

# Chien-hong Lin

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Location: Baltimore, MD, USA

[Google Scholar](#)

## BIOGRAPHY

<b>Ph.D.</b>	Mechanical Engineering	<b>Texas A&amp;M University</b> , College Station, TX, USA	2014
<b>M.S.</b>	Biomedical Engineering	<b>National Cheng Kung University</b> , Taiwan	2001
<b>B.S.</b>	Mechanical Engineering	<b>National Taipei University of Technology</b> , Taiwan	1999

Dr. Lin has a broad background in Solid Mechanics. He has published 9 articles in peer-reviewed journals, and presented over 10 conferences. He also serves as a reviewer for 10+ internationally recognized journals and conferences, and as a member of American Society of Mechanical Engineers (ASME.)

## RESEARCH AREAS

Dr. Lin current research interests concern Mechanics of Materials and Constitutive Modeling of Advanced Engineering Materials. In particular, he is interested in micromechanics of piezoelectric composites, nonlinear and time dependent constitutive modeling, and multiscale & multiphysics modeling of heterogeneous materials.

## EMPLOYMENT HISTORY

<b>Title</b>	<b>Institution / Company</b>	<b>Date</b>
Postdoctoral Fellow	Johns Hopkins University, Baltimore, MD, USA	03/2016 - present
Manufacturing Assistant Manager	Honghua America LLC, Houston, TX, USA	03/2015 - 01/2016
Mechanical Engineer	Honghua America LLC, Houston, TX, USA	09/2014 - 03/2015
Mechanical Engineer	Texma Petroleum Machinery LLC, Houston, TX, USA	07/2014 - 09/2014
Graduate Research Assistant	Texas A&M University College Station, TX, USA	09/2010 - 05/2014
Mechanical Operator	Haisiang Co. Ltd., New Taipei City, Taiwan	10/2005 - 06/2008
Research Assistant	Academia Sinica	11/2001 - 09/2005

	Taipei, Taiwan	
Graduate Research Assistant	National Cheng Kung University	09/1999 - 06/2001
	Tainan, Taiwan	

## AWARDS

- 1 **Employee of the Quarter (second quarter - 2015)**, Honghua America, Houston, TX 06/2015
- 2 **Third place of poster competition**, MEEN Engineering Day hosted by MEGSO at Texas A&M University, College Station, TX 04/05/2014
- 3 **Fourth place of poster competition**, Poster Design Competition hosted by MEGSO at Texas A&M University, College Station, TX 02/2014
- 4 **Recipient of Graduate Assistantship at Texas A&M University in the form of Graduate Assistant Research since fall 2010 till spring 2014.** 09/2010
- 5 **Recipient of Graduate Scholarship at Texas A&M University in the amount of \$1,000 for non-resident tuition exemption since fall 2008 till summer 2009.** 02/2008
- 6 **Honorable Mention Award**, 2000 Conference on Biomechanics, Taiwan 11/2000
- 7 **Distinguished Mechanical Design Award**, Student Project Competition at National Taipei University of Technology, Taiwan 06/1999

## SYNERGISTIC ACTIVITIES

- 1 **Reviewer**, Materials Sciences and Applications (*Scientific Research Publishing*) 2016 – present
- 2 **Reviewer**, Universal Journal of Materials Science (*Horizon Research Publishing*) 2016 – present
- 3 **Reviewer**, Composites Science and Technology (*Elsevier*) 2015 – present
- 4 **Reviewer**, Journal of Intelligent Material Systems and Structures (*Sage*) 2015 – present
- 5 **Reviewer**, Journal of Mechanics in Medicine and Biology (*World Scientific*) 2015 – present
- 6 **Reviewer**, Journal of Mechanics Engineering and Automation (*David Publishing Company*)  
2014 – present
- 7 **Reviewer**, Mathematical Problems in Engineering (*Hindawi*) 2014 – present
- 8 **Reviewer**, Mechanics Research Communications (*Elsevier*) 2014 – present
- 9 **Reviewer**, Composite Structures (*Elsevier*) 2014 – present
- 10 **Reviewer**, Applied Mathematical Modelling (*Elsevier*) 2014 – present
- 11 **Reviewer**, ASME 2014 International Mechanical Engineering Congress & Exposition 05/06/2014
- 12 **Judge**, Spring 2013 MEEN Student Poster Competition, Texas A&M University 04/26/2013
- 13 **Member**, American Society of Mechanical Engineers 2011 – present

