational Micromechanics in Udine, Italy (co-organized with P. Wriggers).
45. Other organized (*twenty events*) events: (2007) Minisymp. Org.: (1 session) U. S. National Congress on Computational Mechanics (USNCCM); San Francisco, USA.; (2003) Minisymp. Org.: (6 sessions) U. S. National Congress on Computational Mechanics (USNCCM); Albuquerque, USA. (with J. Fish, S. Ghosh and P. Ladeveze); (2001) Minisymp. Org.: (6 sessions) United States National Congress on Computational Mechanics (USNCCM). Dearborn, USA. (with J. T. Oden and P.Wriggers); (2001) Minisymp. Org.: (1 session) MIT FEM Conference. Cambridge, USA. (with P. Wriggers); (2001) Minisymp. Org.: (1 session) European Conference on Computational Mechanics (ECCM). Cracow, Poland. (with T. Lewinski); (2000) Minisymp. Org.: (1 session) Gesellschaft fr Angewandte Mathematik und Mechanik (GAMM). G• ottingen, Germany (with P. Wriggers); (1999) Minisymp. Org.: (1 session) European Conference on Computational Mechanics (ECCM). Munich, Germany. (with P. Wriggers)

**(D) OTHER APPOINTED PROFESSIONAL POSITIONS/ACTIVITIES:**

1. (2021): Judge for the Urban Farming Case Competition. UC Berkeley and the City of Berkeley, May 1, 2021
2. (2018): Panelist for California Alliance annual retreat to advance underrepresented minority doctoral students and postdoctoral fellows to competitive academic positions. March 16-17, 2018, UC Berkeley, Berkeley, Ca.
3. (2018): Advisory Board Member for the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG) Priority Programme 2122-Materials for Additive Manufacturing
4. (2017-present): Advisory Board Member for the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG) Priority Programme 2122-Materials for Additive Manufacturing
5. (2017-present): Advisory Board Member for the NSF Nanomanufacturing Node, University of Illinois at Urbana-Champaign
6. (2017) Appointed: Editor of conference proceedings of IRTG Conference in Speyer, Germany
7. (2016-present) Appointed: Gottfried Leibniz University Hannover (Germany) tenure board for the step from W1 to W2 and

W2 to W3 professors.
8. (2016) Appointed: Reviewer of reports for the National Academy of Sciences.
9. (2015-present) Appointed: National Co-Chairman of AmeriMech by the U. S. National Academy of Sciences and the National Research Council as a Co-Chairman (with John Dabiri) of the National AmeriMech Symposium Series for the U. S. National Committee for Theoretical and Applied Mechanics (USNCTAM)
10. (2016) Appointed: Judge for the Berkeley Energy Resources Collaborative (BERC) Innovation Expo. (2/18/2016)
11. (2015-present) Appointed: Judge for Samsung International Doctoral Scholarships
12. (2015) Appointed: Judge for Young Researcher Best Paper Competition for the Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing: Civil-Comp 2015 (CC2015), Prague, Czech Republic from September 1-4, 2015
13. (2014-present) Appointed: National Committee Member by the U. S. National Academy of Sciences and the National Research Council as a member of the U. S. National Committee for Theoretical and Applied Mechanics (USNCTAM).
14. (2014-2015) Appointed: Committee Member, Lawrence Livermore National Laboratory (LLNL) 2014 Engineering Directorate Review Committee (DRC).
15. (2015-present) Appointed: Committee Member, UC-wide external advisory board for the San Diego Supercomputing Center.
16. (2014) Appointed: Judge for the Big Ideas Proposal Competition. Blum Center for Developing Economies, UC Berkeley (11/2014)
17. (2014) Appointed: Judge for the Berkeley Energy Resources Collaborative (BERC) Innovation Expo. (10/16/2014)
18. (2013) Appointed: Panelist for the California Student Sustainability Coalition Convergence Workshop (4/27/2013)
19. (2012) Appointed: Judge for robot building for the Pioneers in Engineering competition at the Lawrence Hall of Science (for Bay Area High Schools).
20. (2012-present) Appointed: Advisory Board to the Deep Green Alliance on the Folding Water Initiative for the San Francisco Bay: http://www.dgda.com/
21. (2012-present) Appointed: Advisory board member for Center for Simulation, Visualization and Real Time Computing (SiViRT), University of Texas, San Antonio.
22. (2011-present) Appointed: LSU Mechanical Engineering Department Industrial Advisory Board.
23. (2011) Appointed: Judge for the best paper of the year (by a junior researcher) for the journal Computers and Structures
24. (2009-present) Appointed: Advisory Board for the International Graduate School for Multiscale Mechanics for Interface Coupling (MUSIC), University of Hannover, Germany
25. (2009-2012) Appointed: Scientific Organizing Committee The European Congress on Computational Methods in Applied Sciences and Engineering, Vienna, September 10-14, 2012.
26. (2002-2004) Appointed: NPACI/NSF-National Partnership for Advanced Computing Infrastructure Allocations Committee
27. Proposal/panel reviewer for: Dutch government Technology Foundation STW(2016), Canadian National Science Foundation (NSERC, 2015), National Science Foundation (for Computational and Data-Enabled Science and Engineering in Engineering, 2014), Swiss National Science Foundation (2013), European Research Council (2007-present), National Science Foundation (Regular panels and Graduate Research Fellowship Program) (2008-2010), Army Research Office (2008, 2009), Air Force of Scientific Research (2008), International Multi-Conference on Engineering and Technological Innovation: IMETI (2009)

**PROFESSIONAL SERVICE TO THE STATE OF CALIFORNIA:**

1. In 2/2019, I was selected expert panelist for the California Council on Science and Technology (CCST) , which is a nonpartisan nonprofit created via the California Legislature in 1988 to provide objective advice from California's best scientists and research institutions on policy issues involving science. In response to the devastating wildfires of 2017 and 2018, CCST convened wildfire experts and facilitated cross-disciplinary meetings about a range of wildfire issues. I was part of the expert briefings for the state legislature on "Emerging Technologies for Real-Time Response to Wildfires." https://ccst.us/expert-briefings/
2. In 3/2019 I was invited by the California State Senate in Sacramento to give a lecture: "Applying advanced engineering technologies to emergency fire control". This was for a Joint Informational Hearing for the Assembly Governmental Organization Committee and Senate Governmental Organization Committee on the "Utilization of Current and Emerging Technologies to Monitor Wildfire Activity in California".

**REFEREED ARCHIVAL JOURNAL PUBLICATIONS (185 see https://cmmrl.berkeley.edu/zohdi-publications/):**

1. Zohdi, T. I. and Meletis, E. I. (1992). On the intergranular hydrogen embrittlement mechanism of Al-Li alloys. Scripta Metallurgica. 26, 1615-1620.
2. Zohdi, T. I., Oden, J. T. and Rodin, G. J. (1996). Hierarchical modeling of heterogeneous bodies. Computer Methods in Applied Mechanics and Engineering. 138, 273-298.
3. Oden, J. T. and Zohdi, T. I. (1997). Analysis and adaptive modeling of highly heterogeneous elastic structures. Computer Methods in Applied Mechanics and Engineering. 148, 367-391.
4. Zohdi, T. I., Feucht, M., Gross, D. and Wriggers, P.(1998). A description of macroscopic damage via microstructural relaxation. The International Journal of Numerical Methods in Engineering. 43, 493-507.
5. Wriggers, P., Zavarise, G. and Zohdi, T. I. (1998). A computational study of interfacial debonding damage in fibrous composite materials. Computational Materials Science. 12, 39-56.
6. Zohdi, T. I. and Meletis, E. I.(1998). Calculation of hydrogen buildup in the neighborhood of intergranular cracks. The Journal of the

Mechanical Behavior of Materials. 9, No. 1, 23-33.
7. Moes, N., Oden, J. T., and Zohdi, T. I.(1998). Investigation of the interaction of numerical error and modeling error in the Homogenized Dirichlet Projection Method. Computer Methods in Applied Mechanics and Engineering. 159, 79-101.
8. Zohdi, T. I. and Wriggers, P. (1999). A domain decomposition method for bodies with microstructure based upon material regularization. The International Journal of Solids and Structures. 36, No. 17, 2507-2526.
9. Zohdi, T. I., Hutter, K., and Wriggers, P. (1999). A technique to describe the macroscopic pressure dependence of diffusive properties of solid materials containing heterogeneities. Computational Materials Science. 15, 69-88.
10. Zohdi, T. I. and Wriggers, P. (1999). On the effects of microstress on macroscopic diffusion processes. Acta Mechanica. 136, No 1-2, 91-107.
11. Zohdi, T. I. and Wriggers, P. (2000). A computational model for interfacial damage through microstructural cohesive zone relaxation. The International Journal of Fracture/Letters in Micromechanics. 101 No. 3, L9-L14.
12. Zohdi, T. I. and Wriggers, P. (2000). Phenomenological modeling and numerical simulation of the environmental degradation of multiphase engineering materials. Archive of Applied Mechanics (Ingenieur Archiv). 70, 47-64.
13. Zohdi, T. I. and Wriggers, P. (2000). On the sensitivity of homogenized material responses at infinitesimal and finite strains. Communications in Numerical Methods in Engineering. 16. 657-670.
14. Zohdi, T. I. (2000). Overall solution-difference bounds on the effects of material inhomogeneities.The Journal of Elasticity. 58 (3), 249-255.
15. Zohdi, T. I. (2000). Some remarks on hydrogen trapping. The International Journal of Fracture/Letters in Micromechanics. 106 No. 2, L9-L14.
16. Zohdi, T. I. and Wriggers, P. (2001). A model for simulating the deterioration of structural-scale material responses of microheterogeneous solids. Computer Methods in Applied Mechanics and Engineering. 190, 22-23, 2803-2823.
17. Zohdi, T. I. and Wriggers, P. (2001). Aspects of the computational testing of the mechanical properties of microheterogeneous material samples. The International Journal of Numerical Methods in Engineering.50, 2573-2599.
18. Zohdi, T. I. and Wriggers, P. (2001). Modeling and simulation of the decohesion of particulate aggregates in a binding matrix. Engineering Computations. 18, 1/2, 79-95.
19. Zohdi, T. I. and Wriggers, P. (2001). A Petrov-Galerkin transformation that eliminates spurious oscillations for heterogeneous diffusion-reaction equations. Computational Materials Science. 21, 2, 255-260.
20. Zohdi, T. I. and Wriggers, P. (2001). Computational micro-macro material testing. Archives of Computational Methods in Engineering. Vol 8, 2, 131-228.
21. Zohdi, T. I., Wriggers, P. and Huet, C. (2001). A method of substructuring large-scale computational micromechanical problems. Computer Methods in Applied Mechanics and Engineering. 190. 43-44, 5639-5656.
22. Zohdi, T. I. (2001). Computational optimization of vortex manufacturing of advanced materials. Computer Methods in Applied Mechanics and Engineering. 190. 46-47, 6231-6256.
23. Zohdi, T. I. (2001). On the propagation of microscale material uncertainty in a class of hyperelastic finite deformation stored energy functions. The International Journal of Fracture/Letters in Micromechanics. 112, L13-L17.
24. Zohdi, T. I. (2002). An adaptive-recursive staggering strategy for simulating multifield coupled processes in microheterogeneous solids. The International Journal of Numerical Methods in Engineering. 53, 1511-1532.
25. Zohdi, T. I. (2002). The tailoring of microstructures for prescribed effective properties. The International Journal of Fracture/Letters in Micromechanics. 114, L15-L20.
26. Zohdi, T. I. (2002). Modeling and simulation of progressive penetration of multilayered ballistic fabric shielding. Computational Mechanics. 29, 61-67.
27. Zohdi, T. I. (2002). Simulation of time-discontinuous chemically-aided intergranular fracture. Computational Materials Science. 24 (4), 490-500.
28. Zohdi, T. I. and Steigmann, D. J. (2002). The toughening effect of microscopic _lament misalignment on macroscopic fabric response. The International Journal of Fracture/Letters in Micromechanics. 118, No. 4, L71-L76.
29. Zohdi, T. I. (2002). Incorporation of microfield distortion into rapid effective property design. Mathematics and Mechanics of Solids. Vol. 7, Number 3, 237-254.
30. Zohdi, T. I., Monteiro, P. J. M. and Lamour, V. (2002). Extraction of elastic moduli from granular compacts. The International Journal of Fracture/Letters in Micromechanics.115, L49-L54.
31. Zohdi, T. I. (2002). Bounding envelopes in multiphase material design. The Journal of Elasticity. 66, 47-62.
32. Zohdi, T. I., Kachanov, M. and Sevostianov, I. (2002). On perfectly-plastic flow in porous material. The International Journal of Plasticity. 18, 1649-1659.
33. Zohdi, T. I. (2003). Large-scale statistical inverse computation of inelastic accretion in transient granular flows. The International Journal of Nonlinear Mechanics. Vol. 8, Issue 38, 1205-1219.
34. Zohdi, T. I. (2003). Genetic design of solids possessing a random-particulate microstructure. Philosophical Transactions of the Royal Society: Mathematical, Physical and Engineering Sciences. Vol: 361, No: 1806, 1021-1043.
35. Zohdi, T. I. (2003). On the compaction of cohesive hyperelastic granules at finite strains. Proceedings of the Royal Society. Vol. 454. Num. 2034, 1395-1401.
36. Zohdi, T. I. (2003). Computational design of swarms. The International Journal of Numerical Methods in Engineering. 57, 2205-2219.
37. Zohdi, T. I. (2003). Constrained inverse formulations in random material design. Computer Methods in Applied Mechanics and

