

# ASHKAN VAZIRI

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Associate of The School of Engineering and Applied Science  
Harvard University

## Education

Institution	Degree	year
Sharif University of Technology (Tehran, Iran)	B. Sc.	1999
Sharif University of Technology (Tehran, Iran)	M. Sc.	2000
Northeastern University (Advisor: Prof. Hamid Nayeb-Hashemi)	Ph. D.	2004
Harvard University (Academic Mentor: Prof. John W. Hutchinson)	Post-Doc	2004-2006

## A. Positions and Employment

<b>07/2013-present</b>	<b>Associate Professor, Department of Mechanical and Industrial Engineering, Northeastern University</b>
09/2008-present	Assistant Professor, Department of Mechanical and Industrial Engineering, Northeastern University
12/2007-present	Adjunct Scholar, School of Engineering and Applied Sciences, Harvard
08/2006-08/2011	Adjunct Scholar, Department of Bioengineering, University of California at Berkeley
12/2007-09/2008	Senior Research Scientist, FM Global Research
10/2006-09/2008	Research Affiliate, Biological Engineering Division, MIT
04/2006-11/2007	Research Associate, School of Engineering and Applied Sciences, Harvard
09/2004-02/2006	Lecturer on Engineering, School of Engineering and Applied Sciences, Harvard
04/2004-04/2006	Post-Doctoral Fellow, Division of Engineering and Applied Sciences, Harvard
2003-2004	Instructor, Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University
2001-2003	Teaching Assistant, Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University

## Honors and Awards

2012	Soren Buus Outstanding Research Award, College of Engineering, Northeastern
2012	ICTAM 2012 Fellowship grant Award
2012	USNCTAM Travel Grant
<b>2012</b>	<b>NSF CAREER Award</b>
<b>2010</b>	<b>AFOSR Young Investigator Award</b>
2008	FM Global Directorate Award
2008	USACM Young Investigator Fellowship
2007	USACM Young Investigator Fellowship
2006	USACM Post-Doctoral Award, 7 <sup>th</sup> World Congress on Computational Mechanics
2005	USACM Travel Grant, 8 <sup>th</sup> U.S. National Congress on Computational Mechanics

2004	Outstanding Teaching Assistant Award of College of Engineering, College of Engineering, Northeastern University
2003 & 2004	Yamamura Fellow, Department of Mechanical and Industrial Engineering, Northeastern
2003	The Honor Society of Phi Kappa Phi, College of Engineering, Northeastern University
2001-2003	Teaching Scholarship, College of Engineering, Northeastern
2000	Graduated with 2 <sup>nd</sup> top GPA in class of 2000 (MSc), Sharif University of Technology
1999	Graduated with 2 <sup>nd</sup> top GPA in class of 1999 (BSc.), Sharif University of Technology
1999	2 <sup>nd</sup> place in the Third Olympiad of Civil and Structural Engineering
1999	3 <sup>rd</sup> place in Nationwide University Entrance Exam toward MSc. degree

### Grants while at Northeastern

**Total grant funding to Northeastern = \$2,472,862**

**Funding amount and percentage attributed to Vaziri = \$2,151,659 (87.0%)**

- [1] NSF-CMMI- 1149750: *CAREER: Functional Biomimetic Materials with Extreme Topology*, PI: A. Vaziri (Northeastern), 03/2012 – 02/2017,  
Total Funding: **\$400,000**, Vaziri's percent effort attributed (100%): **\$400,000**.
- [2] U.S. Air Force Office of Scientific Research, #FA 9550-10-1-0145, *AFOSR YIP: Bioinspired surfaces and interfaces for hybrid multifunctional structures*, PI: A. Vaziri (Northeastern), 01/2010-04/2013.  
Total Funding: **\$359,931**, Vaziri's percent effort attributed (100%): **\$359,931**.
- [3] U.S. Department of Homeland Security - 2008-ST-061-ED0001 (Sub-award from ALERT), *ALERT F4 Initiative*, Sub-award PI: A. Vaziri: 07/2008-6/2014  
Total Funding: **\$187,500**, Vaziri's percent effort attributed (100%): **\$187,500**.
- [4] FM Global: *Mechanics of carbon nanotube surface decontamination*, PI: A. Vaziri (Northeastern), 06/2010-2/2013.  
Total Funding: **\$165,000**, Vaziri's percent effort attributed (100%): **\$165,000**  
  
*Note: Renewed annually. Has verbally committed to additional funding of \$38,000 for 2013 efforts (in addition to the budget above).*
- [5] NSF-CMMI- 0736019: *SGER: Formation and Evolution of Localized Structures*, PI: J. W. Hutchinson (Harvard), Co-PI: A. Vaziri (Northeastern), 7/2007 – 12/2008,  
Total Funding: **\$100,000**, Vaziri's percent effort attributed (transferred to NU after joining NU, 64.4%): **\$64,427**.
- [6] NSF-CMMI- 1065759: *EAGER: Cross-Disciplinary Applications of Shell Mechanics*, PI: A. Vaziri (Northeastern), 10/2010 – 04/2012,  
Total Funding: **\$74,995**, Vaziri's percent effort attributed (100%): **\$74,995**.
- [7] Brooks Automation: *Development of novel high friction, low adhesion materials*, PI: N. Jalili (Northeastern), Co-PI: A. Vaziri, 10/2011 – 10/2012,  
Total Funding: **\$140,002**, Vaziri's percent effort attributed (25%): **\$35,000**.
- [8] Qatar Foundation - NPRP 09 - 145 - 2 - 061: *New approaches for structural protection in oil and gas industry*, Lead PI: A. Vaziri (Northeastern), Co-Lead PI: A. Hamouda (Qatar University), co-PI: H. Nayeb-Hashemi, 09/2010-08/2013,

Total Funding (sub-award from Qatar University): **\$304,712**, Vaziri's percent effort attributed (80%): **\$243,770**.

*Note:* The total grant funding is \$909,122. The amount of sub-award to Northeastern is \$304,712 and the balance went to Qatar University. Vaziri is the Lead PI for the project.

- [9] Qatar Foundation - NPRP 5 - 086 - 2 - 031 : *Knee injury prevention and osteoarthritis risk in obesity*, Lead PI: A. Vaziri (Northeastern), Co-Lead PI: R. Goebel (Qatar University), co-PI: H. Nayeb-Hashemi

Total Funding (sub-award from Qatar University): **\$326,295**, Vaziri's percent effort attributed (80%): **\$261,036**.

