

Michael Ortiz –Short Curriculum Vitae (January, 2023)

PERSONAL INFORMATION

Family name, First name: ORTIZ, MICHAEL.

Date of birth: August 6, 1954. Nationality: USA

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ORCID: orcid.org/0000-0001-5877-4824.

EDUCATION

1982 Philosophy Doctor (PhD), University of California, Berkeley, USA.

1978 Master of Science (MS), University of California, Berkeley, USA.

1977 Bachelor of Science (BS), Polytechnic University, Madrid, Spain.

CURRENT POSITIONS

2016 – Present Bonn Research Chair, Institute for Applied Mathematics, Bonn University (Germany).

2020 – Present Emeritus Professor, Engr. and Applied Science, California Institute of Technology.

2020 – Present Adjunct Prof. and Distinguished Timoshenko Fellow, Mech. Eng., Stanford University.

2021 – Present Adjunct Professor, École Centrale de Nantes (France).

PREVIOUS POSITIONS

1995 – 2020 Professor, Engineering and Applied Science, California Institute of Technology, USA.

1990 – 1995 Professor, Division of Engineering, Brown University, USA.

1987 – 1990 Associate Professor, Division of Engineering, Brown University, USA.

1984 – 1987 Assistant Professor, Division of Engineering, Brown University, USA.

HONORS AND AWARDS

2020 Argyris Distinguished Professor, University of Stuttgart, Germany

2019 John von Neumann Medal, US Association for Computational Mechanics (USACM).

2019 Doctor Honoris Causa, Universidad Politécnica de Madrid, Spain.

2018 Inducted, U.C. Berkeley CEE Academy of Distinguished Alumni.

2016 Journal of the Mech. and Physics of Solids (JMPS) 60th Birthday Special Volume.

2015 Timoshenko Medal, American Society of Mechanical Engineers (ASME).

2014 IUTAM Symposium in honor of 60th birthday, Burg Schnellenberg (Germany).

2011 Zienkiewicz Prize, Spanish Assoc. Numerical Methods in Engineering (SEMNI).

2010 Hans Fischer Senior Fellow, Institute for Advanced Study, TU Munich (Germany).

2008 Rodney Hill Prize, Intl. Union of Theoretical and Applied Mechanics (IUTAM).

2007 Ted Belytschko Medal, US Association for Computational Mechanics (USACM).

2002 Computational Mechanics Award, Intl. Assoc. for Computational Mechanics (IACM).

2002 Humboldt Research Award, Senior US Scientists, A. v. Humboldt Stiftung.

1994-1995 Sherman Fairchild Distinguished Scholar, California Institute of Technology.

1977-1978 Fulbright Scholarship University of California, Berkeley.

ACADEMY MEMBERSHIP

2013 Elected Member of the U.S. National Academy of Engineering (NAE).

2007 Elected Fellow of the American Academy of Arts & Sciences (AAAS).

1999 Corresponding Member, Spanish Academy of Engineering.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

1984-2020 Advised and graduated 56 PhD students (supervised PhD theses).

1984-2020 Advised 39 postdoctoral fellows (leading to joint publications).

INSTITUTIONAL RESPONSIBILITIES

2012 – 2016 Caltech Faculty Board, elected faculty representative.

2008 – 2013 Director, Caltech's DoE/PSAAP Center for the Predictive Modelling and Simulation of High Energy Density Dynamic Response of Materials.

COMMITTEES

2014 – 2020 U. S. National Academy of Engineering (NAE): Section 10, Mechanical Engineering.
2010 U. S. National Academy of Sciences (NAS): Committee on Opportunities in Protection Materials Science and Technology for Future Army Applications.
2007 U. S. National Research Council (NRC): Committee for the Evaluation of Quantification of Margins and Uncertainties QMU).
2000 – 2008 U. S. Association for Computational Mechanics (USACM): Executive Committee.

LEADERSHIP ACTIVITIES

2018-present IMDEA Materials Institute, Madrid (Spain), Scientific Council.
2018-present Basque Centre for Applied Mathematics, Bilbao (Spain), Scientific Advisory Committee.
2008 – 2009 Lawrence Livermore National Laboratory (LLNL): Chemistry, Materials Earth and Life Sciences Directorate Review Panel.
2006 – 2013 U. S. National Nuclear Safety Agency (NNSA): Predictive Science Panel (PSP).
2006 – 2009 Sandia National Laboratories (SNL): Engineering Sciences External Review Panel.
2004 – 2008 Lawrence Livermore National Laboratory (LLNL): Engr. Directorate Review Committee.
2004 – 2006 Los Alamos National Laboratory (LANL): Theoretical Division Review Committee
2002 – 2007 Office of the President of the University of California (OPUC): Science & Tech. Panel.

PRESENT EDITORIAL BOARDS

1999-present Archive for Rational Mechanics and Analysis (ARMA).
1999-present Journal of the Mechanics and Physics of Solids (JMPS).
1996-present International Journal for Numerical Methods in Engineering (IJNME).
1996-present Computer Methods in Applied Mechanics and Engineering (CMAME).

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2008 Founding member, Activity Group on Mathematical Aspects of Materials Science, U. S. Society for Industrial and Applied Mathematics (SIAM).
1999 Founding member, Spanish Society of Numerical Methods in Engineering (SEMNI).
1997 Fellow, U. S. Association for Computational Mechanics (USACM).

PUBLICATIONS

Career total of 401 peer-reviewed publications, h-index 100, citations 41,143 (per Google Scholar)
<http://www.ortiz.caltech.edu/publications/index.html>

RECENT PLENARY LECTURES

2022 Koiter Lecture, 25th Engineering Mechanics Symposium, Arnhem, the Netherlands.
2021 Workshop on Advanced Computing and Big Data, Politecnico di Milano, Italy.
2021 COMPLAS21, Barcelona, Spain.
2020 MATH+ Thematic Conference, Berlin, Germany.
2020 Argyris Distinguished Lecture, University of Stuttgart, Germany.
2019 Inaugural SEMTA Colloquium, Madrid, Spain.
2019 Century Fracture Mechanics Summit, CFMS 2019, Singapore.
2019 USACM Specialty Conference, Johns Hopkins University, Baltimore, MD.
2018 13th World Congress on Computational Mechanics, New York, New York.
2017 ECCOMAS CMCS 2017, Espace Saint Martin, Paris, France.
2017 14th Intl. Conf. Computational Plasticity, COMPLAS XIV, Barcelona, Spain.
2015 CSMA 2015:12eme Colloque National en Calcul des Structures, Giens, France.
2015 13th Intl. Conf. Computational Plasticity, COMPLAS XIII, Barcelona, Spain.