Engineering.1-20. 192, 28-30, 18, 3179-3194.
38. Zohdi, T. I. (2003). On the sensitivity of a class of finite-deformation high strain-rate ballistic models to constitutive parameter uncertainty. The International Journal of Fracture/Letters in Micromechanics. 119, No. 2, L47-L52.
39. Zohdi, T. I. (2004). Staggering error control for a class of inelastic processes in random microheterogeneous solids. The International Journal of Nonlinear Mechanics. 39, 281-297.
40. Zohdi, T. I. (2004). Modeling and simulation of a class of coupled thermo-chemo-mechanical processes in multiphase solids. Computer Methods in Applied Mechanics and Engineering. Vol. 193/6-8 679-699.
41. Zohdi, T. I., Holzapfel, G. A. and Berger, S. A. (2004). A phenomenological model for atherosclerotic plaque growth and rupture. The Journal of Theoretical Biology. Vol. 227, Issue 3, pp. 437-443.
42. Zohdi, T. I. (2004). Modeling and direct simulation of near-field granular flows. The International Journal of Solids and Structures. Vol 42/2 pp 539-564.
43. Zohdi, T. I. (2004). A computational framework for agglomeration in thermo-chemically reacting granular flows. Proceedings of the Royal Society. Vol. 460. Num. 2052, 3421-3445.
44. Zohdi, T. I. (2005). Statistical ensemble error bounds for homogenized microheterogeneous solids. Journal of Applied Mathematics and Physics. (Zeitschrift f• ur Angewandte Mathematik und Physik). Volume 56, Number 3. 497-515.
45. Zohdi, T. I. (2005). Charge-induced clustering in multifield particulate flow The International Journal of Numerical Methods in Engineering. Volume 62, Issue 7, Pages 870-898
46. Temizer, I. and Zohdi, T. I. (2005). Fragmentation and agglomeration in microscale granular flows. The International Journal of Fracture/Letters in Micromechanics. Vol. 131, L37-L44.
47. Zohdi, T. I. and Kachanov, M. (2005). A note on the micromechanics of plastic yield of porous solids The International Journal of Fracture/Letters in Micromechanics. Vol. 133, L31-L35.
48. Zohdi, T. I. (2005). A simple model for shear stress mediated lumen reduction in blood vessels. Biomechanics and Modeling in Mechanobiology. Volume 4, Number 1, p57 - 61.
49. Zohdi, T. I. and Szeri, A. J. (2005). Fatigue of kidney stones with heterogeneous microstructure subjected to shock wave lithotripsy. Journal of Biomedical Materials Research: Part B – Applied Biomaterials. Volume 75B, Issue 2, Date: November 2005, Pages: 351-358.
50. Zohdi, T. I. and Powell, D. (2006). Multiscale construction and large-scale simulation of structural fabric undergoing ballistic impact. Computer Methods in Applied Mechanics and Engineering. Volume 195, 94-109.
51. Zohdi, T. I. (2006). On the optical thickness of disordered particulate media. Mechanics of Materials. Volume 38, 969-981.
52. Zohdi, T. I. (2006). Uncertainty growth in hypo-elastic material models. Mathematics and Mechanics of Solids. Vol 11., Num. 6, 555-562.
53. Zohdi, T. I and Kuypers, F. A. (2006). Modeling and rapid simulation of multiple red blood cell light scattering. Proceedings of the Royal Society Interface. Volume 3, Number 11 Pages 823-831.
54. Zohdi, T. I. (2006). Computation of the coupled thermo-optical scattering properties of random particulate systems. Computer Methods in Applied Mechanics and Engineering. Volume 195, 5813-5830.
55. Temizer, I. and Zohdi, T. I. (2007). A numerical method for homogenization in non-linear elasticity. Computational Mechanics. Volume 40, Number 2, 281-298.
56. Zohdi, T. I. (2007) P-wave induced energy and damage distribution in agglomerated granules Modelling and simulation in materials science and engineering. 15, S435-S448.
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58. Zohdi, T. I. (2007). Computation of strongly coupled multifield interaction in particle-fluid systems. Computer Methods in Applied Mechanics and Engineering. Volume 196, 3927-3950.
59. Zohdi, T. I. (2007). Particle collision and adhesion under the influence of near-fields. Journal of Mechanics of Materials and Structures. Volume 2, No. 6, 1011-1018
60. Dirksen, F. and Zohdi, T. I. (2007) On effective energy reflectance of particulate materials. The International Journal of Fracture/Letters in Fracture and Micromechanics. 145: 341-347.
61. Arbelaez, D., Zohdi, T. I. and Dornfeld, D. (2008) Modeling and Simulation of Material Removal with Particulate Flow. Computational Mechanics. Volume 42, 749-759.
62. Sevostianov, I, Kachanov, M., and Zohdi, T. I. (2008). On computation of the compliance and stiffness contribution tensors of inhomogeneities of non-ellipsoidal shapes. International Journal of Solids and Structures. 45 (16), 4375-4383.
63. Zohdi, T. I. (2008) On the computation of the coupled thermo-electromagnetic response of continua with particulate microstructure. The International Journal of Numerical Methods in Engineering. 76, 1250-1279.
64. Arbelaez, D. and Zohdi, T. I. (2009) Uncertainty quantification of the subsurface failure of composites with nanoscale constituents. Journal of Computational and Theoretical Nanoscience. 6, 2307-2316.
65. Zohdi, T. I. (2009) Mechanistic modeling of swarms. Computer Methods in Applied Mechanics and Engineering. Volume 198, Issues 21-26, Pages 2039-2051.
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81. Zohdi, T. I. (2011) Joule-heating field phase-amplification in particulate-doped dielectrics. The International Journal of Engineering Science. 49, 30-40.
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Optimization for Capturing Infectious Disease Respiratory Emissions, Archives of Computational Methods in Engineering
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Farms, Computational Mechanics
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**BOOKS/RESEARCH MONOGRAPHS (https://cmmrl.berkeley.edu/zohdi-publications/):**
1.Zohdi, T. I. and Wriggers, P. (Book, 2005, 2008) Introduction to computational micromechanics. Link: https://rd.springer.com/book/10.1007/978-3-540-32360-0
2. Zohdi, T. I. (Book, 2007) Introduction to the modeling and simulation of particulate flows. SIAM (Society for Industrial and Applied Mathematics) Link.https://www.amazon.com/Introduction-Simulation-Particulate-Computational-Engineering/dp/0898716276
3. Zohdi, T. I. (Book, 2012) Electromagnetic properties of multiphase dielectrics. A primer on modeling, theory and computation. Link: https://rd.springer.com/book/10.1007/978-3-642-28427-4
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7.Zohdi, T. I. (Book, 2018). Modeling and simulation of functionalized materials for additive manufacturing and 3D printing: continuous and discrete media. Link: https://rd.springer.com/book/10.1007/978-3-319-70079-3
8.Zohdi, T. I. (Book, in press) Modeling and simulation of infectious diseases: microscale transmission, decontamination and macroscale propagation. Springer-Verlag

**BOOK, HANDBOOK AND ENCYCLOPEDIA CHAPTERS (https://cmmrl.berkeley.edu/zohdi-publications/):**
1. Zohdi, T. I. (Encyclopedia chapter, 2004) Homogenization methods and multiscale modeling: linear problems (Peer Reviewed). Encyclopedia of Computational Mechanics. E. Stein, R. de Borst and T. Hughes Editors. John Wiley.
2. Zohdi, T. I. (Handbook chapter, 2006) An introduction to the finite element method (Peer Reviewed). Mechanical Engineer's Handbook, 3rd edition. John Wiley.
3. Zohdi, T. I. (Book chapter, 2011) On the coexistence of intermeshed hostile populations (Peer Reviewed). Chapter 37 in the book: Recent Developments and Innovative Applications in Computational Mechanics. Springer-Verlag, pp 331-340.
4. Zohdi, T. I. and Zohdi, M. E. (Handbook chapter 2013) Analytical tools for estimating particulate composite material properties and their development (Peer Reviewed). Engineering Measurements Encyclopedia, John Wiley.
5. Zohdi, T. I. (Handbook chapter 2013) Basic microstructure-macroproperty calculations (Peer Reviewed). Springer.
6. Zohdi, T. I. (Book chapter 2013) Modeling and rapid simulation of high-frequency scattering responses of cellular groups (Peer Reviewed). John Wiley.
7. Zohdi, T. I. (Encyclopedia chapter 2013) Linear Elastostatics (Peer Reviewed). Encyclopedia of Applied and Computational Mathematics. Springer.
8. Zohdi, T. I. (Encyclopedia chapter 2013) Particulate Composite Media (Peer Reviewed). Encyclopedia of Applied and Computational Mathematics. Springer.
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10. Zohdi, T. I. (Book chapter, 2014) Reduced Order Network Models for Biological Scaffolding (Peer Reviewed). Multiscale Modeling in Biomechanics and Mechanobiology, W. Hwang, E. Kuhl and S. De Editors. Springer.
11. Zohdi, T. I. (Encyclopedia chapter, 2015) Homogenization methods and multiscale modeling: linear problems. 2nd Edition. Encyclopedia of Computational Mechanics. E. Stein, R. de Borst and T. Hughes Editors. John Wiley.
12. Zohdi, T. I. (Book chapter, 2018) A simple qualitative model for the pressure-induced expansion and wall-stress response of fluid-filled biological channels. New Achievements in Continuum Mechanics and Thermodynamics. Advanced Structured Materials, Springer Nature. Pages 553-563.
13. Zohdi, T. I. (Book chapter, 2020) Functionalized materials for additive manufacturing and 3D printing. Edited Volume on Additive Manufacturing of Multi-functional Structures, World Scientific Publishing Company.
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**EDITED BOOK VOLUMES (https://cmmrl.berkeley.edu/zohdi-publications/):**
Aurich, J. C., Ravani, B., Ebert, A., Hamann, B. Muller, R. Zohdi, T.I. and Kirsch, B. (2019). Physical Modeling for Virtual Manufacturing Systems and Processes https://www.scientific.net/book/physical-modeling-for-virtual-manufacturing-systems-and-processes/978-3-0357-3186-6. Scientific Net Publishers.

**US NATIONAL COMMITTEE OF THEORETICAL AND APPLIED MECHANICS REPORT:**
Zohdi, T. I. and Dornfeld, D. A. (2015). Future Synergy between Computational Mechanics and Advanced Additive Manufacturing: http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_166813.pdf

**POPULAR MAGAZINE ARTICLES:**
1. Zohdi, T. I. (2002). Manufacturing and processing of new particulate-based materials: multiphysics, modeling and simulation (Cover

Article). Bulletin of the German Association for Computational Mechanics. Volume 1. http://cmrl.berkeley.edu/Zohdipaper/ZOHDI-GACM Report No1.pdf
2. Zohdi, T. I. (2014). Manufacturing and processing of new particulate-based materials: multiphysics,modeling and simulation (Cover Article). Bulletin of the International Association for Computational Mechanics(IACM Expressions), http://iacm.info/vpage/1/0/IACM-Expressions/34
3. Farrell, L. (2016). Science is a Blast (profile of Zohdi research). Sciencenode science outlet. https://sciencenode.org/feature/big-bang-theory.php
4.Zohdi, T. I., Makiharju, S., Variano, E. and Apte, P.(2021). Analyzing Particle and Droplet Transport During COVID-19 to Enable Safer Semiconductor Manufacturing Cleanroom Operation. https://www.semi.org/en/blogs/technology-trends/particle-droplet-transport-analysis and Analyzing Particle and Droplet Transport During COVID-19 to Enable Safer Semiconductor Manufacturing Cleanroom Operation (citris-uc.org)

**COURSES TAUGHT:**

1. Modeling and Simulation of Advanced Manufacturing Processes (grad). UC Berkeley.(Spring 2013, Spring 2014, Spring 2015,Spring 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020)
2. Computational design of multifunctional/multiphysical composite materials (grad). UC Berkeley. (Spring 2012)
3. Finite element analysis (grad.). UC Berkeley. (Fall 2002, Fall 2003, Fall 2004, Fall 2006,Fall 2007, Fall 2008, Fall 2011, Fall 2012, Fall 2014, Fall 2016, Fall 2018, Fall 2020)
4. Mechanical behavior of engineering materials (grad.). UC Berkeley. (Fall 2005, Fall 2008, Fall 2009, Fall 2010)
5. Multiscale modeling and design of new materials (grad). UC Berkeley. (Fall 2001, Spring 2004, Spring 2008)
6. Continuum mechanics (grad.). U. Hannover. In English and German. (Summer 2000, Winter 2000);
7. Plasticity theory (grad.). U. Hannover. In English and German. (Summer 2000)
8. Elasticity theory (grad.). U. Hannover. In English and German. (Winter 1999, Winter 2000)
9. Micromechanics (grad.). Technische Universitaet Darmstadt. In English and German. (Winter 1998)
10. Finite element analysis (ugrad.). UCB. (Spring 2006, Spring 2008, Spring 2011, Spring 2013, Spring 2017, Spring 2020)
11. Dynamics (undergrad.). UC Berkeley. (Spring 2002, Fall 2002, Spring 2003, Fall 2015);
12. Mechanical behavior of engineering materials (undergrad.). UC Berkeley. (Spring 2004, Spring 2005, Spring 2007)
13. Introduction to solid mechanics (undergrad.). UC Berkeley. (Spring 2009, 2010)
14. Basic modeling and simulation tools for industrial research applications(undergrad.), UC Berkeley. (Fall 2019)

**OVERALL STUDENT SUPERVISION/MENTORSHIP (Since arriving at UC Berkeley in July of 2001):**

1. Graduated/supervised Ph. D. students (39 students),
2. Ph. D. students currently supervised (12 students),
3. Service as second or third reader on doctoral theses (71 students),
4. Service performed as an oral examiner for doctoral candidates (140 students),
5. Graduated/supervised Masters (Plan I and Plan II) students (34 students),
6. Masters theses (Plan I and Plan II) and projects as second or third reader (45 students),
7. Service as an oral examiner for 5th Year's Masters candidates (24 students),
8. Service as Thesis Chairperson for the Prof. Master's of Eng. Degree (110 students)
9. Service as a second reader (thesis committee) for Prof. Master's of Eng. Degree (34 students)
10. Post-doctoral scholars supervised (16 scholars),
11. Mentor for Regents', Chancellor's and CAL Opportunity Scholars (43 students)

**GRADUATED PH. D. STUDENTS (39 STUDENTS):**

1. Ilker Temizer (MS 2003, Ph. D.(ME) 12/2005): Full Prof. at Bilkent University, Turkey.
2. *David Powell (MS 2005, Ph. D.(ME) 12/2007): Baker Engineering and Risk Consultants.*
3. Diego Arbelaez (MS 2005, Ph. D.(ME) 5/2008, co-sup. with D. Dornfeld): staff sci. LBNL
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9. *Ryan Krone (Ph. D. (ME) 12/2010, co-sup with D. Steigmann): Director, Innov. and Comm., Oregon Health and Sci. U.*
10. *Sun Choi (Ph. D. (ME), 5/2012, co-sup. with A. Pisano): Associate Professor, KIST, South Korea*
11. *Brett Collins (Ph. D. (ME) 5/2013): staff scientist at Sandia National Labs.*
12. Hiroyuki Minaki (Ph. D. (ME), 5/2013), co-sup, S. Li): Bridgestone Tire Corp.,Japan.
13. Debanjan Mukherjee (Ph. D. (ME), 8/2013): Asst. Prof. at U. Colorado, Boulder.
14. *Peter Minor (Ph. D. (ME), 12/2013), co-sup P. Wright): Chief Engineer at Carbon180, Co-founder of The Foundry-CITRIS*
15. Alejandro Queiruga (MS 2013, Ph. D. (ME) 5/2015): Engineer at Google

16. Bhavesh Patel (MS 2013, Ph. D. (ME) 5/2015): Asst. Res. Prof. Cal. Medical Innovations Institute
17. *Rishi Ganeriwala (MS 2013, Ph. D. (ME), 10/2015): Staff Scientist LLNL*
18. *Aashish Ahuja (PhD (ME)12/2015,co-sup, K. Mosalam): Senior Engineer, Becton Dickinson*
19. Daniel Driver (MS 2013, Ph. D. (ME), 12/2015): Staff Scientist LLNL
20. *John C. Stevens (MS 2012,Ph.D.(ME), 12/2015): Senior Consultant, Energy and Environmental Economics, Inc.*
21. *Maria Pace (Ph. D. (AS and T), 1/2016, co-sup, A. Pisano): Senior Product Manager, Microsoft*
22. *Raunak Bhinge (Ph.D (ME), 2016): CEO and Founder of Infinite Uptime*
23. *Seyed Hossein Hashemi Ghermezi (Ph. D, (ME) 12/2016): co-founder and CTO of Linquip*
24. *Anju Toor (Ph.D (ME), 5/2017 co-sup. A. Pisano): Post-doc at UC Berkeley*
25. *Lee M. Clemon (Ph.D (ME), 5/2017): Asst. Professor, Univ. of Technology Sydney, Australia*
26. *Matthew Kury (MS 2014, Ph.D (ME), 8/2017): Staff Scientist at Sandia National Labs*
27. *Zeyad Zaky (Ph.D (ME), 12/2017): Engineer at Apple*
28. *Marc Russell (Ph. D (ME), 5/2018): Engineer at ATA Engineering Inc.*
29. Brett Kelly (Doctoral (ME), 5/2018, co-sup. H. Taylor), Align Technologies
30. Santiago Miret (Doctoral (MSE), 5/2018, co-sup with M. Asta), Intel
31. *David F. Gutierrez (Doctoral (ME), 5/2018): Post-doc at MIT*
32. *Mustafa Erden Yildizdag (Doctoral (ME), 12/2018): Asst. Prof. Istanbul Technical University, Naval and Marine Engineering*
33. *Maxwell Micali (Doctoral (ME), 12/2018): Senior Data Scientist at Lineage Logistics*
34. *Chang Yoon Park (Doctoral (ME), 8/2019), Senior Engineer at Roblox corp.*
35. Shanna Hays (Doctoral (ME), 8/2019): Engineer at Lockheed-Martin
36. Bernard Kim (Doctoral (ME), 8/2019, co-sup with P. Wright): Post-doc at UC Berkeley
37. Zachary Gima(Doctoral (ME, 5/2020, co-sup with S. Moura): Post-doc at UC Berkeley
38. *Dong Hoon Kim (Doctoral (ME), 8/2020): Senior Engineer at Samsung Electronics*
39. *Young Kyu Kim (Doctoral (ME), 12/2020): Senior Engineer at Hyundai*

