

Powder Technology Laboratory, San Diego State University

Co-Op Internship

06/2003 ~ 11/2004

RAS Computer Analysis Lab, Sun Microsystems Inc. San Diego, CA

Graduate Research Assistant

09/1999 ~ 11/2004

San Diego State University/ University of California, San Diego

Mechanical Engineer

06/1996 ~ 07/1999

DeShiChuang Corp. Beijing, China

PROFESSIONAL CERTIFICATIONS

FANUC Certified Industrial Robot Handling Tool Operation and Programming

FANUC Certified Industrial Robot iRVision-2D Operation and Programming

FANUC Certified Online CNC Turning Center

Metal Compacts, *J. of Applied Physics*, 101, 074906 (2007).

EA Olevsky, **J. Ma**, and M.A. Meyers, Densification of Porous Bodies in a Granular Pressure-Transmitting Medium, *Acta. Materialia*, Vol. 55, Issue 4, Pages 1351-1366 Feb., (2007).

J. Ma, EA Olevsky, and M.A. Meyers, Modeling of pressure transmission during post-reactive-

Conference, Sept. 27-30, (2021)

J. Ma, and I. Basith, Integration of an Industrial Robot with a CNC machining Center, *ASEE 127th Annual Conference and Exposition*, Montreal, QC, Canada, June 21-24, (2020)

Basith, **J. Ma**, F. Yildiz, Certification and Training for Automation and Mechatronics, *ASEE 127th Annual Conference and Exposition*, Montreal, QC, Canada, June 21-24, (2020)

J. Ma, and K. Coogler, Learning-by-doing: Development of Project-Based Manufacturing Courses,

K. Kuang, D. Zhu, **J. Ma**, Development of Super Copper Tungsten, *IMAPS ATW on R.F./Microwave Packaging*, San Diego, CA, September, (2009).

J. Ma, X. Wei, Numerical Study of the Performance of a Super CuW / BeO Package, *IMAPS ATW on R.F./Microwave Packaging*, San Diego, CA, September, (2009).

D. Zimmerman, J. Diehl, E. Johnson, K. Martin, **J. Ma**, Systematic Study of Microwave Absorption, Heating, and Microstructure Evolution of Porous Copper Powder Metal Compacts, *APS Spring 2008 Conference*, New Orleans, March, (2008).

K. Martin, J. Cardellino, E. Johnson D. Zimmerman, **J. Ma**, Percolation Studies of Metal-insulator Composites at Microwave Frequencies, *APS Spring 2008 Conference*, New Orleans, LA March, 2008

J. Ma, C.T. Smith, G.J. Weisel, B.L. Weiss, N.M. Miskovsky, D.T. Zimmerman, Single Mode Microwave Heating of Copper Powder Metal Compacts, *International COMSOL 2006 Conference*, Boston, Oct. (2006).

J. Ma, EA Olevsky, and M.A. Meyers, Synthesis of dense TiC-Ti based cermets via self-propagating high temperature synthesis and quasi-isostatic pressing, *Proceeding 36th International SAMPE Technical Conference* (2004).

X. Wang, **J. Ma**, A. Maximenko, E.A. Olevsky, M. B. Stern, and B. M. Guenin, Preliminary study on synthesis of composites by electrophoretic deposition and microwave sintering, *Proceeding Annual IMAPS Conference*, Long Beach, CA (2004).

J. Ma, E. Olevsky, and M. Meyers,

a Handheld infrared Thermography-Minirhizotron Device for Nondestructive Rapid Detection of Cyst Nematodes, Plant Protection Act FY2020 (Annual) Implementation Plan for Section 7721, US Department of Agriculture, **\$131,834** (2019)

F. Yildiz (PI), R. Pecan (Co-PI), **J. Ma** (Co-PI), A. Smith-Herron (Co-PI), *Design and Development of Automated Insect/Pest Control and Sorting Devices for Field Deployment*, Plant Protection Act FY2020 (Annual) Implementation Plan for Section 7721, US Department of Agriculture, **\$146,814** (2019)

J. Ma (PI), M. Saadeh (Co-PI), L. Ho-hoon (Co-PI), *Development of an Engineering Design, Analysis, and Prototyping Laboratory*, Louisiana Board of Regents (\$53,500) and Southeastern Louisiana University (\$17,000). Total **\$70,500** (2015)

V. Sebastian (PI), **J. Ma (Co-PI)**, *Tapping into a Well of Potential*, American Association of Drilling Engineers. **\$25,000** (2014)

M. Saadeh (PI), **J. Ma (Co-PI)**, *Automated Rod Singulation Station*, Louisiana Board of Regents (\$11,850) and Laitram LLC. (\$9,736). Total **\$21,586** (2014)

J. Ma (PI), *Microwave and Spark Plasma Sintering (SPS): recent experimental development, modeling and simulation using COMSOL Multiphysics*, International Week, Pole University France. **\$3,000** (2013)

Internal

J. Ma (PI), *Design and Development of Project-Based Instructional Materials for ETEC3375 Statics*, SHSU STEM Center: Scholarship of Teaching and Learning, **\$2,000** (2019)

J. Ma (PI), I. Basith (Co-PI), *Integrating a Fanuc Industrial Robot with an Emco Machining Center*, Office of Research & Sponsored Program (ORSP): Pilot Study Program, **\$10,376** (2018)

D. Fritsche (Student), B. Lowry (Student), **J. Ma** (Faculty), *Development of a Robotic Platform for Wetland Studies*, Summer 2019 Faculty And Student Team (FAST) Awards, Enhancing Undergraduate Research Experiences & Creative Activities (EURECA), **\$8,000** (2018)

H. Martinez (Student), **J. Ma** (Faculty), *Experimental Study of Vertical Axis Wind Turbine (VAWT) with Pitch and Camber Controls*, Summer 2018 Faculty And Student Team (FAST) Awards, Enhancing Undergraduate Research Experiences & Creative Activities (EURECA), **\$6,000** (2017)

J. Ma (PI), K. Coogler (Co-PI), *Development of a Project-based Introductory Manufacturing Process Course*, Professional and Academic

J. Ma (PI), *Expanding Computational Power of the COMSOL Software Package by Acquiring Computational Fluid Dynamics (CFD) Module*, Office of Technology,