*Note:* The total grant funding was \$997,511. The amount of sub-award to Northeastern was \$326,295 and the balance went to Qatar University. Vaziri is the Lead PI for the project.

- [10] Qatar Foundation - NPRP 5 - 1298 - 2 - 560: *Novel multi functional composite sandwich panel*, Lead PI: E.Ahmed (Qatar University), PIs: A. Vaziri, H. Nayeb-Hashemi

Total Funding (sub-award from Qatar University): **\$340,000**, Vaziri's percent effort attributed (80%): **\$272,000**.

- [11] Qatar Foundation - NPRP 5 - 068 - 2 - 024: High-performance biodegradable composites from Qatari date palm waste, Lead PI: E.Ahmed (Qatar University), PIs: A. Vaziri, H. Nayeb-Hashemi, M. Farag

Total Funding (sub-award from Qatar University): **\$110,000**, Vaziri's percent effort attributed (80%): **\$88,000**.

## B. Teaching Experience

### 1. Courses taught since joining Northeastern in September 2008:

Course Number/Title	#Times Taught	Average of Course Evaluations	
		Instructor Effectiveness	Student Learning
- ME 3455 Dynamics and Vibrations (formerly MIM U455)	3	4.70	4.47
- ME 4508 Mechanical Engineering Computation and Design	4	4.55	4.35
<b>Overall Averages</b>		<b>4.61</b>	<b>4.40</b>

2013 (Spring) ME4508 (Mechanical Engineering Computation and Design), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University. (Overall rating of instructor=4.85/5.0)

2012 (Spring) ME4508 (Mechanical Engineering Computation and Design), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University. (Overall rating of instructor=4.8/5.0)

- 2011 (Fall) ME4508 (Mechanical Engineering Computation and Design), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University. (Overall rating of instructor=4.4/5.0)
- 2011 (Spring) ME4509 (Dynamics and Vibrations), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University. (Overall rating of instructor=4.8/5.0)
- 2010 (Fall) ME4508 (Mechanical Engineering Computation and Design), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University. (Overall rating of instructor=4.6/5.0)
- 2010 (Spring) ME4508 (Mechanical Engineering Computation and Design), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University (Overall rating of instructor=4.6/5.0)
- 2009 (Spring) MIMU455 (Dynamics and Vibrations), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University (Overall rating of instructor=4.6/5.0)

**2. Courses taught prior to September 2008:**

- 2006 (Fall) ES128 (Computational Solid and Structural Mechanics), Division of Engineering and Applied Sciences, Harvard University (Overall rating of instructor=4.75/5.0)
- 2005 (Fall) ES125 (Mechanical Systems), Division of Engineering and Applied Sciences, Harvard University (Overall rating of instructor=4.31/5.0)
- 2004 (Fall) ES125 (Mechanical Systems), Division of Engineering and Applied Sciences, Harvard University (Overall rating of instructor=4.93/5.0)
- 2004 (Spring) MIMU355 and MIMU356, (Mechanics of Materials) and (Mechanics of Materials Laboratory), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University (Overall rating of instructor=4.2/5.0)
- 2003 (Fall) MIMU355 (Dynamics and Vibrations), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University (Overall rating of instructor=4.6/5.0)
- 2003 (Summer) MIM1360 (Dynamics), Department of Mechanical, Industrial and Manufacturing Engineering, Northeastern University (Overall rating of instructor=4.7/5.0)

**3. Advisory Courses:**

- 2008 - present Independent study (both undergraduate and graduate levels), Northeastern University
- 2007 Independent Study, School of Engineering and Applied Sciences, Harvard University
- 2006-2007 Independent Study, Division of Engineering and Applied Sciences, Harvard University
- 2005-2006 Senior Design Project, Division of Engineering and Applied Sciences, Harvard University
- 2005 Independent Study, Division of Engineering and Applied Sciences, Harvard University
- 2004 Independent Study, Northeastern University

**4. Other Professional Activities**

- 2008-present Consultant, FM Global Research
- 2007-2010 Consultant, Bosch Research and Technology Center
- 2005-2006 Consultant, McGovern Institute for Brain Research, MIT
- 2004-2005 Consultant, RWE Schott Solars, Billerica, MA
- 2004-2005 Consultant, Beth Israel Hospital, Harvard Medical School

## 5. Invited Presentations

2003	Mechanical Engineering Department, North Dakota State University.
2003	Simpson Gumpertz & Heger Inc., Boston.
2004	Department of Mechanical, Industrial, and Manufacturing Engineering, Northeastern University.
2004	Department of Mechanical Engineering, University of Massachusetts, Lowell.
2004	College of Engineering, Northeastern University.
2006	Department of Civil and Environmental Engineering, Massachusetts Institute of Technology.
2006	Division of Engineering and Applied Sciences, Harvard University.
2007	Keynote Speaker, ICCES07
2007	Keynote Speaker, 9 <sup>th</sup> US Congress in Computational Mechanics
2007	Mechanical and Aerospace Engineering Department, University of California, Irvine.
2007	Department of Mechanical Science and Engineering, University of Illinois, Urbana-Champaign.
2007	Department of Civil Engineering, John Hopkins University.
2007	Department of Civil and Environmental Engineering, Princeton University
2007	Division of Engineering, Brown University.
2007	Department of Mechanical Engineering, Northwestern University
2007	Department of Aerospace and Mechanical Engineering, Boston University
2007	Bosch Research and Technology Center, Paolo Alto, CA
2007	Department of Mechanics, École Polytechnique
2007	FM Global Research
2008	Department of Mechanics and Industrial Engineering, Northeastern University.
2008	Keynote Speaker, ICCES08
2008	Department of Civil Engineering, Sharif University of Technology
2008	Department of Mechanical Engineering, Tehran University
2009	Department of Mechanical and Aerospace Engineering, UCSD
2010	<b>Invited talk, APS March meeting</b>
2010	KaZaK Composites Inc.
2010	Physical Mathematics Seminar, MIT
2010	Physics Department, Harvard University
2010	SAMPE (The Society for the Advancement of Materials and Process Engineering)
2011	Department of Mechanical and Aerospace Engineering, UCLA
2011	College of Engineering, Texas A&M - Qatar
2012	Department of Physics, Clark University
2012	Center for Composite Materials and Structures, Harbin Institute of Technology - China