## JOURNAL PUBLICATIONS

- 1 **Lin, C.**, and A. Muliana. 2016 “[Nonlinear and Rate-dependent Hysteretic Responses of Active Hybrid Composites](#),” *Mat. Sci. Appl.*, 7(1):51-72.
- 2 **Lin, C.**, and A. Muliana. 2015. “[Nonlinear Electro-mechanical Responses of Functionally Graded Piezoelectric Beams](#),” *Compos. Part B-Eng.*, 72:53-64.
- 3 Li, P., K. L. White, **C. Lin**, D. Kim, A. Muliana, R. Krishnamoorti, R. Nishimura, H.-J. Sue. 2014. “[Mechanical Reinforcement of Epoxy with Self-assembled Synthetic Clay in Smectic Order](#),” *ACS*

*Appl. Mater. Interfaces*, 6(13):10188-10195.

- 4 **Lin, C.**, and A. Muliana. 2014. “Polarization Switching Responses of 1-3 and 0-3 Active Composites,” *Compos. Struct.*, 116:535-551.
- 5 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. 2014. “Average Electro-mechanical Properties and Responses of Active Composites,” *Comp. Mater. Sci.*, 82:405-414.
- 6 **Lin, C.**, and A. Muliana. 2014. “Micromechanical Models for the Effective Time-dependent and Nonlinear Electromechanical Responses of Piezoelectric Composites,” *J Intel. Mat. Syst. Str.*, 25(11):1306-1322.
- 7 **Lin, C.**, and A. Muliana. 2013. “Micromechanics Models for the Effective Nonlinear Electro-mechanical Responses of Piezoelectric Composites,” *Acta Mech.*, 224(7):1471-1492.
- 8 Muliana, A., and **C. Lin**. 2011. “A Multi-scale Formulation for Predicting Non-linear Thermo-electro-mechanical Response in Heterogeneous Bodies,” *J. Intel. Mat. Syst. Str.*, 22(8):723-738.
- 9 Hsiao, T.-H., **C. Lin**, T.-T. Lee, J.-Y. Cheng, P.-K. Wei, E.-Y. Chuang, and K. Peck. 2010. “Verifying Expressed Transcript Variants by Detecting and Assembling Stretches of Consecutive Exons,” *Nucleic Acids Res.*, 38(20):e187.