**PH. D. STUDENTS CURRENTLY SUPERVISED (12 STUDENTS):**

1. Nicolas Castrillon (ME), 8/2017: Working on Additive Manufacturing
2. Avery Rock (ME), 8/2018: Uncertainty Quantification in Additive Manufacturing
3. Roger Isied (ME), 8/2018: Multiphysics in Additive Manufacturing
4. Zachary Yun (ME), 1/2019: Multiphysics in Additive Manufacturing
5. Brian Howell (ME), 1/2019: Multiphysics in Additive Manufacturing
6. Payton Goodrich (ME),10/2019: Co-sup with A. Arias): Printed Electronics
7. Jose O. Betancourt (ME), 4/2020: Co-sup with K. Goucher-Lambert: Agent based modeling for surveillance
8. Emre Mengi (ME), 10/2020: Next Generation Food Processing
9. Maya Horii (ME) 4/2021: Co-Sup with Grace Gu. Modeling and Simulation of Advanced Manufacturing Processes
10. Fuad Alamiri(ME), 4/2021: Modeling and Simulation of Renewable Energy Systems
11. Abdullah Alrashdan (ME) 4/2021: Modeling and Simulation of Additive Manufacturing Systems
12. Abdulrahman Alzewawi (ME) 4/2021: Modeling and Simulation of Additive Manufacturing Systems

**DOCTORAL THESES COMPLETED (OR ONGOING) AS SECOND OR THIRD READER (71 STUDENTS):**

F. Hamed (ME, 2003), X. Shen (ME, 2004), P. Tsourkas (ME, 2004), Y. Gao (MsE, 2006), P. H. Jing (NE,2006), M. Jin (MsE, 2006), J. Buckley (ME, 2006), R. Sauer (CE, 2006), R. Borrelli (NE, 2006), S. Williamson-Stack (ME, 2006), J. Foulk (ME, 2007), P. Kessler (ME. 2007), P. Bhargava (ME, 4/2008), J. Ileorta (ME, 5/2008), D. Chen (ME, 8/2008), X. S. Asay-Davis (AS and T, 9/2008), M. Taylor (ME, 9/2008), S. Tripathi (ME, 10/2008), S. Shetty (ME, 12/2008), R. Cole (ME, 12/2008), R. Holtzman (CE, 5/2009), C. Huber (EPS, 5/2009), A. Vijayaraghavan (ME, 5/2009), H. Kam (EECS, 5/2009), P. Jing (NE, 5/2009), M. Koplow (ME, 10/2009), J. C. W. Yuan (MsE, 10/2009), N. Liu (ME, 6/2010), M. Barham (ME, 4/2011), Y. M. Chen (ME, 5/2011), R. Rai (ME, 12/2011), Y. Hanlumyuang (MSE, 12/2011), J. Edmiston (ME, 4/2012), J. Zheng (ME, 5/2012), O. Miller (EECS, 5/2012), M. Petricic (ME, 9/2012), C. Kuhn (ME, Uni. Kaiserslautern, Germany, 12/2012), J. Kim (CEE, 5/2013), M. Laufer (NE, 5/2013), Q. Zhao (ME, 5/2013), P.Hassanzadeh (ME, 5/2013), C. Sawyer (MSE, 5/2013), J. Chien (ME, 12/2013, N. Craig (ChemE, 12/2013), G. Jannoun (CNRS, France, 9/2014), A. Gearhart (EECS 10/2014), M. Tartibi (ME, 5/2015), X. Zhou (ME, 11/2015), M. de Jong (MSE 12/2015), B. Mercer (ME, 9/2016), T. Daya (ME, 5/2017), L. Beker (ME, 5/2017), E. Van Andel (Math, 5/2017), M. Sabel (ME, U. Kaiserslautern, Germany, 6/2017), A. Schlueter (ME, Un. Kaiserslautern 12/2017), M. Mahdinia (ME 12/2017), Y. Liang (AST, 4/2018), D. Krumwiede (NE, 3/2018), J. P. Duarte (EECS 5/2018), E. Schaler (EECS, 5/2018), A. Zareei (ME 12/2018), J. McCullough (ME, Unv. Queensland, Aust., 11/2018), A. Novak (NE, 12/2020), E. Griffiths (2/2020, Uni. Cape Town, SA.), C. Jiang (ME, 2/2020), A. Zeydabadi (ME 12/2020), M. Mirramezani (ME 12/2020), C. Schreiber (U-Kaiser-Laut., Germ, 6/2021), S. Maassen (Uni-Dui, Germ. Ongoing), M. Shirani (ME, Ongoing)

**SERVICE PERFORMED AS AN ORAL EXAMINER DOCTORAL CANDIDATES (140 STUDENTS):**

C. Seybert (MsE,10/2003), Y. Gao (MsE, 01/2003), S. Gupta (AS & T, 05/2003), A. Chakravartula (ME, 11/2003), M. Jin (MsE, 12/2003), J. Edd (ME, 04/2004), L. Parker (AS & T, 04/2004), J. Buckley (ME, 11/2004), B. Nadler (ME, 12/2004), X. Asay-Davis

(AS & T, 12/2004), T. Li (MsE, 12/2004), R. Yuan (MsE, 12/2004), S. Tajima (ME, 01/2005), R. Sauer (CE, 01/2005), S. Shetty (ME, 4/2005), W. He (ME, 05/2005), P. Hua (NE, 05/2005), R. Borrelli (NE, 05/2005), R. Gish (ME, 08/2005), D. Jones (ME, 09/2005), S. Gupta (AS & T, 11/2005), S. Timpe (ME, 12/2005), A. Gupta (ME, 01/2006), D. Chen (ME, 02/2006), P. Bhargava (ME, 4/2006), D. Wong (ME, 04/2006), J. Foulk (ME, 04/2006), G. Bevill (ME, 04/2006), S. Eswaran (ME, 05/2006), R. Cole (ME,05/2006), C. Sparrey (ME, 11/2006). J. C. W. Yuan (MsE, 12/2006), M. Taylor (ME, 10/2006), A. Carbonaro (ME, 12/2006), H. Zhang (ME, 04/2007), S. Tripathi (ME, 04/2007), C. Huber (EPS, 04/2007), R. Holtzman (CE, 04/2007), Y. Huang (CE, 04/2007), S. Moseley (ME, 05/2007), G. Templet (AS & T, 08/2007), A. Vijayaraghavan (ME 10/2007) L. Pan (ME, 12/2007), N. Liu (ME, 12/2007), E. Yap (Bio-eng, 1/2008), K. Mandadapu (ME, 3/2008), H. Kam (EE, 4/2008), A. Sengupta (ME, 5/2008), M. Koplow (ME, 12/2008), M. Barham (ME, 12/2008), A. Fields (ME, 4/2009), X. Yin (ME, 4/2009), H. Xu (ME, 4/2009), S. Easley (ME, 5/2009), R. Rai (ME, 5/2009), Y. M. Chen (ME, 5/2009), W. Li (ME, 8/2009), L. Croft (BioE, 10/2009), Y. Hanlumyuang (MSE, 11/2009), M. Petricic (ME, 2/2010), J. Zheng (ME, 4/2010), J. Kim (CEE, 4/2010), S. Mistry (ME 11/2010), N. Wang (ME 11/2010), M. Laufer (NE 12/2010), M. Ben-Salah (ME 11/2010), Q. Zhao (ME 12/2010), A. Gilles (ME 12/2010), S. Pei (ME 4/2011), A. Sanyal (ME 4/2011), P. Brackbill (ME 4/2011), P. Hassanzadeh (ME 4/2011), C. Sherman (ME 5/2011), O. Miller (EECS 5/2011), M. Tartibi (ME 5/2011), K. Mansukhani (AS & T, 5/2011), S. Nawathe (ME 8/2011), K. Lee (ME 12/2011), J. Chien (ME, 1/2012), M. Aly Moustafa (CEE, 4/2012), S. Xiong (ME, 4/2012), A. Gearhart (EECS, 4/2012), D. Madan (ME, 5/2012), M. Wang (ME, 11/2012), F. Shi (ME, 12/2012), J. Xie (ME, 2/2013), Y. J. Lai (ME, 3/13), V. Ganapati (EECS, 5/2013), G. Vogman (AS & T, 4/2013), E. Van Andel (Math, 4/2013), Y. K. Chen (ME, 5/2013), X. Zhou (ME, 5/2013), A. R. Mendez (ME, 8/2013), S. Oh (ME, 12/2013), M. Mahdinia (ME, 3/2014), S. Xin (ME, 5/2014), M. de Jong (MSE, 9/2014), J. Duarte (EECS, 5/2015), A. Toor (ME, 9/2014), M. Pace (AS & T, 2/2015), A. Zareei (ME, 8/2015), X. Shi (ME, 9/2015), D. Barth (ME, 9/2015), R. Singh (ME, 11/2015), T. Daya (ME, 12/2015), R. Bhinge (ME, 12/2015), Y. Liang (AS & T, 8/2015), D. Vuilleumier (ME, 1/2016), D. Yu (ME, 4/2016), H. Wu (ME, 5/16), L. Beker (ME, 520/16), L. Clemon (ME, 5/2016), Y. Liang (AS & T, 8/16), B. Eovino (ME, 9/16), K. Hansen (ME, 10/16), A. Zeydabadi (ME, 12/16), D. Krumwiede (NE, 12/2016), J. Oreluk (ME, 2/2017) , S. Mirramezani (ME, 4/2017), W. Li (ME 5/2017), Y. Huang (ME 5/2017), H. Gramling (ME 5/2017), B. Kim (ME 10/2017), J. Pyne (ME, 11/2017), M. Shirani (ME 12/2017), H. Budinoff (ME 12/2017), A. MAdani (AS & T 12/2017), S. Kidani (ME, 12/2017), B. Yuan (ME, 1/2018), Z. Gima (ME, 5/2018), J. Kwon (ME, 5/2015), Z. Liu (ME, 8/2018), Y. Wu (CEE, 8/2018), S. Wang (ME, 8/2018),K. Kadala (ME, 8/2018), A. Novak (NE, 04/2019), H. Sheikh (ME 8/2019), Q. Cheng (ME 1/2020), A. Narayanan (ME, 8/2020), P. Antonelli (ME, 12/2020)

**MASTERS STUDENTS (PLAN I AND PLAN II) SUPERVISED (34 STUDENTS):**

I. Temizer (ME, 2003), S. Kelley (ME, 2004), W-K. Li (ME, 2004), D. Powell (ME, 2005), J. Wenk (ME., 2005 (co-supervised with P. Papadopoulos)), D. Arbelaez (ME, 2005), J. Cason (ME, 2006), F. Dirksen (ME, 2007), T. Kostka (ME, 5/2008), J. Waterman (12/2008), V. Escobedo (ME, 5/2009), T. Schmid (ME, 6/2009 (co-supervised with D. Steigmann)), L. Boger (ME, 6/2011), J. Stevens (ME, 5/2012), C. Y. Park (ME, 12/2012), D. Driver (ME, 5/2013), R. Ganeriwala (ME, 5/2013), B. Patel (ME, 8/2013), A. Queiruga (ME, 8/2013), M. Lastres (ME 12/2013), M. Kury (ME 12/2014), S. Miret (MSE 5/2015), B. Kelly (ME 5/2015 (co-supervised with H. Taylor)), M. Russell (ME 12/2015), A. Samardi (ME 5/2017), Y. Kim (ME, 12/2017), N. Castrillon (ME 12/2019), K. Edwards (ME 12/2019), D. Alcantara (ME 5/2020), A. Rock (ME 12/2020), R. Isied (ME 5/2021)

**MASTERS THESES (PLAN I AND PLAN II) COMPLETED AS SECOND OR THIRD READER (45 STUDENTS):**

K. Kwong (ME, 2002), J. Semtner (ME, 2003), J. Buckley (ME, 2004), C. Wolfe (ME, 2004), R. Sauer (CE, 2004), M. Michlitsh (ME, 2004), C. May (ME, 2004), T. Raybon (ME., 2005), S. Williamson- Stack (ME, 2005), J. Sendagorta (ME, 2005), A. Menjot de Champuer (ME, 2005) E. Cao (ME, 2005), T. Tresierras (ME, 2006), K. Donovan (ME, 2006), Y. Z Lu (ME, 2006), C. Bureau (ME 2006), J. Elkin (ME, 2006), A. Faruk (ME, 2008), R. Singla (ME, 2008), Se. Choi (ME, 12/2008), A. Green (ME, 4/2009), S. Choi (ME, 5/2009), P. Minor (ME, 5/2009), T. Schmid (ME, 6/2009), N. Tom (ME, 8/2009), A. Daniel (ME 11/2009), J. Chien (ME, 12/2009), S. Woodin-Schwartz (ME, 12/2010), A. Lee (ME, 1/2011), A. de Closset (ME, 5/2011), M. Sinclair (MENG, 5/2011), P. Cottle (ME, 12/2012), J. Eggleston (ME, 12/2012), A. Immas (ME, 12/2012), A. Sudradjat (ME, 5/2013), L. Clemon (ME, 5/2013), M. Speight (ME 12/2013), S. Frank (ME 4/2014), J. Rey (ME 05/2014), K. Ninomiya (ME 12/2014), M. Micali (ME 5/2016), J. Cen (ME 12/2017),Y. Wang (12/2017), A. Zeydabadi (ME 12/2017), E. Choi(CEE, 5/2019)

**SERVICE PERFORMED AS AN ORAL EXAMINER FOR 5TH YEAR MASTERS (24 STUDENTS):**

J. Jantzen (ME. 3/2009), T. Zhao (ME 3/2011) T. Aung (ME 4/2011), K. Huynh (ME 4/2011), J. Young (ME, 3/2012), K. Moore (ME, 4/2013), R. Le (ME, 4/2013), Y. H. To (ME, 4/2017) , D. Zu (ME, 2/2019), A. Susneno (ME, 4/2019), S. Luna (ME, 4/2019), S. Ketsamanian (ME, 4/2019), A. Meyers (ME, 10/2019), I. St. Louis (ME, 11/2019), Y. Sun (ME, 10/2020), D. Pan (ME, 10/2020),Q. Ho (ME, 2/2021), E. Jacobs (ME, 2/2021), T. C. Hsu (ME, 3/2021), K. Coulson (ME, 4/2021), K. Widjaja (ME, 4/2021), A. Robles (ME, 4/2021), F. Bin Azhari (ME 4/2021), J. Yuan (ME 4/2021)

**SERVICE PERFORMED AS THESIS CHAIRPERSON FOR THE PROFESSIONAL MASTER'S OF ENGINEERING DEGREE CAPSTONE (109 STUDENTS):**

S. Hossein Hashemi Ghermezi (ME 5/2013), Y. Sun (ME 5/2013), B. Taylor (ME 5/2013), S. Kondaskumar (ME 5/2013), H. Liu (ME 5/2013), A. Moosazadeh (ME 5/2013), T.-C. Chuang (MSE 5/2014), J. Khan (ME 5/2014), S. Lian (ME 5/2014), Y. Liu (MSE 5/2014), K. Wang (IEOR 5/2014), C. Yang (ME 5/2014), X. Zhang (IEOR 5/2014), C. Paga (ME 5/2015), R. Reghunath (ME 5/2015), Y. Lin (IEOR 5/2015), C. Shen (ME 5/2015), Z. Liu (ME 5/2015), Y. Lai (IEOR 5/2015), A. Kok (MENG 5/2015), H. Hu (BIOENG 5/2015), J. Loh (ME 5/2015), S. Garg (ME 5/2015), M. L. Liou (ME 5/2015), W. H. Lin (MSE 5/2015), M. A. Hakim (IEOR 5/2015) , J. Guo