### **Graduate Students/Post-Docs and Visiting Students and Scholars**

**PhD Students:** Babak Haghpanah (Expected graduation date: Dec. 2012), Hamid Ebrahimi (Expected graduation date: Sep. 2014), Davood Mousanezhad (Started: Jan. 2012), Ramin Oftadeh (Started Jan. 2012), Hamed Abdi (Started Sep. 2011)

**Masters Students:** Syed Hassan (Expected graduation date: Sep. 2012)

**Visiting Research Associates:** Dr. Joseph Gwin, Dr. Ranajay Ghosh, Ghazal Alipour

## **Graduated students and Recent Visiting Scholars**

**PhD Students:** Amin Ajdari (December 2011)

**Masters Students:** Jonathan M Erickson Hammel (August 2011), Ghanim Al Qassim (August 2011), Sahab Babaei (August 2011), Mahdi Ashrafi (August 2011), Yoontae Kim (July 2011), Shih-Hung Chiu (June 2011), Hamid Ebrahimi (June 2012)

**Post-Doc:** Dr. Amin Ajdari (Currently Post-Doc at Northwestern)

**Visiting Students and Scholars:** Jian Xiong (visiting PhD student, Harbin Institute Technology), Gulbahar Wahap (Visiting PhD student, Tokyo University), Dr. Ghazal Alipour (Visiting Research Associate).

## **C. Publications**

**(78 Published Journal Articles, 150 Conference Proceedings/Abstracts)**

Google scholar Citations > 1350, h- index = 21

<http://scholar.google.com/citations?user=a11lyJoAAAAJ&hl=en>

## **Book Chapters**

**A. Vaziri** and R. Ghosh “Numerical analysis of the response of biomimetic cellular materials under static and dynamic loadings“, Blast Mitigation. Springer, Edited by A. Shukla, Y. D. S. Rajapakse, M. E. Hynes, 2013.

M. W. Moon, C. Kim and **A. Vaziri** “Ion beam-induced self-assembled wrinkles“, Mechanical Self-Assembly: Science and Application. Springer, Edited by X. Chen, 2013.

## **Journal Articles:**

\* correspondence author. †graduate/undergraduate students, post-doctoral fellows in Vaziri’s group. †† Visiting PhD students in Vaziri’s group. Citations information are based on Google Scholar Profile, taken on Dec. 9, 2012.

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## **2013**

1. H. Ebrahimi† and **A. Vaziri\***, “Metallic Sandwich panels subjected to multiple intense shocks”, *Int. J. Solids and Structures*, 2013, Int. J. Solids and Structures, 2013, 50, pp. 1164–1176.

## **2012**

2. D. Vella\*, A. Ajdari†, **A. Vaziri** & A. Boudaoud\*, “Indentation of ellipsoidal and cylindrical shells“, *Physical Review Letters*, 2012, 109, pp. 144302. (**citation = 1**)

**Commentaries and press reports:** *Scientific American Blogs, InsideScience.org, lemonde.fr.*

Featured 'Focus' article by physics.aps.org, Journal Editor's suggestion list.



3. J. Xiong\*††, L. Ma, **A. Vaziri**, J. Yang, L. Wu\*, & “Mechanical behavior of carbon fiber composite lattice core sandwich panels fabricated by laser cutting”, *Acta Materialia*, 2012, **60**, pp. 5322-5334. DOI: 10.1016/j.actamat.2012.06.004.
4. A. Ajdari†, B. Hapghpanah Jahromi†, J. Papadopoulos†, H. Nayeb-Hashemi & **A. Vaziri\***, “Hierarchical honeycombs with tailorable properties”, *Int. J. Solids and Structures*, 2012, **49**, pp. 1413-1419. DOI: 10.1016/j.ijsolstr.2012.02.029. (**citations = 2**)
5. A. Marzban, P. Canavan, **A. Vaziri**, G. Warner & H. Nayeb-Hashemi\*, “Parametric Investigation of Load -induced Structure Remodeling in the Proximal Femur”, *J. Engineering in Medicine*, 2012, **226(6)**, pp. 450-460. DOI: 10.1177/0954411912444067.
6. S. Babee†, B. Hapghpanah Jahromi†, A. Ajdari†, H. Nayeb-Hashemi, & **A. Vaziri\***, “Mechanical properties of open-cell rhombic Dodecahedron cellular structures”, *Acta Materialia*, 2012, **60**, pp. 2873-2885. DOI: 10.1016/j.actamat.2012.01.052.
7. B. Hapghpanah Jahromi†, H. Nayeb-Hashemi, & **A. Vaziri\***, “Elasto-plastic stresses in a functionally graded rotating disk”, *ASME Journal of Engineering Materials and Technology*, 2012, **134**, pp. 021004. DOI: 10.1115/1.4006023.
8. B. Hapghpanah Jahromi†, & **A. Vaziri\***, “Instability of cylindrical shells with single and multiple cracks under axial compression”, *Thin-Walled Structures*, 2012, **54**, pp. 35-43. DOI: 10.1016/j.tws.2012.01.014. (**citation = 1**)
9. J. Xiong\*††, L. Ma, S. Pan, L. Wu\* & **A. Vaziri**, “Shear and bending performance of carbon fiber composite sandwich panels with pyramidal truss cores”, *Acta Materialia*, 2012, **60**, pp. 1455-1466. DOI: 10.1016/j.actamat.2011.11.028. (**citations = 4**)
10. J. Xiong\*††, **A. Vaziri**, L. Ma, J. Papadopoulos† & L. Wu\*, “Compression and impact testing of two-layer composite pyramidal-core sandwich panels”, *Composite Structures*, 2012, **94**, pp. 793-801. DOI: 10.1016/j.compstruct.2011.09.018. (**citations = 1**)
11. M. Ashrafi†, A. Ajdari†, N. Rahbar, J. Papadopoulos†, H. Nayeb-Hashemi & **A. Vaziri\***, “Adhesively bonded single lap joints with non-flat interfaces”, *International Journal of Adhesion and Adhesives*, 2012, **32**, pp. 46-52. DOI: 10.1016/j.ijadhadh.2011.09.004.
12. D. Vella\*, A. Ajdari†, **A. Vaziri** & A. Boudaoud\*, “The indentation of pressurized elastic shells: From polymeric capsules to yeast cells”, *Journal of the Royal Society Interface*, 2012, **9**, pp. 448-455. DOI: 10.1098/rsif.2011.0352. (**citations = 3**)

## 2011

13. M. Ashrafi†, H. Nayeb-Hashemi\* & **A. Vaziri**, “Effect of Processing Variables and Fiber Reinforcement on the Mechanical Properties of Wood Plastic Composites”, *Journal of Reinforced Plastics and Composites*, 2012, 30, pp. 1939-1945. DOI: 10.1177/0731684411431120.

