Name:	Junkun Ma
Title, position:	Associate Professor of Engineering Technology
Department:	Department of Agricultural Sciences and Engineering Technology
College:	College of Science and Engineering Technology

Degrees Earned:

Ph.D., Engineering Science/Applied Mechanics (Joint Doctoral Degree)		
Dept. of Mechanical Engineering	San Diego State University	
Dept. of Mechanical & Aerospace Engineering	University of California, San Diego	
M.S., Mechanical Engineering	1999	
Dept. of Mechanical Engineering	N. China Electric Power University	
B.S., Applied Engineering Mechanics		
Dept. of Applied Engineering Mechanics	Tsinghua University	

Professional Licensure and Certifications

Peer-Review Publications and Artistic Performances/Exhibitions

- J. Ma, K. Cris, H. Luo, *Efficiency of a Vertical Axis Wind Turbine (VAWT) with Airfoil Pitch Control*, COMSOL Conference 2016, Oct., (2016)
- J. Ma, K. Cris, Effects of Design Parameters on the Fluid Flow and the Efficiency of Single Ended Evacuated Tubular Solar Thermal Collectors via FEM Modelling and Experimentation, Engineering Journal, Vol 19, No5 (2015).
- J. Ma, E.A. Olevsky, Numerical Simulation of Densification and Deformation of Porous Bodies in a Granular Pressure-Transmitting Medium, Advances in Sintering Science and Technology, Ceramic Transactions, Vol. 209, Pages 113-124 (2009).
- J. Ma, G.J. Weisel, B.L. Weiss, N.M. Miskovsky, D.T. Zimmerman, Systematic Study of Microwave Absorption, Heating, and Microstructure Evolution of Porous Copper Powder Metal Compacts, J. of Applied Physics, 101, 074906 (2007).
- E.A. 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).

Refereed Abstracts

• J. Ma, C. Born, *Further Development of Capstone Design Project Courses based on a case study*, 2017 ASEE Annual Conference, June (2017) – accepted

Research Monographs and Technical Reports

Funded External Grants

- 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)

Peer-Review Presentations/Posters

• J. Ma, M. Suh, Finite Element Method based numerical simulation of the thermodynamic process of a single stage solar absorption chiller, Engineering Sustainability 2017, April (2017) – accepted

- J. Ma, K. Cris, Evaluation of Design Efficiency via COMSOL Simulations, 2014 EPSCoR Industry-Academia Workshop on Advanced Materials and Manufacturing, New Orleans, November (2014)
- J. Ma, Microwave and Spark Plasma Sintering(SPS): recent experimental development, modeling and simulation using COMSOL Multiphysics, Pole University Leonard De Vinci International Week, Paris, France. March, (2013)
- J. Ma, A. Parker, K. Kuan, *Thermal Properties of Copper Tungsten with Copper Via Composite*, International COMSOL 2011 Conference, Boston, MA, October, (2011).
- J. Ma, X. Wei, *Efficiency of Evacuated Tubular Solar Thermal Collector*, International COMSOL 2011 Conference, Boston, MA, October, (2011)

Work or Professional Experiences

Associate Professor of Engineering Technology	
Dept. of Agricultural Sci. & Industrial Tech., Sam Houston State Univ.	08/2016 ~ present
Associate Professor of Engineering Technology	
Dept. of Computer Sci. & Industrial Tech., Southeastern Louisiana Univ.	08/2013 ~ 07/2016
Assistant Professor of Engineering/Industrial Technology	
Dept. of Computer Sci. & Industrial Tech., Southeastern Louisiana Univ.	08/2007 ~ 07/2013
Visiting Assistant Professor	
Division of Math and Natural Science, Penn State Univ., Altoona	04/2005 ~07/2007
Postdoctoral Fellow	
Powder Technology Laboratory, San Diego State University	11/2004 ~ 04/2005

Honors and Awards

Other Competencies

Certification:

Institute for the Development of Excellence in Assessment Leadership (IDEAL) Scholar awarded by the Accreditation Board for Engineering and Technology (ABET), Jan. (2017).