(ME, 5/2017),R. Yu (ME, 5/2017),C. Ding (ME, 5/2017),J. Aase (ME, 5/2017),Y. Su (ME, 5/2017),X. Zhang (ME, 5/2017),Y. Yu (ME, 5/2017),A. Showalter (BIOE, 5/2017),A. Tian (BIOE, 5/2017),V. Kim (MSE, 5/2017),M. Dai (MSE, 5/2017),Q. Hamil (MSE, 5/2017),S. Raghu (MSE, 5/2017),Y. Huang (MSE, 5/2017), J. Zhao (MSE, 5/2017),O. Abdulgader (MSE, 5/2017),G. Shende (ME, 5/2018), K. Verma (ME, 5/2018), M. Birari (ME, 5/2018), L. Fan (ME, 5/2018), W. Siu (ME, 5/2018), A. Alfaris (ME, 5/2018), P. Chen (ME, 5/2018), M. Meyer (ME, 5/2018), M. Wu (ME, 5/2018), S. Zheng (ME, 5/2018), J. Shao (ME, 5/2018), A. Sooranahalli (ME, 5/2018), X. Liu (MSE, 5/2018), N. Mundla (MSE, 5/2018), T. Tsai (MSE, 5/2018), I. Breiwish (ME, 5/2019), L. Zhou (ME, 5/2019), Z. Lin (ME, 5/2019), Y. Ji (ME, 5/2019), Y. Lin (ME 5/2019), E. Etchevers(IEOR, 2020) , X. Gong(IEOR, 2020) , C. Zhou(IEOR, 2020), M. Rajhansa(BIOE, 2020),M. Ang Kai Lun, (IEOR, 2020), Y. Li(IEOR, 2020), W. Li(IEOR, 2020), G. Yu(IEOR, 2020), F. J. Su(BIOE, 2020), K. Talaei(IEOR, 2020), T. Xing(IEOR, 2020), R. Zolyomi(ME, 2020), R. Sun(CEE, 2020), C. Nunez(IEOR, 2020), J. Hamlin(ME, 2020), M. LaCapra(ME, 2020), R. Xu(MSE, 2020), W. Huang(MSE, 2020), J. Zhao (MSE, 2020), R. Chen (ME, 2020), G. Myers (BIOE, 2020), A. Labarre (CEE, 2020), W. Lu (IEOR, 2020), P. Mehta (ME, 2020) Y. Sun (IEOR, 5/2021),C. Zhu(IEOR, 5/2021),S. Meng(IEOR, 5/2021),Y-Y. Chu(MSE, 5/2021),M. Le Magueresse(IEOR, 5/2021),Z. Lin(IEOR, 5/2021),S. Xu(ME, 5/2021),X. Xu(ME, 5/2021),A. Lee (MSE, 5/2021),Julie Yu(ME, 5/2021),K. Henshaw(ME, 5/2021),M. Mesman(ME, 5/2021),O. Agbojo(BIOE, 5/2021),A. Gad(BIOE, 5/2021),C. Guo(BIOE, 5/2021),D. Zeng(ME, 5/2021),I. Tikku(IEOR, 5/2021), J. Burke(IEOR, 5/2021), X. Song(IEOR, 5/2021),A. Gordo-Cuadrado(ME, 5/2021),Junhao Yu(ME, 5/2021), Z. Huang(ME, 5/2021),A. Min (MEng-MBA, 5/2021)

**SERVICE PERFORMED AS A SECOND READER FOR THE PROFESSIONAL MASTER'S OF ENGINEERING DEGREE THESIS (34 STUDENTS):**

D. Taxier (ME 5/2015), J. Steck (ME 5/2015), Y. Tian (ME 5/2015), S. Ai (ME 5/2016), V. Bansal (ME 5/2016), S. Kudroli (ME 5/2016), Y. Li (ME 5/2016), Y. Lo (ME 5/2016), A. Madiyan (ME 5/2016), S. Mahata (ME 5/2016), V. Vohra (ME 5/2016), J. Wu (ME 5/2016), B. Xia (ME 5/2016), X. Zeng (ME 5/2016), Y. Zheng (ME 5/2016), G. Hamel (ME 5/2017), Z. Yu (ME 5/2017), J. Wei (IEOR 5/2017), H. Huang (ME 5/2017), R. Zhang (ME 5/2018), C. Xie (ME 5/2018), C. He (MSE 5/2018), L. Fan (ME 5/2018), H. Li (ME, 5/2019), A. Louie (ME, 5/2019), H. Liao(ME, 5/2019), Y. H. Yu(ME, 5/2019), B.Wang (ME, 5/2019), A. Lin (ME, 5/2019), J. Lee (ME, 5/2019), J. Golden(ME, 5/2019), J. Xu (ME, 5/2019)

**POST-DOCTORAL SCHOLARS SUPERVISED/HOSTED (16 SCHOLARS):**

Dr. D. Powell (UC Berkeley, 12/2006- 6/2007), Dr. P. Glosmann (Hamburg, Germany, 8/2007-8/2008), Dr. G. Lubineau (Cachan,France, 5/2007-12/2008), Dr. D. Arbelaez (UC Berkeley, 5/2008-5/2009), Dr. K. Linnemann (Karlsruhe, Germany, 5/2008-5/2009,) Dr. D. Klepach (UC Berkeley/UCSF (jointly with Prof. J. Guccione), 12/2010- 8/2012), Dr. L-C. Lee (UC Berkeley/UCSF (jointly with Prof. J. Guccione), 12/2010-12/2012), Dr. D. Mukherjee (UC Berkeley, 9/2013-1/2014), Dr. E. Degirmenci (Turkish National Defense Ministry 1/2013-2/2014), Dr. E. Campello (U. Sao Paulo 2012-2014), Dr. S. Shaul (UC Berkeley, 1/2015-5/2016), Dr. A. Queiruga (UC Berkeley, 5/2015-5/2016), Dr. A. Bandiera (U. Bahia, Brazil,6/2015-7/2016), Dr. T. Maeshima (Toyota, 9/2018-present)

**UNDERGRADUATE SCHOLARSHIP MENTEES FOR THE REGENTS' AND CHANCELLOR'S AND/OR CAL OPPORTUNITY SCHOLARSHIP PROGRAMS (43 STUDENTS):**

V. Shen (RC, 8/2012-5/2016), W. Lee (Cal Op, 8/2012-5/2016), A. Li (RC, 8/2012-5/2016), M. Cameron (Cal Op, 8/2012-5/2016), A. Faroni (RC, 8/2012-5/2016), T. Wang (RC, 8/2012-5/2016), I. Maric (RC, 8/2012-5/2016), J. Vigneshwaran (RC, 8/2012-5/2016), K. Kung (RC, 8/2012-5/2016), N. Argade (RC, 8/2013-5/2017), M. Campbell (RC, 8/2013-5/2017), D. Fernandez (RC, 8/2013-5/2017), V. Tolani (RC, 8/2013-5/2017), E. Yehl (RC, 8/2013-5/2017), L. Newton (RC, 8/2014-5/2018), N. Subramanian (RC, 8/2014-5/2018), D. Tseng (RC, 8/2014-5/2018), D. Zu (RC, 8/2014-5/2018), A. Carson (RC, 8/2015-5/2019), J. Cortes (RC, 8/2015-5/2019), B. Huang (RC, 8/2015-5/2019), C. Kan (RC, 8/2015-5/2019), A. Ng (RC, 8/2015-5/2019), M. Stump (RC, 8/2015-5/2019), A. Uppaluri (RC, 8/2015-5/2019), S. Wu (RC, 8/2015-5/2019), A. J. Florek (RC, 8/2015-5/2019), C. Y. Wong (Cal Op, 8/2015-5/2019), W. Buchanan (RC, 8/2018-present), E. Cruvinel (RC, 8/2018-present), A. Elashoff (RC, 8/2018-present), A. Rovinsky (RC, 8/2019), S. Sabouri (RC, 8/2019), E. Wang (RC, 8/2019), Z. Cui (RC, 8/2020-), M. Akbar(RC, 8/2020-),M. Bapat(RC, 8/2020-),S. Berkun(RC, 8/2020-),A. Chauhan(RC, 8/2020-),V. Ippili(RC, 8/2020-),M. Khan(RC, 8/2020-),A. Moturi(RC, 8/2020-), R. Thomas(RC, 8/2020-)

**PRESENTATIONS/LECTURES (Note: First author was presenter. 184 invited, 81 Keynote, 17 Plenary: 214 Total)**

1. Zohdi, T. I. (1992) Mathematical modeling of the dynamics of Wankel rotors. AIAA Southwest Student Conference. Dallas, Texas, USA. (Winner of best AIAA student technical lecture).
2. Oden, J. T., Zohdi, T. I. and Rodin, G. J. (1996) Hierarchical modeling of heterogeneous bodies. IUTAM World Congress, Kyoto, Japan (invited keynote lecture).
3. Oden, J. T., Zohdi, T. I. and Cho, J. R. (1996) Hierarchical modeling, a-posteriori error estimation and adaptive methods in computational mechanics. ECCOMAS, Paris, France. (plenary lecture).
4. Oden, J. T. and Zohdi, T. I. (1997) Hierarchical modeling of highly heterogeneous materials. USNCCM, Congress, San Francisco, USA (invited keynote lecture).
5. Oden, J. T. (1997) Vemaganti, K., Moes, N., and Zohdi, T. I. Analysis of composite materials. USNCCM, Congress, San Francisco, USA (invited keynote lecture).
6. Zohdi, T. I. and Oden, J. T. (1997) Analysis and adaptive modeling of highly heterogeneous elastic structures. Workshop on Adaptive Finite Element Methods in Computational Mechanics, Universitaet Stuttgart, Germany (invited keynote lecture).

7. Zohdi, T. I. (1997) Multiscale modeling of complex solids. Universitaet Stuttgart, Department of Mechanics, Germany (invited keynote/colloquium lecture)
8. Zohdi, T. I. (1997) Adaptive modeling and simulation of heterogeneous materials. ETH Zurich, Department of Applied Mathematics, Switzerland (invited keynote/colloquium lecture)
9. Zohdi, T. I. (1997) Hierarchical modeling and simulation of complex materials. Universitaet Kiel, Department of Applied Mathematics, Germany, (invited keynote/colloquium lecture)
10. Zohdi, T. I. and Wriggers, P.(1998) Toward computationally rapid analysis and design of material microstructure and macrostructure GAMM conference, Bremen, Germany (invited lecture).
11. Zohdi, T. I. (1998) A method of model reduction for heterogeneous materials. Workshop: Mathematical approaches to the continuum mechanics of fluids and solids. Wahlen, Germany. (invited lecture)
12. Zohdi, T. I. (1998) Universitaet Braunschweig, Department of Scientific Computation, Germany (invited keynote/colloquium lecture)
13. Zohdi, T. I. (1999) Max Planck Institute, Leipzig, Department of Applied Mathematics, Germany (invited keynote/colloquium lecture)
14. Zohdi, T. I. (1999) Ecole Polytechnique Federale, Lausanne, Department of Materials Science, Switzerland (invited keynote/colloquium lecture)
15. Zohdi, T. I. and Wriggers, P.(1999) Thermo-chemo-mechanische Simulation der Degradation von Ingenieurwerksto_en. Kolloquium: Gekoppelte Probleme der Fluid- und Festkorpermechanik. Hannover, Germany (invited keynote/colloquium lecture).
16. Zohdi, T. I. and Wriggers, P.(1999) Some aspects of computational testing and design of composite materials. European Conference on Computational Mechanics. Munich, Germany (invited lecture).
17. Oden, J. T., Vemaganti, K. and Zohdi, T. I.(1999) Local estimates and upper and lower bounds of modeling error and adaptive modeling of heterogeneous media. European Conference on Computational Mechanics. Munich, Germany. (invited keynote/colloquium lecture)
18. Zohdi, T. I. (1999) A model for simulating the deterioration of structural-scale material responses of microheterogeneous solids. Euromech Colloquium 402: Micromechanics of Fracture Processes. Seeheim, Germany. (invited keynote/colloquium lecture)
19. Zohdi, T. I. (2000) Computational testing of microheterogeneous solids. Northwest German Colloquium for Mechanics. Hannover, Germany. (invited keynote/colloquium lecture)
20. Wriggers, P. and Zohdi, T. I. (2000) On the reliability of computational material tests at infinitesimal and finite strains. IUTAM World Congress, Chicago, USA (invited lecture).
21. Zohdi, T. I. (2000) Some approaches for modeling and simulation of thermo-chemo-mechano processes in microheterogeneous solids. 239. WE-Heraeus-Seminar: Modeling and algorithms for problems in solid mechanics. Bad Hone_, Germany. (invited lecture)
22. Zohdi, T. I. and Wriggers, P. (2000) A model for simulating the deterioration of structural-scale material responses of microheterogeneous solids. ECCOMAS/COMPLAS. September 11-14., Barcelona, Spain. (invited keynote/colloquium lecture)
23. Zohdi, T. I. (2000) Universit• at Stuttgart, Stuttgart, Department of Mechanics, Germany (invited keynote/colloquium lecture)
24. Zohdi, T. I. (2000) Chalmers University, Departments of Applied Mathematics and Mechanics, Goteburg, Sweden (invited keynote/colloquium lecture)
25. Zohdi, T. I. (2001) Universit• at Stuttgart, Department of Structural Mechanics, Stuttgart, Germany (invited keynote/colloquium lecture)
26. Zohdi, T. I. (2001) University of California, Department of Mechanical Engineering, Berkeley, USA (invited keynote/colloquium lecture)
27. Zohdi, T. I. (2001) University of New Mexico, Department of Mechanical Engineering, Albuquerque, USA (invited keynote/colloquium lecture)
28. Zohdi, T. I. (2001) Johns Hopkins University, Department of Civil Engineering, Baltimore, USA (invited keynote/colloquium lecture)
29. Zohdi, T. I. (2001) Yale University, Department of Mechanical Engineering, New Haven, USA (invited keynote/colloquium lecture)
30. Zohdi, T. I. (2001) University of California, Department of Materials Science, Berkeley, USA (invited keynote/colloquium lecture)
31. Wriggers, P. and Zohdi, T. I. (2001) Computational testing of new materials. ECCM Conference. Cracow, Poland. (plenary lecture)
32. Zohdi, T. I. andWriggers, P. (2001) Aspects of the computational testing of the mechanical properties of microheterogeneous material samples. USNCCM Conference, Dearborn, USA (invited lecture).
33. Zohdi, T. I. (2002) Genetic strings for nonconvex micro-macro material design. IUTAM Symposium on Micromechanics of Suspensions and Composites. Austin, Texas. (invited keynote/colloquium lecture)
34. Zohdi, T. I. (2002) Micro-macro genetic design of multiscale solids. 12th International Workshop on Computational Mechanics of Materials. Darmstadt, Germany. (invited keynote/colloquium lecture)
35. Zohdi, T. I. (2002) Modeling and simulation of variably coupled time-transient thermo-chemomechanical processes in multiphase solids. Multiscale Computational Mechanics for Material and Structures, Cachan, France. (invited keynote/colloquium lecture)
36. Zohdi, T. I. (2002) Stanford University, Department of Mechanical Engineering, Palo Alto, USA (invited keynote/colloquium lecture)
37. Zohdi, T. I. (2002) CISM (the International Centre For Mechanical Sciences) Lecture Series. Six lectures on Computational Micromechanics. Udine, Italy (invited keynote/colloquium lecturer).
38. Zohdi, T. I. (2003) University of California, Department of Mechanical Engineering, San Diego, USA (invited keynote/colloquium lecture)