14. D. Vella\*, A. Ajdari†, **A. Vaziri** & A. Boudaoud\*, “Wrinkling of pressurized elastic shells”, *Physical Review Letters*, 2011, 107, pp. 174301. DOI: 10.1103/PhysRevLett.107.174301. (**citations = 5**)

**Commentaries and press reports:** Physics World and physicsworld.com, *Northeastern College of Engineering*.

15. **A. Vaziri\***, A. Ajdari†, H. Ali & A. Agelaridou Twohig, “Structural analysis of reinforced concrete chimneys subjected to uncontrolled fire”, *Engineering Structures*, 2011, **33**, pp. 2888-2898. DOI: 10.1016/j.engstruct.2011.06.013.

## 2010

16. J. Xiong\*††, L. Ma, L. Wu\*, J. Liu & **A. Vaziri**, “Mechanical behavior and failure of composite pyramidal truss core sandwich columns”, *Composite Part B: Engineering*, 2011, **42**, pp. 938-945. DOI: 10.1016/j.compositesb.2010.12.021. (**citations = 5**)

17. A. Ajdari†, H. Nayeb-Hashemi & **A. Vaziri\***, “Dynamic crushing and energy absorption of regular, irregular and functionally graded cellular structures”, *Int. J. Solids and Structures*, 2011, **48**, pp. 506-516. DOI: 10.1016/j.ijsolstr.2010.10.018. (**citations = 16**)

18. J. Xiong\*, L. Ma, L. Wu\*, M. Li & **A. Vaziri**, “Mechanical behavior of sandwich panels with hollow Al-Si alloy tubes core construction”, *Materials and Design*, 2011, **32**, pp. 592-597. DOI: 10.1016/j.matdes.2010.08.016. (**citations = 7**)

19. **A. Vaziri\***, L. Moore & H. Ali “Monitoring systems for open pit walls”, *Natural Hazards*, 2010, **55**, pp.501-512. DOI: 10.1007/s11069-010-9542-5.

20. Sk. Faruque Ahmed, G. Nho, K. R. Lee, **A. Vaziri\*** & M. W. Moon\*, “High aspect ratio wrinkles on soft polymer”, *Soft Matter*, 2010, 2010, **6**, pp. 5709-5714. DOI: 10.1039/c0sm00386g. (**citations = 7**)

**Cover of Soft Matter, Amongst the most-read article of Soft Matter in November 2010,**

**Commentaries and press reports:** *Soft Matter Blog*, *Northeastern College of Engineering news*, *Faculty Spotlight: Northeastern College of Engineering*, *Northeastern University main homepage*.





21. W. Moon, T. G. Cha, K. R. Lee, **A. Vaziri\*** & H. Y. Kim\*, "Tilted Janus Polymer Pillars", *Soft Matter*, 2010, **6**, pp. 3924-3929. DOI: 10.1039/c0sm00126k. (**citations = 11**)

**2<sup>nd</sup> most-read article of Soft Matter in July 2010, 7<sup>th</sup> most-read article of Soft Matter in August 2010**

**Commentaries and press reports:** *Soft Matter Latest News, Highlights in Chemical Science-RSC Publishing, Institute of nanotechnology, e-Science News, Northeastern University main homepage, Northeastern College of Engineering news, Physorg.com, TheEngineer.co.uk, nanaomagazine.co.uk, The X-Journals, NSTI.org, American Society of Nanomedicine, Adhesives.org e-Newsletter.*

22. H. N. Yang\*, P. Canavan, H. Nayeb-Hashemi & **A. Vaziri**, "Effect of the frontal plane tibiofemoral angle on the stress and strain at the knee cartilage during the stance phase of the gait cycle", *J. Orthopaedic Research*, 2010, **28**, pp. 1539-1547. DOI: 10.1002/jor.21174. (**citations = 11**)

**Cover of J. Orthopaedic Research (Dec. 2010 issue), Faculty Spotlight:** *Northeastern College of Engineering, Northeastern University main homepage, Northeastern College of Engineering news.*



23. J. Xiong\*††, L. Wu, L. Ma, B. Wang\* & **A. Vaziri**, "Fabrication and crushing behavior of carbon fiber composite pyramidal truss cores", *Composite Structures*, 2010, **92**, pp. 2695-2702. DOI: 10.1016/j.compstruct.2010.03.010. (**citations = 23**)

24. R. A. Jenks, **A. Vaziri**, A. R. Bolori & G. Stanley\*, "Self-motion and the shaping of sensory signals", *Journal of Neurophysiology*, 2010, **103**, pp. 2195-2207. DOI: 10.1152/jn.00106.2009. (**citations = 7**)

25. B. Haghpanah†, A. Ajdari†, H. Nayeb-Hashemi, & **A. Vaziri\***, "Autofrettage of laminated and functionally graded metal-ceramic composite vessels", *Composite Structures*, 2010, **92**, pp. 1813-1822. DOI: 10.1016/j.compstruct.2010.01.019. (**citations = 5**)

26. H. N. Yang, P. Canavan, H. Nayeb-Hashemi, B. Najafi & **A. Vaziri\***, "Protocol for Constructing Subject-Specific Biomechanical Model of Knee Joint", *Computer Methods in Biomechanics and Biomedical Engineering*, 2010, **13**, pp. 589-603. DOI: 10.1080/10255840903389989. (**citations = 8**)

27. **A. Vaziri\***, H. Nayeb-Hashemi, & B. Tafti, "Computational model of rib movement and its application in studying the effects of age-related thoracic cage calcification on respiratory system", *Computer Methods in Biomechanics and Biomedical Engineering*, 2010, **13**, pp. 257-264. DOI: 10.1080/10255840903170694. (**citations = 3**)