## CONFERENCE PRESENTATIONS

- 1 **Lin, C.** and A. Muliana. “A Multiscale Analysis of Functionally Graded Piezoelectric Beams,” oral presentation at *2016 ASME Int. Mech. Eng. Congress Expo.*, Nov. 11-17, 2016, Phoenix, AZ.
- 2 **Lin, C.** and A. Muliana. “A Micromechanical Model for the Effective Polarization Switching Responses of Piezoelectric Hybrid Composites,” oral presentation at *2015 ASME Int. Mech. Eng. Congress Expo.*, Nov. 13-19, 2015, Houston, TX.
- 3 **Lin, C.** and A. Muliana. “Micromechanical Analyses on Electro-mechanical Hysteresis of 1-3, 0-3, and Functionally Graded Composites,” oral presentation at *the 11th Int. Conf. Mech.Comp.*, Jun. 8-12, 2014, Long Island, NY.
- 4 **Lin, C.** and A. Muliana. “Rate-dependent Hysteresis in Piezoelectric Composites: A Micromechanical Analysis,” co-authored presentation at *the 9th Int. Conf. Mech. Time-Dep. Mat.*, May 27-30, 2014, Montréal, Canada.
- 5 **Lin, C.** and A. Muliana. “Rate-dependent Electro-mechanical Coupling Response of Active Composites,” oral presentation at *2013 ASME Int. Mech. Eng. Congress Expo.*, Nov. 15-21, 2013, San Diego, CA.
- 6 **Lin, C.** and A. Muliana. “A Micromechanical Model for Analyzing Responses of a Piezoelectric Hybrid Composite,” oral presentation at *American Society for Composites – 28th Tech. Conf.*, Sept. 9-11, 2013, State College, PA.
- 7 **Lin, C.** and A. Muliana. “Effective Nonlinear Responses of Piezoelectric Fibrous and Hybrid Composites,” oral presentation at *2012 ASME Int. Mech. Eng. Congress Expo.*, Nov. 9-15, 2012, Houston, TX.
- 8 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. “The effect of microstructural morphologies on the effective electro-mechanical properties of piezoelectric particle composites,” co-authored presentation at *2012 ASME Int. Mech. Eng. Congress Expo.*, Nov. 9-15, 2012, Houston, TX.
- 9 **Lin, C.** and A. Muliana. “Analyzing Thermo-Electro-Mechanical Response of Active Composites,” co-authored presentation at *American Society for Composites – 26th Technical Conference/2nd Joint US-Canada Conference on Composites*, Sept. 26-28, 2011, Montréal, Canada.
- 10 **Lin, C.** and A. Muliana. “A Multi-scale Model for Analyzing Nonlinear Response of Active Composites,” co-authored presentation at *the 16th Int. Conf. Comp. Struct. (ICCS16)*, Jun. 28-30,

2011, Porto, Portugal.

- 11 **Lin, C.** and A. Muliana. "Micromechanics Model for Nonlinear Multi-field Responses of Active Composites," oral presentation at *ASME Applied Mechanics and Materials Conf. (McMAT 2011)*, May 30-Jun. 1, 2011, Chicago, IL.
- 12 **Lin, C.** and A. Muliana. "Micromechanics Model For Nonlinear Multi-field Responses of Active Composites," oral presentation at 14th Annual Student Research Week at Texas A&M University, Match 21-25, 2011, College Station, TX.
- 13 **Lin, J.**, K. Chung, and H. Lin, "Design and Development in Specialized Seating/Positioning Wheelchair for the Cerebral Palsied," co-authored presentation at *2000 International Conference on Biomechanics*, pp. B50, November 25, 2000, Kaohsiung, Taiwan.
- 14 **Lin, J.**, and K. Chung, "Design of Clinical Seating/Positioning Evaluation System," co-authored presentation at *1999 International Conference on Biomedical Engineering*, pp. 156-157, December 17-18, 1999, Tainan, Taiwan R.O.C.

## RESEARCH POSTERS

- 1 **Lin, C.** and A. Muliana. "Micromechanics Modeling of Piezoelectric Composites," *3rd Annual Student Research Poster Competition, Texas A&M University*, Apr. 17, 2014, College Station, TX.
- 2 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. "Electro-mechanical Responses of Piezoelectric Composites," *3rd Annual Student Research Poster Competition, Texas A&M University*, Apr. 17, 2014, College Station, TX.
- 3 **Lin, C.** and A. Muliana. "Micromechanics Modeling of Piezoelectric Composites," *Mechanical Engineering Day, Texas A&M University*, Apr. 5, 2014, College Station, TX.
- 4 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. "Electro-mechanical Responses of Piezoelectric Composites," *Mechanical Engineering Day, Texas A&M University*, Apr. 5, 2014, College Station, TX.
- 5 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. "Electro-mechanical Responses of Piezoelectric Composites," *2014 Pi Tau Sigma National Convention, Texas A&M University*, Feb. 22, 2014, College Station, TX.
- 6 Tajeddini, V., **C. Lin**, A. Muliana, and M. Lévesque. "Electro-mechanical Responses of Piezoelectric Composites," *Spring 2013 MEEN Student Poster Competition, Texas A&M University*, Apr. 26, 2013, College Station, TX.

## REFERENCES

### Anastasia Muliana

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