39. Zohdi, T. I. (2003) Materials Research Institute, Chemistry and Materials Science Directorate, Lawrence Livermore National Lab, Livermore, USA (invited keynote/colloquium lecture).
40. Zohdi, T. I. (2003) Nonstandard inverse problems in micro-macro mechanics USNCCM Conference, Albuquerque, USA (invited lecture).
41. Zohdi, T. I. (2003) New particle-based models for granular flows. Second InternationalWorkshop on Geophysical Mass Flow Modeling and Simulations. Buffalo, New York. (invited keynote/colloquium lecture).
42. Zohdi, T. I. (2003) Nano-scale heterogeneous and multifunctional materials. ARO Workshop on Future Directions in Solid Mechanics. Arlington, Virginia. (invited keynote/colloquium lecture).
43. Zohdi, T. I. (2004) University of California, Department of Civil Engineering, Berkeley, USA (invited keynote/colloquium lecture)
44. Zohdi, T. I. (2004) Lawrence Berkeley Labs, Berkeley, USA (invited keynote/colloquium lecture)
45. Zohdi, T. I. (2004) Nonstandard inverse problems in micro-macro mechanics. Workshop on inverse problems in solid mechanics. The Center for Inverse Problems at Rensselaer Polytechnic Institute, Troy, New York. (invited keynote/colloquium lecture).
46. Szeri, A. J. and Zohdi, T. I. (2004) Lithotripter shock wave simulations and cavitation damage of kidney stones, Annual Program Project Meeting, sponsored by N.I.H., Indiana University School of Medicine, September 2, 2004 (invited lecture).
47. Szeri, A. J. and Zohdi, T. I. (2005) A model for damage of microheterogeneous kidney stones. Meeting of the Acoustical Society of America, Vancouver, May 16, 2005 (invited lecture).
48. Zohdi, T. I. (2005) Modeling and simulation of nonstandard multifield granular flows. Berkeley-Stanford Computational Fest (invited keynote/colloquium lecture).
49. Zohdi, T. I. (2005) Light scattering properties of random particulate systems. USNCCM Conference, Austin, Texas, USA. (invited lecture).
50. Zohdi, T. I. (2005) Light scattering and coupled thermal processes in particulate clouds. Clouds, Aerosols, and Radiative Transfer Workshop. Space Sciences Laboratory, Berkeley, California, USA (invited keynote/colloquium lecture).
51. Zohdi, T. I. (2005) University of California, Los Angeles, Department of Mechanical Engineering, Los Angeles, USA (invited keynote/colloquium lecture)
52. Zohdi, T. I. (2005) The Ohio State University, Department of Mechanical Engineering, Columbus, USA (invited keynote/colloquium lecture)
53. Zohdi, T. I., (2005) CISM (the International Centre For Mechanical Sciences) Lecture Series. Six lectures on multiscale modeling and design of new materials. Udine, Italy (invited keynote/colloquium lecture).
54. Arbelaez, D. & Zohdi, T. (2006) Granular Flow Simulation of CMP. Eleventh International CMP Planarization for ULSI Multilevel Interconnection Conference. February 21 - 23, 2006 Fremont, Ca (contributed lecture).
55. Arbelaez, D. & Zohdi, T. I. (2006) Modeling and simulation of CMP. Berkeley-Stanford Computational Fest (invited lecture).
56. Powell, D. & Zohdi, T. I. (2006) Modeling and simulation of Ballistic Fabric. Berkeley-Stanford Computational Fest (invited lecture).
57. Powell, D and Zohdi, T. I. (2007) Multiscale construction and large-scale simulation of dynamically loaded structural fabric, 9th US National Congress on Computational Mechanics, San Francisco, California, USA (contributed lecture).
58. Arbelaez, D. and Zohdi, T. (2007) Simulation of charged particulate sprays striking a surface. 9$^{th}$ US National Congress on Computational Mechanics, San Francisco, California, USA (contributed lecture).
59. Wenk, J., Papadopoulos, P. and Zohdi, T. (2007) On the sensitivity of critical plaque-cap stress in stenosed arteries. 9th US National Congress on Computational Mechanics, San Francisco, California, USA (contributed lecture).
60. Zohdi, T. (2007) Modeling and simulation of multiphysical processes in particulate media. MSC Software Corporation, Mountain View, California (invited keynote/colloquium lecture)
61. Zohdi, T. (2007) Modeling and simulation of multiphysical processes in particulate media. UC Berkeley Applied Math Series, Berkeley, California (invited keynote/colloquium lecture)
62. Lee, L. C., Jackson, I., Morris, S. and Zohdi, T. I. (2007) A finite element study of elastically accommodated grain boundary sliding. Eos Trans., AGU, 88 (52), Fall Meeting, 10-14 December, San Francisco, California, USA. (contributed lecture).
63. Zohdi, T. (01/2008) Multiphysical granular flows: from particles to swarms. Midwest Mechanics Lecture Series. Northwestern University, Evanston, Illinois (invited keynote/colloquium lecture)
64. Zohdi, T. (03/2008) Modeling and simulation of multiphysical processes in particulate media. University of Southern California (invited keynote/colloquium lecture)
65. Zohdi, T. (04/2008) An Overview of Contemporary Topics in Multiscale Modeling. Department of Civil Engineering, UC Berkeley (invited keynote/colloquium lecture)
66. Zohdi, T. (05/2008) Multiphysical particulate systems. Department of Mechanical Engineering, Stanford University (invited keynote/colloquium lecture)
67. Wenk, J., Papadopoulos, P., Zohdi, T. (06/2008) Numerical Modeling of Stress Concentrations in Micro-Heterogeneous Bio-Tissue. 8th World Congress for Computational Mechanics, Venice, Italy (contributed lecture)
68. Powell, D., Zohdi, T., Farhat, C. (06/2008) Multi-Scale Construction and Large-Scale Simulation of Dynamically Loaded Structural Fabric. 8th World Congress for Computational Mechanics, Venice, Italy (invited lecture)
69. Powell, D., Zohdi, T., Farhat, C. (12/2008) Multi-Scale Modeling and Large-Scale Transient Simulation of Ballistic Fabric. 26th Army Science Conference, Orlando, FL (contributed lecture).
70. Farhat, C., Powell, D. and Zohdi, T. (04/2009) Multi-Scale Modeling and Large-Scale Transient Simulation of Ballistic Fabric. Aberdeen Proving Grounds (invited lecture).

71. Arbelaez, D. and Zohdi, T. (04/2009) Modeling of Composite Materials at Multiple Scales. Aberdeen Proving Grounds (invited lecture).
72. Arbelaez, D., Mseis, G. and Zohdi, T. (06/2009) Modeling of Composite Materials at Multiple Scales. Army High Performance Computing Center Review, Stanford University (invited lecture).
73. Powell, D., Zohdi, T., and Farhat, C. (07/2009) Multi-Scale Modeling and Large-Scale Transient Simulation of Ballistic Fabric. 10th US National Congress on Computational Mechanics, Columbus, Ohio, USA (invited lecture).
74. Zohdi, T. (10/2009) Modeling and simulation of multiphysical processes in particulate media. University of Southern California, Department of Civil Engineering (invited keynote/colloquium lecture)
75. Zohdi, T. (11/2009) Modeling and simulation of multiphysical processes in particulate media:
electromagnetic sprays and solids. Workshop on Mesoscale Mechanics of Complex Materials. Vancouver, Canada (invited keynote lecture)
76. Zohdi, T. (12/2009) Modeling and simulation of multiphysical processes in particulate media. Lawrence Berkeley National Labs (invited keynote/colloquium lecture)
77. Choi, S., Pisano, A. P. and Zohdi, T. I. (12/2009) Ultrafast self-assembly of microscale particles by open-channel Flow. Materials Research Society (MRS) Fall 2009 Meeting, Dec 2009, Boston, Mass., USA (contributed lecture).
78. Lee, L. C., Morris, S. and Zohdi, T. I. (12/2009) Effects of stress concentrations on the attenuation by diffusionally-assisted grain boundary sliding. Eos Trans., AGU 90 (52), Fall Meeting, 14-18 December, San Francisco, California, USA (contributed lecture).
79. Zohdi, T. (02/2010) Computational analysis of microheterogeneous media. Lawrence Berkeley National Labs (invited keynote/colloquium lecture)
80. Zohdi, T. (04/2010) Modeling and simulation of multiphysical processes in particulate media. Duracell/Proctor and Gamble ("Webinar" invited keynote/colloquium lecture)
81. Choi, S., Pisano, A. P. and Zohdi, T. I. (04/2010) Three-dimensional Patterning of Micro, Nano-Particle Assembly With Single Droplet. Materials Science Research Society, Spring Meeting Conference, San Francisco (contributed lecture).
82. Zohdi, T. (05/2010) Modeling and simulation of multiphysical processes in particulate media. University of Colorado, Boulder, Department of Mechanical Engineering (invited keynote/colloquium lecture)
83. Lee, L. C., Morris, S. J. S., Wilkening, J. and Zohdi, T. (06/2010) E_ects of stress concentrations on the attenuation by diffusionally-assisted grain boundary sliding. 16th US National Congress of Theoretical and Applied Mechanics, State College, Pennsylvania, USA (contributed lecture).
84. Zohdi, T. I., (06/2010) CISM (the International Centre For Mechanical Sciences) Lecture Series. Six lectures on modeling and simulation of multiphysical processes in multiscale systems. Udine, Italy (invited keynote/colloquium lecture).
85. Collins, B., Krishnan, J., Arbelaez, D., Ferracin, P., Prestemon, S. O., Godeke, A., Dietderich, D. R., Sabbi, G. and Zohdi, T. I. (08/2010). Introduction of nonlinear properties into hierarchical models of Nb3Sn strands. IEEE 2010 Applied Superconductivity Conference, Washington, DC, USA (contributed lecture).
86. Zohdi, T. I. (01/2011). Computational needs for arti_cial photosynthesis. DOE Advanced Mod/Sim Workshop, Lawrence Livermore National Labs (invited lecture).
87. Zohdi, T. I. (01/2011). Modeling and simulation tools for multiphysical ballistic shielding applications. DOD workshop, UC Berkeley (invited lecture).
88. Dibble, R., Chen, J. Y., and Zohdi, T. I. (01/2011). Ion Chemistry in Combustion with Applications to a Microwave-Assisted Spark Plug. Inaugural Meeting of the Saudi Arabian Section of the Combustion Institute, KAUST (invited keynote/colloquium lecture).
89. Zohdi, T. I. (03/2011). LSU Mechanical Engineering Alumni Achievement Lecture for 2011. A special honor reserved for one Louisiana State University (LSU) ME alumnus per year for an
exceptional level of achievement: Modern computational Design". Baton Rouge, La. (invited keynote/colloquium lecture).
90. Choi, S., Pisano, A. P. and Zohdi, T. I. (04/2011) Fast, High-Throughput Micro, Nanoparticle Printing with Tunable Size and Resolution via Porous Membrane. Materials Research Society (MRS) Spring 2010 Meeting, April 2011, San Francisco, CA, USA (contributed lecture).
91. Zohdi, T. I. (07/2011) Modeling and simulation electromagnetically-controlled structural fabric. 11th US National Congress on Computational Mechanics, Minneapolis, Minnesota, USA July 25-29 (contributed lecture).
92. Zohdi, T. I. and Farhat, C. (08/2011) Multiscale ballistic fabric nets. Army High Performance Computing Center Review. August 17-18 (invited lecture).
93. Klepach, D., Lee, L-C., Wenk, J., Ratcli_e, M. B., Zohdi, T. I., Kuhl, E. and Guccione, J. M.
(09/2011) Finite Element Stress Analysis of Left Ventricular Remodeling in Response to a Myocardial Infarction ASME Emerging Technologies' 6th Frontiers in Biomedical Devices Conference and Exhibition, September 26-27, Irvine, California (invited lecture).
94. Collins, B., Krishnan, J., Arbelaez, D., Ferracin, P., Dietderich, D. R. and Zohdi, T. I. (09/2011) Computation of Strain State in a Nb3Sn Strand Using Nonlinear Hierarchical Models. IEEE 22 Magnet Technology Conference, Marseille, France (contributed lecture)
95. Zohdi, T. I. (10/2011) Impact dynamics of charged electromagnetic particulate jets and droplets. Session: Multiscale Modeling in Mechanics and Materials at the 48th Annual Technical Meeting of the Society of Engineering Science (SES). Northwestern University on October 12 - 14, 2011 (invited lecture).
96. Zohdi, T. I., Kuypers, F. A. and Lee, W. C.(10/2011) Estimation of red blood cell volume
fraction from overall permittivity measurements. Session: Mechanics of Soft Tissues at the 48$^{th}$ Annual Technical Meeting of the Society of Engineering Science (SES). Northwestern University on October 12 - 14, 2011 (invited lecture).
97. Zohdi, T. I. (11/2011) Survivability of lightweight structures. Army high performance computing research center research

management board review. Stanford University, November 30, 2011 (invited lecture).
98. Zohdi, T. I. (12/2011) Computational design of new materials. Advanced Manufacturing Project Workshop. U. C. Berkeley, December 5, 2011 (invited lecture).
99. Zohdi, T. I. (01/2012) Modeling and simulation of ballistic electromagnetic fabric shields. Symposium on Advances in Computational Science, Engineering and Mathematics. January 19-20, Austin, Texas (invited lecture).
100. Zohdi, T. I., Kuypers, F. A. and Lee, W. C.(02/2012) Computational estimation of red blood cell volume fraction from overall permittivity measurements. First USACM Thematic Conference on Multiscale Methods and Validation in Medicine and Biology. February 13-14, San Francisco (contributed lecture).
101. Zohdi, T. I. (03/2012) Electromagnetic contact in particulate media and fabric materials. March 26-30, EUROMECH 514 : New trends in Contact Mechanics, Cargese, Corsica, France (invited lecture).
102. Zohdi, T. I. (05/2012) An Overview of Modeling and Simulation of Multiphysical Processes in New Materials. The Siemens Corporation. Orlando, Florida (invited lecture).
103. Zohdi, T. I. (07/2012) Modeling and Simulation of Multiphysical Processes in New Materials: Electro-Magneto-Thermo-Elasto Coupled Systems. World Congress for Computational Mechanics, Sao Paulo, Brazil July 8-13, 2012 (invited congress plenary lecture).
104. Dirksen, F., Lammering, R. and Zohdi, T. I. (07/2012) Structural optimization of large-displacement, path-following compliant mechanisms with optimally designed
flexure hinges. European Solid Mechanics Conference, Graz, Austria. July 9-13, 2012 (contributed lecture).
105. Zohdi, T. I. (09/2012) Modeling and Simulation of Multiphysical Processes in New Materials for Energy-Related Applications. 22nd International Workshop on Computational Mechanics of Materials (IWCMM XXII). September 24-26, 2012 in Baltimore, Maryland (invited workshop semi-plenary lecture).
106. Zohdi, T. I. (10/2012) Modeling and Simulation of New Materials for Energy-Related Applications. Notre Dame University, South Bend, Indiana (invited keynote/colloquium lecture).
107. Zohdi, T. I. (11/2012) Modeling and Simulation of New Materials. UC San Diego (colloquium/invited lecture).
108. Mosalam, K. and Zohdi, T. I. (12/2012) Developing Surface Features on Building Envelopes for Sunlight Capture Association of Egyptian American Scholars 39th Annual conference, December 25-27th, Cairo, Egypt (invited lecture).
109. Dirksen, F., Berg, T., Lammering, R. and Zohdi, T. I. (12/2012) Topology synthesis of large displacement compliant mechanisms with specific output motion paths. 83rd Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM), Darmstadt, Germany (contributed lecture).
110. Zohdi, T. I. (02/2013) Deposition of complex particulate sprays and droplets in electromagnetic fields. Advances in Computational Mechanics. February 24-27, San Diego, California (invited lecture).
111. Mosalam, K. M., Casquero-Modrego, N., Armengou, J., Ahuja, A., Zohdi, T. I. and Huang,
B. (03/2013). Anidolic Day-Light Concentrator in Structural Building Envelopes. 1st Annual International Conference on Architecture and Civil Engineering (ACE 2013). Singapore, March 18-19, 2013 (contributed lecture).
112. Zohdi, T. I. (06/2013) Harnessing Electromagnetism for the Manufacturing of New Multifunctional Particulate Materials: Modeling and Simulation. Common Challenges in Computationally-Based Engineering Research. ETH Zurich, June 5 (invited keynote lecture).
113. Zohdi, T. I. (06/2013) Harnessing Electromagnetism for the Manufacturing of New Multifunctional Particulate Materials. Computational Methods for Coupled Problems in Science and Engineering. June 17-19, Ibiza, Spain (invited keynote lecture).
114. Zohdi, T. I. (06/2013) Manufacturing of Processes for New Materials. Colloquium Materials Modelling, Institute for Materials Testing, Materials Science and Strength of Materials (IMWF), University of Stuttgart, Germany (invited keynote/colloquium lecture).
115. Zohdi, T. I. (07/2013) Electrically-aided compaction of powdered materials and laser-based post processing. The International Conference on Computational Contact Mechanics - ICCCM13, July 10-12, Lecce, Italy (invited keynote lecture).
116. Zohdi, T. I. (07/2013) Modeling and Simulation of Electromagnetic Fabric Shielding United States National Congress for Computational Mechanics. Raleigh July 22-26, (invited keynote lecture).
117. Campello, E. and Zohdi, T. I. (07/2013) Computational Analysis of Drug Jets for Transdermal Drug Delivery. United States National Congress for Computational Mechanics. Raleigh July 22-26, (contributed lecture).
118. Mukherjee, D. and Zohdi, T. I. (07/2013) Development of a Computer Simulation Tool for Discrete Element Method and Collision Driven Particle Dynamics Simulations. United States National Congress for Computational Mechanics. Raleigh July 22-26, (contributed lecture).
119. Zohdi, T. I. (09/2013). Harnessing Electromagnetism for the Manufacturing of New Multifunctional Particulate Materials. The 3rd ECCOMAS Thematic Conference on Particle-Based Methods. Fundamentals and Applications (Particles 2013), Stuttgart, Germany, September 18-20, 2013 (invited conference plenary lecture).
120. Mukherjee, D. and Zohdi, T.I. (11/2013) Electromagnetic control of charged particulate spray systems - models for planning the spray gun operations, SIAM Conference on Geometrical and Physical Modeling, Denver, November 11-14 (contributed lecture).
121. Mukherjee, D. and Zohdi, T.I. (11/2013) Computer Modeling and Simulation Framework for Particulate Spray Based Manufacturing Processes, Proceedings of The ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE2013), San Diego, November 15-21 (contributed lecture).
122. Mukherjee, D. and Zohdi, T.I. (11/2013) Collision Driven Particle Dynamics Simulations for Analyzing Flows of Particulate Sprays and Jets, The 66th Annual Meeting of the American Physical Society's Division of Fluid Dynamics, Pittsburgh, November 24-26 (contributed lecture).
123. Zohdi, T. I. (11/2013). Computational approaches for next generation additive manufacturing simulation. MIT (invited keynote/colloquium lecture).