**2009**

28.B. Haghpanah†, H. H. Farahi, M. Maleki, H. Nayeb-Hashemi, & **A. Vaziri\***, “Residual stresses in autofretaged vessel made of functionally graded materials”, *Engineering Structures*, 2009, **31**, pp. 2930-2935. DOI: 10.1016/j.engstruct.2009.07.019. (**citations = 5**)

29. M.W. Moon & **A. Vaziri\***, “Surface modification of polymers by multi-step plasma treatment”, *Scripta Materialia*, 2009, **60**, pp. 44-47. DOI: 10.1016/j.scriptamat.2008.08.038. (**citations = 23**)

30. **A. Vaziri\***, “Mechanics of highly-deformed elastic shells”, *Thin-Walled Structures*, 2009, **47**, pp. 692-700. DOI: 10.1016/j.tws.2008.11.009. (**citations = 12**)

31. M.W. Moon, J. H. Han, **A. Vaziri\***, E. K. Her, K. H. Oh, K.R. Lee, & J. W. Hutchinson\*, “Nanoscale ripples on polymers created by a focused ion beam”, *Nanotechnology*, 2009, **20**, pp. 115301. DOI: 10.1088/0957-4484/20/11/115301. (**citations = 5**)

**Commentaries and press reports:** *nanotechweb.org, Advanced Physics Forums, Internano.org, Northeastern University News, Northeastern College of Engineering news, Frost & Sullivan Nanotech Alert, Iran Daily.*

## **2008**

32. M.W. Moon, E. K. Her, K. H. Oh, K. R. Lee & **A. Vaziri\***, “Sculpting on polymers by focused ion beam”, *Surface and Coating Technology*, 2008, **26**, pp. 1335-1344. DOI: 10.1016/j.surfcoat.2008.06.059. (**citations = 6**)

33. O. Loh, **A. Vaziri** & H.D. Espinosa\*, “The potential of MEMS for advancing experiments and modeling in cell mechanics”, *Experimental Mechanics*, 2009, **49**, pp. 105-124. DOI: 10.1007/s11340-007-9099-8. (**citations = 20**)

34. **A. Vaziri\***, H. Nayeb-Hashemi, A. Singh & B. A. Tafti, “The influence of meniscectomy and meniscus replacement on the stress distribution in human knee joint”, *Annals of Biomedical Engineering*, 2008, **36**, pp. 1335-1344. DOI: 10.1007/s10439-008-9515-y. (**citations = 17**)

35. **A. Vaziri** & L. Mahadevan\*, “Localized and extended deformation of elastic shells”, *Proceedings of the National Academy of Sciences*, 2008, **105**, pp. 7913-7918. DOI: 10.1073/pnas.0707364105. (**citations = 27**)

Commentaries and press reports: **PNAS Cover Page, In This issue PNAS.**

36. H. Nayeb-Hashemi\*, **A. Vaziri** & K. Ziemer, “Wear resistance of Cu-18 vol.% Nb (P/M) composites”, *Journal of Materials Science and Engineering A*, 2008, **478**, pp. 390-396. DOI: 10.1016/j.msea.2007.06.034. (**citations = 6**)



37. Z. Xue, **A. Vaziri** & J. W. Hutchinson\*, "Material aspects of dynamic neck retardation", *J. Mechanics and Physics of Solids*, 2008, **56**, pp. 93-113. DOI: 10.1016/j.jmps.2007.04.003. (**citations = 8**)
38. S. S. Oh, D. H. Kim, M.W. Moon, **A. Vaziri**, M. Kim, E. Yoon, K. H. Oh\* & J. W. Hutchinson\*, "Indium nanowires grown at ultra-fast rate", *Advanced Materials*, 2008, **6**, pp. 1093-1098. DOI: 10.1002/adma.200702134. (**citations = 7**)
39. N. H. Yang, H. Nayeb-Hashemi\*, **A. Vaziri**, "Non-destructive evaluation of erosion damage on E-glass/epoxy composites", *Composites: Part A*, , 2008, **39**, pp. 56-66. DOI: 10.1016/j.compositesa.2007.09.001. (**citations = 3**)
40. **A. Vaziri**\* & A. Gopinath, "Cell and biomolecular mechanics in *silico*", *Nature Materials*, January 2008, **7**. DOI: 10.1038/nmat2040. (**citations = 31**)

## 2007

41. L. Mori, S. Lee, Z. Xue, **A. Vaziri**, D. Queheillalt, H. Wadley, J. W. Hutchinson and H.D. Espinosa\*, "On the behavior of sandwich structures subjected to under water impulsive loads", *J. Mechanics of Materials and Structures*, 2007, **2**(10), pp. 1981-2006. (**citations = 26**)
42. M.W. Moon, S.H. Lee, K.H. Oh, **A. Vaziri** & J. W. Hutchinson\*, "Controlled formation of nanoscale wrinkling patterns on polymers using focused ion beam", *Scripta Materialia*, 2007, **57**(3), pp. 747-750. DOI: 10.1016/j.scriptamat.2007.06.043. (**citations = 25**)
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87. A. Ajdari, S. Babae & **A. Vaziri**, "In-plane dynamic crushing and energy absorption of cellular structures", *IMPLAST 2010*.
88. R. Liu, H. Nayeb-Hashemi, M. Olia, & **A. Vaziri**, "On transverse vibration of a functionally graded rotating disk", *IMECE 2010*, 2010.
89. B. Haghpanah, A. Ajdari, H. Nayeb-Hashemi, & **A. Vaziri**, "Linear buckling analysis of cracked cylindrical shells under axial compression", *IMECE 2010*, 2010.
90. S. Babae, B. Haghpanah, A. Ajdari, H. Nayeb-Hashemi, & **A. Vaziri**, "Mechanical properties of three-dimensional open, closed and partially-closed rhombic dodecahedron cellular structure", *IMECE 2010*, 2010.
91. **A. Vaziri**, B. Haghpanah & A. Ajdari, "Failure and fracture of shock-loaded sandwich panels", *IMECE 2010*, 2010.
92. A. Ajdari, L. Mahadevan & **A. Vaziri**, "Localization and curvature-driven wrinkling in elastic shells", *New England Workshop on the Mechanics of Materials and Structures*, 2010.



