

CURRICULUM VITÆ

SIDNEY CHOCRON

Ph. D. AERONAUTICAL ENGINEERING (1997)

M. SC. AERONAUTICAL ENGINEERING (1993)

M. SC. ASTROPHYSICS (1999)

RESEARCH AND PROFESSIONAL EXPERIENCE

- May 2002– Present
Research Engineer (2002-2006), Senior Res. Engineer (2006-2012), Principal Engineer (2012- Sept 2014), Manager R&D (Oct 2014 – Present), Southwest Research Institute
6220 Culebra Road, San Antonio, TX 78238
- 2005– Present
Adjoint Professor at University of Texas San Antonio. Occasional teaching of Combustion, (ME 5263), Advanced Solid Mechanics (ME 5413), Mechanical Behavior of Materials (ME 5713), Continuum Mechanics (ME 6043), Computational Inelasticity (ME 5013)
- October 1998– May 2002
Associate Professor, Dept. of Material Science, School of Civil Engineering, Polytechnic University of Madrid, SPAIN.
- March 1997 – October 1998
Research Fellow (Post-doc) at Southwest Research Institute, San Antonio, Texas, USA
Working in the Engineering Dynamics Department in computer simulation of impact into ceramic, metals and composite materials in a US Army project.
- September 1993 - March 1997
Research Assistant
Department of Material Science, Polytechnic University of Madrid, SPAIN
- June 1992 - July 1993
Student Intern, Propulsion Lab., School of Aeronautics, Polytechnic University of Madrid.

EDUCATION

- **M.S. Aeronautical Engineering (1993)** **Ph.D. Aeronautical Engng. (1997)**
School of Aeronautics **School of Aeronautics**
Polytechnic University of Madrid **Polytechnic University of Madrid**
M.S. Thesis: *Complete Design of a Liquid Propelled Rocket Engine*
Ph.D. Thesis: *Characterization and Analytical and Numerical Simulation of Impact in Composites*

AWARDS

- Research Assistant Fellowship, Polytechnic University, Madrid, Spain, 1993-1997
- Postdoctoral Fellowship, Ministry of Education, Spain, 1997-1999
- Extraordinary award for Ph. D. Thesis, Polytechnic University of Madrid, 1998
- Award for the Best Paper by a Young Author, International Symposium on Ballistics, Switzerland, 2001
- First Prize for the ICM (International Conference on Mathematics) 2006 Poster Competition (Section 18), joint with J. Walker and W. Gray
- Group Achievement Award to the Wing Leading Edge Impact Detection System Team, NASA, April 2006.
- Best Paper in the HVIS conference, 2012, Baltimore, Maryland

SHORT STAYS ABROAD

- June 2010 and June 2012
Invited Professor at Polytechnic University of Madrid, Spain
Teaching part of a Ph.D. course on Dynamic Properties of Materials.
- July 2001 – August 2001
Consulting in Southwest Res. Inst., San Antonio, TX, USA
- July 2000 – September 2000

CURRICULUM VITÆ

Invited Professor, Israel Institute of Technology, Haifa, Israel

Dep. of Mechanical Engineering

- July 1999 – September 1999
Visitor in Southwest Res. Inst., San Antonio, TX, USA (two months)
Non Linear Dynamics group in University of Texas at Austin (one month)
- August - November 1995
U.S. Army Natick Research, Development & Engineering Center, Natick, Massachusetts
- July - August 1994
Department of Engineering Science , Oxford University.

JOURNALS REFEREED

- International Journal of Impact Engineering, Composites B, Composites Structures, Composites Science and Technology, Experimental Mechanics, Engineering Fracture Mechanics, Journal of Engineering Materials and Technology, Journal of the American Ceramic Society, Journal of Applied Mechanics, Textile Research Journal, Annals of Solid and Structural Mechanics, Fibers, International Journal of Solids and Structures, Journal of Dynamic Behavior of Materials, Journal of Industrial Textiles, Mechanics of Materials, Philosophical Transactions A, Refereed many symposia papers (Ballistics, HVIS)

SYMPOSIA ORGANIZED

- ARA (Aeroballistics Range Association), Madrid, Spain, 2000. Member of the organization committee
- International Symposium on Ballistics, Tarragona, Spain, 2007. Co-chair
- Chair of the International Ballistics Symposium to be organized in Long Beach, California, in September 2017.
- As a Board member, I have been involved in the organization of all the International Symposium on Ballistics since 2007.

MEMBERSHIPS

- DYMAT since 2006
- International Ballistics Committee since 2007. Member of the Board. Served as Secretary 2008-2010.
- Founding Board member of the International Ballistics Society. Member of the Board and Fellow. Served as secretary 2010-13, as treasurer 2013-2016, as President Sept 2017-present.

PATENTS

- U.S. Patent number 8,240,200, "Techniques to Measure Strain Development and Failure in a Fabric," I. S. Chocron, A. E. Nicholls, C. E. Anderson, Jr., and J. D. Walker, August 14, 2012

KEYNOTE TALKS

1. Polyethylene Unidirectional Composite Mesoscale and Continuum Models for Impact Applications, 9th European Solid Mechanics Conference (ESMC 2015), July 6-10, 2015, Leganés, Madrid, Spain.
2. Experiments and Simulations with Dynamic Failure: Survival Guide, The 2016 Mach Conference, Annapolis, MD, USA
3. Panel discussion member: Key Technologies for Characterizing and Understanding Dynamic Failure, together with Dr. Richard Becker, Dr. Elmar Strassburger, Dr. KT Ramesh, moderated by Dr. Brady Aydelotte

THESIS ADVISOR

- Eli Iglesias, UTSA, in progress.