124. Zohdi, T. I. (12/2013). Modeling and Simulation of Electromagnetic Fabric Shielding. Workshop on Computational Methods for Problems With Evolving Domains and Discontinuities, Palo Alto, CA. (contributed lecture).
125. Zohdi, T. I. (2/2014). Electromagnetics and biotissue across multiple frequency and intensity regimes. Multiscale Methods and Validation in Medicine and Biology II: Biomechanics and Mechanobiology. Feb. 13-14, Berkeley, California. (contributed lecture).
126. Ganeriwala, R. and Zohdi, T. I. (6/2014). Multiphysics modeling and simulation of selective laser sintering manufacturing processes. 6th CIRP Conference on High Performance Cutting (HPC2014). June 23-24, Berkeley, California (contributed lecture).
127. Zohdi, T. I. (5/2014). Modeling and Simulation of Multiphysical Processes for the Manufacturing of New Multifunctional Particulate Materials. IUTAM Conference on Connecting Multiscale Mechanics to Complex Material Design. May 14-16, Evanston, Illinois. (invited lecture).
128. Mukherjee, D., Zaky, Z., Zohdi , T. I., Salama, A. and Sun, S. (5/2014). Investigation of noninvasive healing of damaged piping system using electro-magneto-mechanical methods. (Won Best Poster) Conference: SPE International Oil Field Corrosion Conference and Exhibition, May 12-13, 2014, United Kingdom. (contributed lecture).
129. Zohdi, T. I. (7/2014). New materials: a research overview. Siemens University Liason Management Workshop. Charlotte, North Carolina, July 24-26. (invited lecture).
130. Zohdi, T. I. (9/2014). Modeling and simulation of multiphysical processes for advanced manufacturing of new multifunctional materials. Invited Departmental Seminar, USC, Department of Mechanical Engineering. Sept. 6, 2014. (invited lecture).
131. Zohdi, T. I. (9/2014). Computational methods for the propagation of light and heat transfer for next generation buildings. The UC Berkeley-Norway Workshop on Next-Generation Building Efficiency, Sept. 15, 2014, UC Berkeley (invited lecture).
132. Zohdi, T. I. (9/2014). Modeling and simulation of additive manufacturing processes. Applied Mathematics Seminar. Sept. 24, 2014, UC Berkeley (invited lecture).
133. Zohdi, T. I. (3/2015). Modeling and Simulation of Multiphysical Processes for Advanced Manufacturing of New Multifunctional Materials. March 23-24, 2015, University of Southern California. (invited lecture).
134. Zohdi, T. I. (4/2015). Modeling and simulation of advanced manufacturing processes. Keynote speaker at the 2015 Annual Computational Science and Engineering Symposium. April 16, 2015, University of Illinois Urbana Champaign (invited lecture).
135. Johnson, J., Edmiston, J., Zohdi, T. I. and Steigmann, D. J. (6/2015). Development of a geoperidynamics simulation for hydraulic fracture. Engineering Mechanics Institute Conference. June 16-19, 2015 Palo Alto (contributed lecture).
136. Zohdi, T. I. (7/2015). Application of computational methods for advanced manufacturing. Machine Tool Technologies Research Foundation. July 2, 2015, San Francisco (invited lecture).
137. Zohdi, T. I. (7/2015). Disruptive technologies for advanced manufacturing. Second Workshop- Synergy in Computational Mechanics and Manufacturing. Hannover, Germany. July 13, 2015, (invited lecture).
138. Zohdi, T. I. (8/2015). Computational methods for advanced manufacturing. American Bureau of Shipping. August 4, 2015, Houston, USA (invited lecture).
139. Zohdi, T. I. (8/2015). An Introduction to the Designated Emphasis at UC Berkeley. Lawrence Berkeley National Labs. August 21, 2015, Berkeley, USA (invited lecture).
140. Zohdi, T. I. (9/2015). A Consortium for Computational Manufacturing for Medical Industry. Center for Disruptive Musculoskeletal Innovations-Fall Symposium. September 10, 2015, San Francisco, USA (invited lecture).
141. Zohdi, T. I. (9/2015). Modeling and Simulation of Multiphysical Processes for Advanced Manufacturing of New Multifunctional Materials. Lawrence Berkeley National Labs. September 14, 2015, Berkeley, USA (invited lecture).
142. Casas, G., Mukherjee, D., Celigueta, M. A., Zohdi, T. I. and Onate, E. (9/2015). Large-Scale
Grain Distribution Simulations With Rotating Machinery Using E_cient Discrete Element Models. IV International Conference On Particle-Based Methods: Fundamentals and Applications, Barcelona, September 30, 2015 (contributed lecture).
143. Ahuja, A., Mosalam, K. and Zohdi, T. I. (12/2015). An illumination Model For Translucent Concrete Using Radiance. Building Simulation 2015, Hyderbad, India, December 7-9 (contributed lecture).
144. Zohdi, T. I. (12/2015). Industrial applications of additive manufacturing for use in military applications. Army High Performance Computing Research Center Conference on Additive Manufacturing. Adelphi, Maryland, December 15-16, 2015 (invited lecture).
145. Zohdi, T. I. (1/2016). Discrete Element Methods for use in military applications. Stanford University, Palo Alto, USA January 19, 2016(invited lecture).
146. Zohdi, T. I. (3/2016). Next generation advanced manufacturing. Army High Performance Computing Research Center Workshop. Santa Cruz. March 28-29, 2016 (invited lecture).
147. Zohdi, T. I. (5/2016). An Overview of the Advanced Robotics Manufacturing Network. UC Berkeley, May 25, 2016 (invited lecture).
148. Zohdi, T. I. (6/2016). Ballistic modeling of electrified fabric shields. IUTAM Symposium on Integrated Computational Structure-Material Modeling of Deformation and Failure under Extreme Conditions, Johns Hopkins University June 20, 2016 (invited lecture).
149. Zohdi, T. I. (6/2016). Multiphysical Simulation for Advanced Additive Manufacturing Processes. Inaugural Scientific Computing and Algorithm Development SIG Lecture. Schlumberger Corporation. Houston (invited lecture).
150. Zohdi, T. I. (8/2016). Modeling and Simulation of Multiphysical Processes for Advanced Manufacturing of New Multifunctional Materials. Karles Invitation Conference, ONR, Washington DC. August 11, 2016 (invited lecture).
151. Zohdi, T. I. (9/2016). Swarm-Enabled Infrastructure-Mapping for Rapid Damage Assessment Following Earthquakes. Faculty Forum on Resilience in the Face of Global Change, UC Berkeley, September 16 (invited lecture).
152. Zohdi, T. I. (9/2016). Due Diligence When Considering New Water Technologies-An Engineers Point of View. The Townes and Tagore Annual Seminar For Science and Technology-World Water Symposium, UC Berkeley, September 17 (invited lecture).

153. Zohdi, T. I. (9/2016). An Introduction to the UC Berkeley Computational and Data Science and Engineering Program. Berkeley Institute for Data Science, UC Berkeley, September 22 (invited lecture).
154. Zohdi, T. I. (9/2016). Multiphysical Simulation of Additive Manufacturing Processes. Conference on Additive Manufacturing and Innovative Technologies. Linz, Austria, September 28-29 (invited plenary lecture).
155. Zohdi, T. I. (10/2016). Computational Contact and Interface Mechanics: Modeling Industrial Powder-Processing. CISM, Palazzo del Torso, Udine, Italy. 6 lectures. October 3-7 (invited lecture).
156. Zohdi, T. I. (11/2016-tentative). Modeling and Simulation of Multiphysical Particulate Flows for Advanced Additive Manufacturing Processes. Stanford University Fluid Mechanics Colloquium. Palo Alto (invited lecture).
157. Zohdi, T. I. (11/2016). Modeling and Simulation of Discontinuous Systems: from Materials to Synthetic Swarms, Geospatial Innovation Facility Lecture series, UC Berkeley, November 17 (invited lecture).
158. Zohdi, T. I. (3/2017). Simulation of Advanced Manufacturing Processes. Advances in Computational Science and Engineering, Austin, Texas (invited lecture).
160. Zohdi, T. I. (5/2017) A Virtual Tour of the Berkeley Industrial Research Center. May 12, 2017. Regional Meeting of the Clean Energy Smart Manufacturing Innovation Institute. Phoenix, Arizona (invited lecture)
161. Zohdi, T. I. (5/2017) Next Generation Electromagnetic 3D Printing. May 22, 2017. IUTAM Workshop on Advanced Manufacturing, UC Berkeley (invited lecture)
162. Russell, M. and Zohdi, T. I. (6/2017). Numerical simulation of advanced additive manufacturing processes using meshless particle methods. Conference on Hierarchical and Multiscale Methods for Material Modeling. San Diego, California June 4-7, 2017. (invited lecture).
163. Russell, M., Souto-Iglesias, A. and Zohdi, T. I. (6/2017). Numerical Simulation of Advanced Additive Manufacturing Processes using SPH. 12th International Smoothed Particle Hydrodynamics European Res. Interest Community (SPHERIC) Workshop Spain June 13-17, 2017. (contributed lecture).
164. Fernandez-Guttierez, D., Souto-Iglesias, A. and Zohdi, T. I. (6/2017). A hybrid Lagrangian Voronoi-SPH scheme.12th International Smoothed Particle Hydrodynamics European Res. Interest Community (SPHERIC) Workshop Spain June 13-17, 2017. (contributed lecture).
165. Zohdi, T. I. (7/2017). Modeling and Simulation of Multiphysical Particulate Flows for Advanced Additive Manufacturing Processes. United States National Congress for Computational Mechanics. Montreal, Canada (invited plenary lecture-congress opening lecture).
166. Zohdi, T. I. (8/2017). An Introduction to Research in the College of Engineering. TPREP Seminar, UC Berkeley (Invited lecture)
167. Zohdi, T. I. (9/2017). An Introduction to 3D printing. Energy Engineering Seminar. UC Berkeley. September 5, 2017 (invited lecture).
168. Zohdi, T. I. (9/2017). The Madman. Invited UC Berkeley Poetry Reading. UC Berkeley Library. September 7, 2017. http://lunchpoems.berkeley.edu (invited lecture).
169. Zohdi, T. I. (9/2017). Modeling and simulation of functionalized materials for additive manufacturing and 3-D printing V International Conference on Particle-based Methods. Hannover, Germany, September 26-28 (invited plenary lecture-conference opening lecture).
170. Bandiera, A., A. and Zohdi . T. I (9/2017), Numerical simulations of granular material. V International Conference on Particle-based Methods. Hannover, Germany, September 26-28 (contributed lecture).
171. Zohdi, T. I. (9/2017) Industrial Simulation of Next Generation 3D printing and Advanced Manufacturing. UC Berkeley Homecoming Commencement Lecture. Berkeley, California (invited lecture)
172. Zohdi, T. I. (11/2017). Modeling and simulation of advanced manufacturing and 3-D printing. CILAMCE 2017 (XXXVIII Iberian Latin American Congress on Computational Methods in Engineering). Florianópolis, Santa Catarina, Brazil, November 5-8, 2017.(Invited plenary lecture-conference opening lecture)
173. Fernandez-Gutierrez, D. and Zohdi, T.I. (11/2017). Coupling SPH with Voronoi diagrams to model solid boundaries. 70th Annual Meeting of the American Physical Society Division of Fluid Dynamics (APS-DFD). Denver, USA, November 19-21, 2017. (contributed lecture).
174. Zohdi, T. I. (12/2017). Computational Methods for Advanced Additive Manufacturing Processes. University of Michigan, Ann Arbor (invited keynote/colloquium lecture).
175. Zohdi, T. I. (1/2018). Additive Manufacturing. Berkeley-Autodesk Research Symposium. January 31, 2018 (contributed lecture).
176. Zohdi, T. I. (4/2018). Identification and control of the thermal sensitivity in laser sintering of powder-based thermoplastics. BASF California Research Alliance. Santa Barbara, April 22-23, 2018 (Invited Lecture)
177. Zohdi, T. I. (6/2018). Manufacturing multifunctional printing materials. Processes. Mechanics of Multifunctional Materials. Bad Honeff, Physikzentrum June 11-15, 2018 (Invited keynote lecture-conference opening lecture)
178. Zohdi, T. I. (7/2018). Rapid simulation of powder-based additive manufacturing processes. BASF Research Center, Ludwigshaffen, Germany. June 18, 2018 (Invited Lecture)
179. Zohdi, T. I. (7/2018). Modeling and Simulation of 3D Printing of Functionalized Materials with Machine-Learning System Design. World Congress for Computational Mechanics. July 22-27, 2018 (Invited Semi-Plenary Lecture)
180. Zohdi, T. I. (8/2018). Swarm-enabled infrastructure-mapping for mapping and damage assessment following earthquakes. Pacific Earthquake Engineering Research Center Workshop. Richmond, California. (Invited Lecture)
181. Zohdi, T. I. (11/2018). Modeling and Simulation of 3D Printing and Uncertainty Quantification. BASF California Research Alliance. UC Berkeley, November 8, 2018 (Invited Lecture)