93. A. Ajdari, S. Babaee & **A. Vaziri**, “Dynamic crushing of heterogeneous and functionally graded cellular structures”, *New England Workshop on the Mechanics of Materials and Structures*, 2010.
94. S. Chiu, M. Ashrafi, B. Haghpanah & **A. Vaziri**, “Toughening bonded joints by morphological alterations”, *New England Workshop on the Mechanics of Materials and Structures*, 2010.
95. S. K. Faruque Ahmed, G. H. Nho, K. R. Lee, **A. Vaziri** & M. W. Moon, “High aspect ratio wrinkles created by carbon deposition on pre-patterned soft polymers”, *MRS Fall Meeting, 2010*.
96. S. M. W. Moon, T. G. Cha, K. R. Lee, **A. Vaziri** & H. Y. Kim, “Tilting polymeric micropillars by ion beam”, *MRS Fall Meeting, 2010*.
97. A. Ajdari & **A. Vaziri**, “Curvature-driven instability and wrinkling in elastic shells”, *MRS Fall Meeting, 2010*.
98. **A. Vaziri**, S. Babaee, B. Haghpanah, A. Ajdari & H. Nayeb-Hashemi, “Elasto-plastic properties and energy absorption of 3-D tessellated cellular structures”, *Plasticity*, 2011.
99. **A. Vaziri**, B. Haghpanah, A. Ajdari & H. Nayeb-Hashemi, “Extended Variable Materials Property (X-VMP) method for elasto-plastic analysis”, *Plasticity*, 2011.
100. M. W. Moon & **A. Vaziri**, “From micropillar tilting to optics grating using wrinkles”, *2011 SEM Annual Conference and Exposition on Experimental and Applied Mechanics*.
101. S. Babaee, A. Ajdari & **A. Vaziri**, “Heterogeneous and functionally graded three-dimensional cellular materials”, *2011 SEM Annual Conference and Exposition on Experimental and Applied Mechanics*.
102. B. Haghpanah, A. Ajdari & **A. Vaziri**, “Instability of cracked shells under complex loading”, *2011 SEM Annual Conference and Exposition on Experimental and Applied Mechanics*.
103. M. W. Moon, T. J. Ko, K. H. Oh, **A. Vaziri** & K. R. Lee “Nanostructures formed on polymeric materials by ion beam with glancing angle irradiation”, *MRS Spring Meeting, 2011*.
104. **A. Vaziri** & A. Ajdari, “Multi-scale and cross-disciplinary aspects of shell mechanics”, *NSF CMMI Research and Innovation Conference, 2011*.
105. B. Haghpanah, A. Ajdari & **A. Vaziri**, “Extended Variable Materials Property (X-VMP) method for functionally graded materials and structures”, *NSF CMMI Research and Innovation Conference, 2011*.
106. A. Ajdari, S. Babaee & **A. Vaziri**, “Mechanical properties and energy absorption of heterogeneous and functionally graded cellular structures”, *International Conference on the Mechanical Behavior of Materials, 2011*.
107. M. W. Moon & **A. Vaziri**, “Wrinkling instability and its applications: From biomimetic tilted pillars to optics grating”, *International Conference on the Mechanical Behavior of Materials, 2011*.
108. B. Haghpanah, Yoontae Kim & **A. Vaziri**, “Instability of cracked pipes with an without an elastomeric liner”, *Engineering Mechanics Institute Conference (EMI2011)*

109. **A. Vaziri** & A. Ajdari & “Global and localized features of shell deformation and instability”, *Engineering Mechanics Institute Conference (EMI2011)*
110. H. Nayeb-Hashemi, & **A. Vaziri**, “Non-destructive evaluation of damaged composites”, *Engineering Mechanics Institute Conference (EMI2011)*
111. M. Ashrafi, Sh. Chiu, N. Rahbar, H. Nayeb-Hashemi & **A. Vaziri**, “Strengthening the bonded joints by interface shape alteration”, *Engineering Mechanics Institute Conference (EMI2011)*
112. A. Ajdari, S. Babee, H. Nayeb-Hashemi & **A. Vaziri**, “Cellular structures with irregular structural organization”, *Engineering Mechanics Institute Conference (EMI2011)*
113. A. Ajdari, S. Babee & **A. Vaziri**, “Energy absorption of heterogeneous and functionally graded cellular structures”, *Sixth MIT Conference on Computational Fluid and Solid Mechanics, 2011.*
114. A. Ajdari, B. Haghpanah & **A. Vaziri**, “Structural stiffness of honeycombs with hierarchical organization”, *11<sup>th</sup> US National Congress on Computational Mechanics, 2011.*
115. A. Ajdari & **A. Vaziri**, “Multi-scale mechanics of thick elastic shells upon indentation”, *11<sup>th</sup> US National Congress on Computational Mechanics, 2011.*
116. B. Haghpanah, H. Nayeb-Hashemi & **A. Vaziri**, “Plastic behavior of functionally graded rotating disks”, *11<sup>th</sup> US National Congress on Computational Mechanics, 2011.*
117. B. Haghpanah, H. Nayeb-Hashemi & **A. Vaziri**, “Instability and post-buckling behavior of cracked shells”, *11<sup>th</sup> US National Congress on Computational Mechanics, 2011.*
118. J. Xiong, **A. Vaziri**, L. Ma, L. Wu & J. Yang, “Quasi-static compressive and low velocity impact response of multilayer carbon fiber sandwich panels with pyramidal truss cores”, *5<sup>th</sup> International Conference on Advanced Computational Engineering and Experiments, 2011.*
119. K. Ho, N. Mokarram, N. Hang, **A. Vaziri** & C. M. Powers, “Estimation of patella bone stress: A comparison of homogenous and heterogeneous finite element models”, *American Society of Biomechanics Annual Meeting, 2011.*
120. A. Ajdari, B. Haghpanah & **A. Vaziri**, “Fractal and hierarchical honeycombs”, *48th Annual Technical meeting of the Society of Engineering Science, 2011.*
121. **A. Vaziri** & A. Ajdari “Localized features and patterns of strongly-deformed elastic shells”, *48th Annual Technical meeting of the Society of Engineering Science, 2011.*
122. A. Orsi, N. Yang, P. Canavan, **A. Vaziri** & H. Nayeb-Hashemi, “Development of a failure locus for a 3-dimensional anterior cruciate ligament: A finite element analysis”, *IMECE, 2011.*
123. J. A. Rennick, A. Nazarian, A. Entezari, H. Nayeb-Hashemi, **A. Vaziri** & B. D. Snyder, “Finite Element Analysis and Computed Tomography Based Structural Rigidity Analysis of Rat Tibia with Simulated Lytic Defects”, *2011 Orthopaedic Research Society.*
124. A. Ajdari, B. H. Jahromi, A. M. Hamouda, **A. Vaziri**, “Hierarchical cellular structures with tailorable properties”, *Qatar Foundation Annual Research Forum, Doha, Qatar, 2011*

125. A. Orsi, N. Yang, **A. Vaziri**, P. Canavan, A. S. Hamouda & H. Nayeb-Hashemi, "Failure locus for a 3-dimensional anterior crutiate ligament", *Qatar Foundation Annual Research Forum*, Doha, Qatar, 2011.
126. A. Ajdari, B. Haghpanah & **A. Vaziri**, "Mechanics of hierarchical honeycombs", *Plasticity*, 2012.
127. **A. Vaziri**, H. Ebrahimi, A. S. Hamouda, "Sandwich panels subjected to multiple shocks and projectile impact", *Plasticity*, 2012.
128. A. Nasto, A. Ajdari, A. Lazarus, **A. Vaziri**, P.M. Reis "S-cones in this shells under indentation", *APS March Meeting*, Boston, MA 2012.
129. A. Ajdari, B. H. Jahromi, J. Papadopoulos, **A. Vaziri**, "Honeycombs with Hierarchical Organization", *APS March Meeting*, Boston, MA 2012.
130. A. Ajdari, B. H. Jahromi, **A. Vaziri**, "Stiff honeycombs with structural hierarchy", *European Congress on Computational Methods in Applied Sciences and Engineering*, Vienna, Austria, 2012.
131. H. Ebrahimi, A. S. Hamouda, **A. Vaziri**, "Impact Mechanics of Sandwich Panels", *European Congress on Computational Methods in Applied Sciences and Engineering*, Vienna, Austria, 2012.
132. A. Orsi, H. Nayeb-Hashemi, P. Canavan, **A. Vaziri**, "Failure loci of knee joint ligaments and concomitant injuries: A 3D finite element analysis", *Summer BioEngineering Conference*, 2012.
133. C.Tse, H. Nayeb-Hashemi, P. Canavan, **A. Vaziri**. "An analysis of frontal and sagittal plane knee kinematics during a subject specific single-leg landing," *Summer BioEngineering Conference*, 2012.
134. B. H. Jahromi, A. Ajdari, R. Oftadeh, **A. Vaziri**, "Hierarchical and Fractal Honeycombs with Tailorable Properties", *RISE2012*, Boston.
135. A. Ajdari, B. H. Jahromi, H. Nayeb-Hashemi, **A. Vaziri**, "Hierarchical honeycombs with enhanced mechanical properies", *XXIII International Congress of Theoretical and Applied Mechanics (ICTAM2012)*, Beijing, China 2012.
136. A. Ajdari, A. Nasto, A. Lazarus, **A. Vaziri**, P.M. Reis, "Localized deformation and instability of thin elastic shells upon indentation", *ASME IMECE2012*, Houston, TX 2012.
137. P. Su, B. H. Jahromi, W. W. Doerr, S. Hassan, A.A. Busnaina, **A. Vaziri**, "Decontamination of Surfaces Exposed to Carbon-based Nanotubes and Nanomaterials ", *ASME IMECE2012*, Houston, TX 2012.
138. M. Ashrafi, A. Ajdari, B.H. Jahromi, M. Olia, H. Nayeb-Hashemi, **A. Vaziri**, "Adhesively Bonded Joints with Non-flat Interfaces", *ASME IMECE2012*, Houston, TX 2012.
139. B. H. Jahromi, A. Ajdari, R. Oftadeh, J. Papadopoulos, H. Nayeb-Hashemi, **A. Vaziri**, "Honeycombs with Structural Hierarchy", *ASME IMECE2012*, Houston, TX 2012.
140. J. Xiong, B. H. Jahromi, **A. Vaziri**, T. Tang, L. Ma, L. Wu, "Low Density Carbon Fiber Composite Pyramidal Truss Cores: Manufacturing, Experiments, Theory", *ASME IMECE2012*, Houston, TX 2012.

141. H. Ebrahimi, A. S. Hamouda, H. N. Hashemi, **A. Vaziri**, "Impact Mechanics of Sandwich Panels Subjected to Combined Shock and Projectile Loading", *ASME IMECE2012*, Houston, TX 2012.
142. A. Orsi, H. Nayeb-Hashemi, P. Canavan, **A. Vaziri**, "Anterior Cruciate Ligament Tear Initiation Locus and the Effect of Partial Tearing on the ACL Failure Locus: A 3D Finite Element Analysis", *ASME IMECE2012*, Houston, TX 2012.
143. B. H. Jahromi, A. Ajdari, R. Oftadeh, **A. Vaziri**, "Hierarchical and Fractal Honeycombs with Tailorable Properties", Research, Innovation and Scholarship Expo (RISE 2012), Boston 2012.
144. H. Ebrahimi, A. S. Hamouda, **A. Vaziri**, "Structural Performance of Sandwich Panels under Complex Loading", NSF CMMI Engineering Research and Innovation Conference, Boston 2012.
145. B. H. Jahromi, A. Ajdari, R. Oftadeh, H. Ebrahimi & **A. Vaziri**, "Mechanics of hierarchical honeycombs", NSF CMMI Research and Innovation Conference, Boston, MA, 2012.
146. B. H. Jahromi, A. Ajdari, **A. Vaziri**, "Intricate mechanics of hierarchical honeycombs", Society of Engineering Sciences (SES2012), Atlanta, GA 2012.
147. R. Oftadeh, B. H. Jahromi, A. Ajdari, **A. Vaziri**, "Fractal-Appearing hierarchical honeycombs", MRS Fall meeting, Boston 2012.
148. A. Ajdari, B. H. Jahromi, A. M. Hamouda, **A. Vaziri**, " Hierarchical honeycombs with enhanced mechanical properties", 7th International Conference Supply on the Wings, Frankfurt, Germany 2012.
149. **A. Vaziri**, H. Ebrahimi, A.S. Hamouda, "Finite Element Study of Honeycomb Sandwich Panels subjected to complex Dynamic Loading", *Plasticity*, Bahamas, 2013
150. **A. Vaziri**, B. H. Jahromi, A. Ajdari, H. Ebrahimi, P. Papadopoulos, H. Nayeb-Hashemi, "Plastic Limit Analysis of hierarchical honeycombs", *Plasticity*, Bahamas 2013.