182. Zohdi, T. I. (12/2018). Modeling and Simulation of Particulate Flows from 3D Printing Systems to Fires. Lawrence Berkeley National Lab, December 3, 2018 (Invited Lecture)
183. Zohdi, T. I. (1/2019). 3D printing and advanced manufacturing. HP Labs. Corvalis, Oregon, January 14, 2018 (Invited Lecture)
184. Zohdi, T. I. (1/2019). Multiphysical additive manufacturing with complex materials and machine learning. Structural Engineering Mechanics and Materials Seminar. Dept. of CEE UC Berkeley, California, January 29th,2019 (Invited Speaker)
185. Zohdi, T. I. (3/2019). Applying advanced engineering technologies to emergency fire control. California State Senate, Sacramento, California, March 6th 2019 (Invited Lecture)
186. Zohdi, T. I. (3/2019). Modeling and simulation of next-generation 3D printing systems for complex materials with machine learning. Conference on Meshfree Methods and Advanced in Computational Mechanics. Pleasanton, California, March 10st-12th 2019 (Invited Plenary Lecture)
187. Zohdi, T. I. (4/2019). Modeling and Simulation of 3D Printing of Functionalized Materials with Machine-Learning System Design. 20th International Conference on Finite Elements in Flow Problems - FEF 2019
March 31 – April 3 2019 (Invited Semi-plenary Lecture), Chicago, Ill.
188. Zohdi, T. I. (4/2019). Modeling and simulation of advanced additive manufacturing processes. Lawrence Livermore National Labs, Livermore, Ca. April 15th 2019 (Invited lecture)
189. Zohdi, T. I. (4/2019). Modeling and simulation complex multiphysical systems-like fire! Berkeley Fire Research Workshop, UC Berkeley, May 9th 2019 (invited lecture)
190. Zohdi, T. I. (6/2019). Modeling and simulation of next-generation 3D printing systems for complex materials with machine learning. National Academies Workshop, Berkeley June 4-5, 2019. (Invited Lecture)
191. Zohdi, T. I. (10/2019) Next-generation advanced manufacturing simulation. IRTG Conference, Berkeley California 10/2019 (Invited Lecture)
192. Zohdi, T. I. (10/2019) A Machine-Learning Framework for Rapid Adaptive Wildfire Simulation. National Academies Workshop, Berkeley October 7-8, 2019. (Invited Lecture)
193. Zohdi, T. I. (11/2019) Vistas in computational manufacturing. NSF Computational Mechanics Vision, Workshop, Ann Arbor, Michigan. (Invited Keynote Lecture)
194. Zohdi, T. I. (11/2019) Modeling and simulation tools for advanced manufacturing. Chemical and Materials Engineering Department, San Jose State University. 10/2019 (Invited Keynote Lecture)
195. Zohdi, T. I. (1/2020) Modeling and simulation tools for advanced manufacturing. Lawrence Livermore National Conference-Connecting FEA, HPC and AM via Optimization (Invited Keynote Lecture)
196. Zohdi, T. I. (4/2020) 2019-2020 Lindbergh Lecture. The Department of Mechanical Engineering at the University of Wisconsin–Madison, named for the aviation pioneer Charles Lindbergh x'24. Madison Wisconsin 4/2020 (Invited keynote/distinguished Lecture)
197. Zohdi, T. I. (6/2020) Modeling and simulation of infectious diseases. SEMI Corp. https://www.semi.org/en/about, Milpitas, CA. 6/2020 (Invited Lecture)
198.Zohdi, T. I. (6/2020) Rapid simulation processes of Covid-19 propagation, Lam Research Corp. https://www.lamresearch.com, CA. 7/2020 (Invited Lecture)
199. Zohdi, T. I. (09/2020) Modeling and simulation of next-generation advanced manufacturing. SolMech 2020, Warsaw, Poland. (Invited Plenary Lecture)
200. Zohdi, T. I. (09/2020) Modeling and Simulation Tools for advanced manufacturing, fire propagation, swarms of unmanned aerial vehicles and pandemics, Army Research Labs, Aberdeen, Maryland (Invited Keynote Lecture)
201. Zohdi, T. I. (11/2020) Disease transmission and remote decontamination. CITRIS Day, Berkeley, California
(Invited Lecture)
202. Kim, Y., Choi, Y., Widemann, D., and Zohdi, T. I. (12/2020) Efficient nonlinear manifold reduced order model. Advances in Neural Information Processing Systems(Online, Contributed Lecture)
203. Zohdi, T. I. (12/2020) Digital twin technologies: enabling next generation material production. LBNL. (Invited Lecture)
204. Zohdi, T. I. (01/2021) Modeling and Simulation Tools for Industrial and Societal Research Applications: Digital Twins and Genome-based Machine-learning. Applied Materials Santa Clara, Ca. (Invited Keynote Speaker)
205. Zohdi, T. I. (02/2021) Modeling and Simulation Tools for Industrial and Societal Research Applications: Digital Twins and Genome-based Machine-learning. Duke University, Ca. (Invited Keynote Speaker)
206. Zohdi, T. I. (02/2021) Modeling and Simulation Tools for Industrial and Societal Research Applications: Digital Twins and Genome-based Machine-learning. California Institute of Technology, Ca. (Invited Keynote Speaker)
207. Zohdi, T. I. (03/2021) Modeling and Simulation Tools for Advanced Manufacturing Applications: Digital Twins and Genome-based Machine-learning. Sabanci University, Turkey. (Invited Keynote Speaker)
208. Zohdi, T. I. (05/2021) Digital Twins for Next Generation Food Systems. Board Meeting of the MARS Corporation.
London, UK on May 26, 2021 (Invited Keynote Lecture).
209. Zohdi, T. I. (05/2021) Modeling and Simulation Tools for Industrial and Societal Research Applications: Digital Twins and Genome-based Machine-learning. 4th World Congress on Mechanical and Mechatronics Engineering, London, UK on May 27-29, 2021 (Invited Plenary Lecture).
210. Zohdi, T.I. (06/2021) Modeling and Simulation Tools for Advanced Manufacturing. Greek Association for Computational Mechanics Conference, Athens, Greece. (Invited Plenary Lecture)

211. Zohdi, T. I. (8/2021) Digital Twins and Genome-based Machine-learning for Advanced Manufacturing of New Materials. The 3rd ECCOMAS International Conference Simulation for Additive Manufacturing (Sim-AM 2021), Glasgow, Scotland, (Invited Distinguished Lecture)
212. Zohdi, T. I. (8/2021) Digital Twins and Genome-based Machine-learning for Advanced Manufacturing of New Materials, IUPAC World Chemistry Congress 2021, August 13-21, 2021, Montreal, Canada (Invited Keynote Speaker)
213. Zohdi, T. I. (09/2021) Modeling and Simulation Tools for Industrial and Societal Research Applications: Digital Twins and Genome-based Machine-learning, MECHMEET2021, Sept. 13-15, Porto, Portugal (Invited Plenary Lecture)
214. Zohdi, T. I. (10/2021) Fire!-Rapid Adaptive Digital-Twin Based Fire-Propagation Simulation in Complex Environments and Machine-learning Suppression Strategies. The VII International Conference on Particle-Based Methods. Fundamentals and Applications (PARTICLES 2021), October 4-6, 2021, Hamburg, Germany (Invited Plenary Lecture).

**UNIVERSITY COMMITTEE SERVICE:**

**(1)SERVICE TO DEPARTMENT:**

**ACTIVE COMMITTEE SERVICE:**

1. (ME Committee) Departmental Committee on Master of Engineering (8/2011-present),
2. (ME Committee) Departmental Committee on ABET and Undergraduate Study (8/2020-present),
3. (ME Committee) Chair's Advisory Committee (8/2014-present),
4. (ME Committee) Strategic Planning Committee (8/2020-present),

**PAST COMMITTEE SERVICE:**

1. ME Committee) ME Industrial Advisory Board (3/2015-8/2017),
2. (ME Committee) Seminars (8/2001-8/2017),
3. (ME Committee) Preliminary exam committee (1/2012-7/2017),
4. (ME Committee) Departmental Standing Search Committee (8/2013- 8/2017),
5. (ME Committee) Social Committee (8/2015- 8/2016),
6. (ME Committee) Development Committee (8/2015- 8/2017),
7. (ME Committee) Awards committee (8/2005-8/2006),
8. (ME Committee) Undergraduate Study (8/2005-8/2006),
9. (ME Committee) Computing software (8/2001-8/2011), chair 8/2005-8/2011),
10. (ME Committee) NRC Review (8/2005-8/2010, chair),
11. (ME Committee) Graduate Study (8/2005-8/2012),
12. (ME Committee) Faculty and Student Affirmative Action (8/2005-8/2010),
13. ME Solid and Continuum Mechanics graduate group advisor (8/2005-8/2009),
14. (ME Committee) Academic Planning (8/2009-8/2012)
15. (ME Committee) ABET and undergraduate study (8/2009-8/2012, chair 8/2009-8/2012)
16. (ME Committee) Comm. for on-line (Master of Adv. Studies (MAS) degree (1/2012-1/2013)
17. (ME Committee) Faculty search committee for Advanced Manufacturing (9/2012-5/2013)
18. (ME Committee) Faculty search committee for Ocean Engineering (9/2014-5/2015),
19. (ME Committee) Faculty search, Design, Control and Rob., Applied Energy (9/2015- 8/2016)
20. (ME Committee) Faculty search, All Areas (10/2017- 8/2018)
21. (ME Committee) Faculty search, Design, Materials and Manufacturing (10/2017- 8/2018)
22. (ME Committee) Development Committee (8/2015-8/2020)
23. ME Committee) MENG reorganization committee (1/2018-8/2020)
24. (ME Committee) Data Science committee (1/2018-8/2020)
25. ME Committee) Equity, Diversity and Inclusion (8/2012-8/2020),
26. (ME Committee) Departmental Committee on Graduate Study (8/2013-8/2020),
27. (ME Committee) Major Field Advisor MENG: Advance Manf.(1/2013-8/2020)

**(2)SERVICE TO COLLEGE:**

**ACTIVE COMMITTEE SERVICE:**

1. (College Committee) College of Engineering Executive Committee (8/2008-present),
2. (College Committee) Engineering Science Committee (8/2002-present)
3. (College Committee) MENG Steering Com. for the College of Eng. (8/2010-present).

**PAST COMMITTEE SERVICE:**

1. (College Committee) Masters of Eng. Degree Task Force/Steering Com. for COE (8/2010- 8/2017),
2. (College Committee) Summer Undergrad. Prog. in Eng. Res. at Berk. (SUPERB) (8/2006-8/2017).
3. (College Committee) College of Engineering Task Force on Data Science (1/2018-9/2018)
4. (College Committee) ABET Committee (8/2009- 8/2017),
5. (College Committee) Committee of Ocean Engineering (8/2007- 8/2017,)
6. (College Committee) Jaehne Endowment Committee for the College of Engineering (8/2010- 8/2017).

7. (College Committee) COE Undergraduate Admission Committee (8/2011- 8/2017),
8. (College Committee) COE Broadening Participation Committee (12/2011- 8/2017),
9. (CEE Committee) Faculty search committee for Resilient Systems (9/2013-9/2015)
10. (College Committee) Undergraduate Studies Committee (8/2009-8/2012),
11. (College Committee) Common First Year Committee (8/2009-8/2012)
12. (College Committee) Advisory Com. for the Eng. Systems Research Center (8/2002-8/2005),
13. (College Committee) Comp. Engineering Sciences Review Committee (8/2002-8/2009),
14. (College Committee) Ad Hoc Com. for a Comp. Engineering Sciences (8/2002-8/2008),
15. (College Committee) Special Task Force on COE Course Consol. (Chair, 8/2009-8/2010).

**(3) SERVICE TO BERKELEY CAMPUS:**

**ACTIVE COMMITTEE SERVICE:**

1. (Academic Senate Committee) UCB Diversity, Equity and Climate Com. (8/2014- 8/2017, 8/2020-present),
2. (Campus Committee) CITRIS Berkeley Faculty Advisory Council Member ( 8/2019-present)
3. (Academic Senate Committee) Ac. Senate Advisory Committee to SIS (Chair,10/2018-present)
4. (Campus Committee) User Advisory Group for the Berkeley Research Computing program (7/2014-present)
5. (Campus Committee) Student Affairs Faculty Liaison Group (2017-present)
6. DE-CDSE (Computational and Data Science and Engineering) Program Chair (8/2012-present),
7. DE-CDSE (Computational and Data Science and Engineering) Executive Council (8/2008-present),
8. DE-CDSE (Computational and Data Science and Engineering) Faculty Advisor (8/2012-present),
9. DE-CDSE (Computational and Data Science and Engineering) Equity Advisor (8/2012-present),
10. (Campus Committee) Cal Teach Faculty Advisory Committee (Appointed 3/2015-present)
11. Member, Applied Science and Technology Graduate Group (8/2004-present),
12. (Campus Committee) AS & T Admissions Committee (8/2007-present),
13. AS & T Graduate Diversity Advisor (8/2007-present),
14. (Campus Committee) AS & T (elected) Executive Committee (8/2007-present),

**PAST COMMITTEE SERVICE:**

1. DE-CDSE (Computational Science and Engineering) Head Graduate Advisor (8/2012- 8/2017),
2. (Ac. Sen. Comm.) UC Berk Committee on Research(8/2017-8/2018),
3. (Ac. Sen. Comm.) UC Berk Graduate Council (8/2008-8/2014),
4. (Ac. Sen. Comm.) UC Berk Grad. Coun. Interdiscip. Com. (8/2009-8/2014),
5. Campus Committee)campus ad-hoc review committee for tenure (2016),
6. (Campus Committee) Campus Packard Fellowship Selection Committee (2017),
7. (Academic Senate Committee)Graduate Division's Fellowship Adv. Board (8/2006-8/2012),
8. (Academic Senate Comm.)Working Group on Online Graduate Degrees (03/2010-08/2013),
9. DE-CSE (Computational Science and Engineering) Head Graduate Advisor (8/2012- 8/2017),
10. (Campus Committee)campus ad-hoc review committee for tenure (2016),
11. (Academic Senate Committee) UC Berkeley Graduate Council (8/2008-8/2014),
12. (Academic Senate Committee) UC Berkeley Graduate Council Interdisc. Com (8/2009-8/2014).

(4) **SERVICE TO THE UNIVERSITY OF CALIFORNIA:**

1. (UC System-wide) Ext. Adv. Board San Diego Supercomp. Center (1/2005-08/2010, 1/2015-present).
2. Faculty advisor- Regent's-Chancellor's (RC) Schol. Prog. and Cal Op Schol. Prog.(8/2010-present)

**PRO BONO WORK:** Engineering consultant for the ABC news program "7 On Your Side", which were televised here:

1. Pro bono as an engineering consultant for the ABC news on spontaneously shattering of sunroofs. Located here: http://abc7:com/archive/8026317
2. Pro bono as an engineering consultant for the ABC news on exploding shower doors made of tempered safety glass. Located here: http://abc30:com/archive/9313662/
3. Pro bono as an engineering consultant for the ABC news on a faulty baby zipper device from a sleeping bag. Located here: http://abc7news:com/archive/8433331/
4. UC Berkeley Zero Waste Project: http://news.berkeley.edu/2017/02/15/3d-printer-filament-reclamation-project/

**ATHLETIC HONORS:** Former Member of the United States National Junior Table Tennis Team, U.S. National Junior Olympic Table Tennis Singles Silver Medalist, Louisiana State Mens Table Tennis Singles and Doubles Champion.

**CONSULTANT/ADVISOR FOR:** Siemens, Apple, BASF, FAA, Boeing, Madorra, Samsung, Lawrence Livermore National Labs, Lawrence Berkeley National Labs, Sandia National Labs, Army Research Labs, DMG-Mori, Toyota, BASF, KAUST, Polaronyx, Samsung, Lockheed-Martin, SkyH2O, Type-A Machines, Abbott, Dubai Electric and Water Authority, Lam Research, Autodesk, etc.

**BRIEF ZOHDI BIOGRAPHY:** Tarek I. Zohdi is a Professor of Mechanical Engineering (2001-present). He was a Chancellors Professor from 2014-2020 and currently holds the W. C. Hall Family Endowed Chair in Engineering. He has held a number of administrative posts at UC Berkeley, including:

- 7/2020-present Associate Dean for Post Baccalaureate Programs, College of Eng., UC Berkeley.
- 7/2018-6/2020: Chief Technology Officer of the Fung Institute, UC Berkeley
- 7/2018-6/2020: Elected Chair of the Faculty, College of Engineering, UC Berkeley.
- 7/2012-present: Chair, Computational and Data Science and Eng. Program, UC Berkeley.
- 7/2009-6/2012: Vice-Chair for Instruction, Dept. of Mech. Eng., UC Berkeley.
- 7/2008-6/2012: Chair, Engineering Science Program, UC Berkeley.

He also holds a Staff Scientist position at Lawrence Berkeley National Labs and an Adjunct Scientist position at the Children's Hospital Oakland Research Institute. His main research interests are in modeling, simulation and optimization of nonconvex multiscale-multiphysics problems for industrial applications**.** He has published over 180 archival refereed journal papers and seven books. He is an editor of two leading journals in his field, namely Computational Mechanics and managing editor of Computer Methods in Applied Mechanics and serves on 11 editorial boards of international journals. He is also the co-founder and co-editor-in-chief of relatively new journal, Computational Particle Mechanics (CPM). In the past, he has organized or co-organized over 30 international conferences and workshops and has been appointed/invited to the Scientific Advisory Boards of over 40 international conferences. He was elected President of the United States Association for Computational Mechanics in 2012, and served from 2012 to 2014. Overall, he has given more than 200 plenary, keynote and contributed lectures at conferences, universities and other research institutions. In 2017, he received the UC Berkeley Distinguished Teaching Award; the highest award for teaching at UC Berkeley. In 2019 he was elected as Fellow of the American Academy of Mechanics (AAM)-only one new Fellow is inducted in the nation and the Americas into the AAM each year: https://medium.com/the-coleman-fung-institute/tarek-zohdi-named-2019-aam-fellow-d4df374246e1. In 2020, he received the prestigious Humboldt-Forschungspreis (Humboldt Research Prize). The prize, given by the Alexander von Humboldt Foundation of the German Government, recognizes renowned researchers outside of Germany whose "fundamental discoveries, new theories or insights have had a significant impact on their own discipline and who are expected to continue producing cutting-edge achievements in the future." He received it in the area of Mechanics in recognition of lifetime achievements https://www.humboldt-foundation.de/web/humboldt-award.html, https://en.wikipedia.org/wiki/Humboldt_Prize and https://www.uni-due.de/2020-07-21-humboldt-forschungspreistraeger-tarek-i-zohdi-kommt).

**FULL ZOHDI BIOGRAPHY:** Tarek I. Zohdi http://www.me.berkeley.edu/people/faculty/tarek-i-zohdi/ received his Ph.D. in 1997 in Computational and Applied Mathematics from the University of Texas at Austin. He was a post-doctoral fellow at the Technical University of Darmstadt in Germany from 1997 to 1998 and then a lecturer (C2-Oberingenieur) at the Gottfried Leibniz University of Hannover in Germany from 1998 to 2001, where he received his Habilitation in General Mechanics (Allgemeine Mechanik). Approximately one out of every twenty Ph.D holders in Germany is allowed to proceed with a Habilitation. It is the highest academic degree in Germany and is usually required to obtain the rank of full Professor there and in other parts of Europe. In July 2001, he became an Assistant Professor at the University of California, Berkeley, in the Department of Mechanical Engineering. He was promoted to Associate Professor in July 2004 and to Full Professor in July 2009. He has held a number of administrative posts at UC Berkeley, including:

- 11/2020-present Academic Director, Sutardja Center for Entrepreneurship & Technology (SCET), UC Berkeley, https://scet.berkeley.edu/scet-names-tarek-zohdi-as-new-academic-director/
- 7/2020-present Associate Dean for Post Baccalaureate Programs, College of Eng., UC Berkeley.
- 7/2019-present: Director of the UCB-DEWA Program: https://engineering.berkeley.edu/2019/05/dubai-electricity-and-water-authority-partnership-advances-future-energy-educational-program
- 7/2018-6/2020: Chief Technology Officer of the Fung Institute, UC Berkeley https://funginstitute.berkeley.edu/about-us/our-people/staff/
- 7/2018-6/2020: Elected Chair of the Faculty, College of Engineering, UC Berkeley.
- 7/2012-present: Chair, Computational and Data Science and Eng. Program, UC Berkeley.
- 7/2009-6/2012: Vice-Chair for Instruction, Dept. of Mech. Eng., UC Berkeley.
- 7/2008-6/2012: Chair, Engineering Science Program, UC Berkeley.
- 7/2008-11/2008: Acting Assoc. Dean, Interim Eng. Sci. Prog. Exec. Comm., UC Berkeley.

From 2014-2020, he was a Chancellors Professor of Mechanical Engineering. Since 2016, he is the holder of the W. C. Hall Family Endowed Chair in Engineering. He also holds a Staff Scientist position at Lawrence Berkeley National Labs and an Adjunct Scientist position at the Children's Hospital Oakland Research Institute. His main research interests are in modeling, simulation and optimization of nonconvex multiscale-multiphysics problems for industrial applications. He has published over 180 archival refereed journal papers and eight books: (1) Introduction to computational micromechanics (T. Zohdi and P. Wriggers, Springer-Verlag), (2) An introduction to modeling and simulation of particulate flows (T. Zohdi, SIAM), (3) Electromagnetic properties of multiphase dielectrics: a primer on modeling, theory and computation (T. Zohdi, Springer- Verlag), (4) Dynamics of charged particulate systems: modeling, theory and

computation (T. Zohdi, Springer-Verlag) (5 and 6) A finite element primer for beginners-the basics (T. Zohdi, Springer- Verlag, 2 distinct editions), (7) Modeling and simulation of functionalized materials for additive manufacturing and 3D printing: continuous and discrete media (T. Zohdi, Springer-Verlag) and (8) Modeling and simulation of infectious diseases: microscale transmission, decontamination and macroscale propagation (T. Zohdi, Springer-Verlag), as well as eight handbook/book chapters and five encyclopedia chapters. In 2000, he received the Zienkiewicz Prize and Medal, which are awarded once every two years, to one post-graduate researcher under the age of 35, by The Royal Institution of Civil Engineers in London, to commemorate the work of Professor O. C. Zienkiewicz, for research which contributes most to the field of numerical methods in engineering. In 2002, he received the Best Paper of the Year 2001 Award in London, at the Lord's Cricket Grounds, for a paper published in Engineering Computations, pertaining to modeling and simulation of the propagation of failure in particulate aggregates of material. In 2003, he received the Junior Achievement Award of the American Academy of Mechanics. The award is given once a year, to one post-graduate researcher, to recognize outstanding research during the first decade of a professional career. In 2008, he was elected Fellow of the International Association for Computational Mechanics (IACM) and in 2009 he was elected Fellow of the United Stated Association for Computational Mechanics (USACM). The USACM is the primary computational mechanics organization in the United States and the International Association for Computational Mechanics is the primary international organization in this field. In 2011, he was selected as "Alumnus of the Year" by the Department of Mechanical Engineering at Louisiana State University (LSU), where he did his undergraduate studies. In 2017, he was awarded the University of California, Berkeley Distinguished Teaching Award. The Distinguished Teaching Award is a campus-wide recognition for faculty that have established a sustained and varied record of teaching excellence. This is the highest award for teaching in the University: http://teaching.berkeley.edu/node/240 https://www.youtube.com/watch?v=ntzkn71r2Sg. In 2019, he was selected to give a Lindbergh Lecture, by the University of Wisconsin in honor aviation pioneer (and engineer) Charles Lindbergh (a 1924 graduate of UW). In 2019 he was elected as Fellow of the American Academy of Mechanics (AAM)-only one new Fellow is inducted in the nation and the Americas into the AAM each year: https://medium.com/the-coleman-fung-institute/tarek-zohdi-named-2019-aam-fellow-d4df374246e1. In 2020, he received the prestigious Humboldt-Forschungspreis (Humboldt Research Prize). The prize, given by the Alexander von Humboldt Foundation of the German Government, recognizes renowned researchers outside of Germany whose "fundamental discoveries, new theories or insights have had a significant impact on their own discipline and who are expected to continue producing cutting-edge achievements in the future." He received it in the area of Mechanics in recognition of lifetime achievements https://www.humboldt-foundation.de/web/humboldt-award.html, https://en.wikipedia.org/wiki/Humboldt_Prize and https://www.uni-due.de/2020-07-21-humboldt-forschungspreistraeger-tarek-i-zohdi-kommt). He is an editor of two leading journals in his field, namely Computational Mechanics and managing editor of Computer Methods in Applied Mechanics and serves on 11 editorial boards of international journals. He is also the co-founder and co-editor-in-chief of relatively new journal, Computational Particle Mechanics (CPM), as well as an editor of the Computational Mechanics book series (Wiley). He has organized or co-organized over 30 international conferences and workshops and been appointed/invited to the Scientific Advisory Boards of over 40 international conferences. He was elected President of the USACM in 2012, and served from 2012 to 2014. Since 2009, he has served as a representative of the USACM on the General Council of the IACM, which is the governing committee of the primary international organization in his field of research and was elected to the Executive Council of IACM in 2020 (seven were elected worldwide in 2020). In 2014, he was appointed by the United States National Academy of Science (NAS) and the National Research Council (NRC) as a member of the US National Committee for Theoretical and Applied Mechanics (USNC/TAM) representing the USACM (4/15/2014-10/31/2018): https://www.nationalacademies.org/our-work/us-national-committee-for-theoretical-and-applied-mechanics-usnc-iutam. USNC/TAM is the primary national governing body for Mechanics in the United States. This committee operates under the auspices of the US Board on International Scientific Organizations (BISO) and the Policy and Global Affairs Division of the NRC. Furthermore, he is the national coordinator for the NAS and USNC/TAM for AmeriMech Symposia, which are intended to promote interactions among researchers in an area of contemporary interest in the mechanics of fluids and solids http://sites.nationalacademies.org/pga/biso/iutam/pga_086043. These symposia are designed to encourage participation of young researchers, and to promote interdisciplinary ideas and discussions. This format allows for in-depth discussions and close interactions between participants. Such symposia are renown to help assess the state-of-the-art and chart new directions for the future. In 2018, he was elected to Member-at-Large status of the USNC/TAM by the National Academy of Sciences: http://www.me.berkeley.edu/about/news/me-professor-tarek-zohdi-appointed-member-large-us-national-academy-sciences-and-national. Overall, he has been a plenary speaker at each of the three major conferences in his field: (a) The World Congress for Computational Mechanics (Sao Paulo , 2012), (b) The United States National Congress for Computational Mechanics (Montreal, 2017) and (c) The International Conference on Particle-based Methods (Stuttgart 2013, Hannover, 2017, Hamburg 2021) and given more than 200 other plenary, keynote and contributed lectures at conferences, universities and other research institutions worldwide. In addition to his academic credentials, Tarek I. Zohdi has been active in five main industrial areas:

- **Modeling and simulation of high-strength fabric:** He has worked extensively in the computational analysis of high-strength ballistic fabric shielding. Initially, this work was funded by the FAA and Boeing as part of a 10 year (2001-2011) multi-million dollar laboratory and simulation effort to develop ballistic fabric shields for the Boeing 787. He was heavily involved in the development of 787 Boeing designs. The work was then applied to the development of new ballistic fabric shielding armor (from 2007-present) with the Army Research Labs (ARL) and the Army High Performance Computing Research Center (AHPCRC). In summary, the combined laboratory, modeling and simulation efforts have been instrumental for the development of new types of ballistic fabric shields for the safety and betterment of society.
- **Modeling and simulation of highly heterogeneous materials:** He worked extensively in the computational analysis of particulate functionalized materials in multiphysical regimes. This work has been continuously funded by a number of

industries, most notably for power-generation materials in harsh environments such as thermal barrier turbine blade coating materials (CMCs: Ceramic Matrix Composites) and high-voltage electromagnetic generator (dielectric) materials, such as End Corona Protection systems. This work has been a direct industrial outgrowth of his unique book: *Introduction to computational micromechanics* (T. Zohdi and P. Wriggers, Springer-Verlag).

- **Modeling and simulation of fire-technologies**: In 2018, he founded the UC Berkeley Fire Research Group(FRG): https://frg.berkeley.edu/, whose mission is to serve the best interests of the State of California and society at large, by working toward the development and implementation of more effective solutions for uncontrolled wildfires. The FRG's mission is to develop, harness and integrate the state-of-the-art technologies across many fields in order to produce robust and affordable firefighting systems that are easy to maintain, upgrade and deploy for early detection and control of fires. The FRG has brought together engineers, scientists, technologists, first responders and firefighters to bolster research in fire science, management and emergency control.
- **Modeling and simulation of food systems**: In 2019, he founded the UC Berkeley Center for Next Generation Food Systems: https://food-manufacturing.berkeley.edu/. The overall mission of the center is to optimize societal food production, quality, and food safety/security in the era of pandemics and beyond. These themes are central to California since its economy is the 5th largest economy in the world. The institute encourages cross-collaboration and sharing of information, where possible, and through various forums to further enhance expanding opportunities. Furthermore, the institute supports the research, education, extension, and economics endeavors designed to advance public knowledge and commercial interests. The center explores themes associated with (a) pandemic driven food system security and safety, (b) improving food yield, quality, and nutrition, (c) decreasing energy and water resource consumption, (d) increasing production yield and eliminating food waste, (e) large surface-area agriculture, using energy-efficient technologies such as solar and wind and the (f) use of autonomous systems, drones, sensors and machine-learning for detection of inefficiencies and hazards. The center is part of a 20,000,000 dollar multi-campus NSF-USDA-NIFA funded network. Zohdi is the PI of the UC Berkeley hub/node.
- **Modeling and simulation of advanced manufacturing processes:** He has been heavily involved in the National Network of Manufacturing Innovation (NNMI) system that has been developed over the last decade by the US Government. The goal is to add capacity to the National Network of Manufacturing Innovation, a 2014 initiative to increase the competitiveness of U.S. manufacturing by streamlining research and development and increasing collaboration among industry, academia, national labs and federal partners. Form 2016-2021, he was the Northern California PI for the Northern California Clean Energy Smart Manufacturing Innovation Institute (CESMII); see Whitehouse announcement: http://engineering.berkeley.edu/2016/06/california-new-headquarters-smart-manufacturing-institute and http://www.me.berkeley.edu/about/news/president-obama-announces-winner-new-smart-manufacturing-innovation-institute-competition which is part of a 140,000,000 dollar consortium of universities, national labs and companies geared towards smart clean manufacturing (headquartered at UCLA). The mission of the consortium, consisting of 200 partners from 30 states representing a wide spectrum of interests across industry and academia, is to help hone advanced manufacturing's competitive edge in the United States by increasing efficiency and accelerating the adoption of technologies such as advanced sensors, data analytics and digital controls in manufacturing. Also, from 2016-2021, he was the California Principal Investigator for another successful consortium NNMI grant (the Advanced Robotics Manufacturing (ARM), headquartered at Carnegie Mellon) in which he was appointed the coordinator of the Northern California Branch; see announcement http://www.me.berkeley.edu/about/news/dod-announces-award-new-advanced-robotics-manufacturing-arm-innovation-hub and http://engineering.berkeley.edu/2017/01/berkeley-regional-center-new-robotics-manufacturing-consortium which is part of a 253,000,000 dollar consortium of universities, national labs and companies focused on advanced robotic manufacturing.