## **D. Other Activities**

### **Professional Societies**

- 2001-present American Society of Mechanical Engineering (ASME)
- 2001-present American Society of Civil Engineering (ASCE)
- 2003-present The Honor Society of Phi Kappa Phi
- 2006-present United States Association for Computational Mechanics (USACM)
- 2006-present Materials Research Society (MRS)
- 2011-present Society of Engineering Science (SES)

### **Editorial Activities**

- 2008-present **Associate Technical Editor: Experimental Mechanics**
- 2008-present **Member of the Editorial Board: Theoretical Biology Insights**
- 2008-present **Member of the Editorial Board: MCB: Molecular and Cell Biomechanics**
- 2009-present **Member of the Editorial Board: Journal: Biomedical Engineering and Computational Biology**

2008-2009 **Associate Editor: International Journal of Engineering**

2010, 2011 Reviewer and panelist for NSF

2007-present **Guest Editor**

**Experimental Mechanics** - Special issue: Modeling and Experiments in Cell and Biomolecular Mechanics (2009, Vol. 49).

**J. of Applied Mechanics** - Special issue: Recent Advances in Impact Engineering (Vol. 76, 2009)

**J. Mechanics of Materials and Structures** - Special issue: Microscale Mechanics of Biomaterials (2007, Volume 2, issue 10)

**J. Mechanics of Materials and Structures** - Special issue: Computational Impact Engineering (2007, Volume 2, issue 6)

2004-present Reviewer

Int. J. of Adhesion and Adhesives, Biomechanics and Modeling in Mechanobiology, Biophysical Journal, Journal of Biomechanics, ASME Journal of Biomechanical Engineering, Computer Methods in Applied Mechanics and Engineering, Int. J. of Solids and Structures, Process Safety Progress, J. Mechanics of Materials and Structures, Structural Engineering and Mechanics, J. Engineering Materials and Technology, J. Vibration and Acoustics, J. Applied Mechanics, International J. Applied Mechanics, Fatigue and Fracture of Engineering Materials and Structures, Experimental Mechanics, AIAA Journal, Thin-Walled Structures, Computer Modeling in Engineering and Sciences, Journals of Materials Research, Materials & Design, IEEE Transaction on NanoBioScience, Journal of Materials Science and Engineering A, Journal of Materials Science, Molecular and Cellular Biomechanics, Journal of Diabetes Science and Technology, Journal of Motor Behavior, Surface and Coating Technology, Strain, Composite Structures, Composites Part A, Composites Part B, Composite Science and Technology, European Journal of Mechanics - A/Solids, The Journal of Adhesion, SIAM Journal of Applied Mathematics, Mechanics Research Communications, International Journal of Engineering, International Journal of Damage Mechanics, Langmuir, The Proceedings of Royal Society of London: A, The Proceedings of Royal Society of London: Interface, Engineering Fracture Mechanics, J. Mechanics and Physics of Solids, Mathematics and Mechanics of Solids, Nanotechnology, Applied Physics Letters, Nature Materials.

### **Major Administrative Responsibilities**

2005-present Session Chair and co-Chair for different meeting and conferences, including:

8<sup>th</sup> US National Congress on Computational Mechanics (2005)

7<sup>th</sup> World Congress on Computational Mechanics (2006)

ASME IMECHE (2006)

International Conference on Computational and Experimental Eng. and Sciences (2007)

9<sup>th</sup> US National Conference on Computational Mechanics (2007)

International Symposium on Plasticity (2010)

International Symposium on Plasticity and Its Current Applications (2011)

2006 **Mini-Symposium Primary Organizer**, 7<sup>th</sup> World Congress on Computational Mechanics

- Mini-symposium: *Advances and Application of Computational Methods in Impact Engineering*
- 2007 **Mini-Symposium Primary Organizer**, 9<sup>th</sup> US National Conference on Computational Mechanics  
Mini-symposium: *Computational Methods in Impact Engineering*
- 2007 **Mini-Symposium Co-organizer**, 9<sup>th</sup> US National Conference on Computational Mechanics  
Mini-symposium: *Computational Methods in Bioengineering*
- 2007 **Symposium Primary Organizer**, IMECE2007  
Symposium: *Response of Materials and Structures under High Intensity Loading*
- 2008 **Mini-Symposium Primary Organizer**, The joint VIII World Congress on Computational Mechanics and V European Congress on Computational Methods in Applied Sciences and Engineering  
Mini-symposium: *Advances in Computational Impact Engineering*
- 2008 **Symposium Organizer**, International Conference on Computational and Experimental Engineering and Sciences (ICCES'08)  
Symposium: *Recent Advances in Biomechanics*
- 2008 **Member of the Organizing Committee**, International Conference on Computational and Experimental Engineering and Sciences (ICCES'08)
- 2009 **Mini-Symposium Organizer**, 10<sup>th</sup> US National Congress on Computational Mechanics  
Mini-symposium: *Computational Methods in Impact Engineering*
- 2010 **Mini-Symposium Primary Organizer**, IV European Conference on Computational Mechanics – Paris, France (ECCM 2010)  
Mini-symposium: *Computational Methods in Impact Engineering*
- 2010 **Symposium Organizer**, International Conference on Computational and Experimental Engineering and Sciences (ICCES10)  
Symposium: *Computational and Experimental Methods in Impact and Blast Mechanics*
- 2010 **Workshop co-Organizer**, The New England Workshop on the Mechanics of Materials and Structures (NEW.Mech 2010)
- 2011 **Symposium co-Organizer**, Six MIT Conference on Computational Fluid and Solid Mechanics  
Symposium: *Impact Modeling of Composites*



- 2011      **Workshop co-Organizer**, Second New England Workshop on the Mechanics of Materials and Structures (NEW.Mech 2011)
- 2012      **Mini-Symposium Primary Organizer**, 10th World Congress on Computational Mechanics – Sao Paulo, Brazil (WCMM2012)  
Mini-symposium: *Computational and Experimental Methods in Impact and Blast Mechanics*
- 2012      **Workshop co-Organizer**, Third New England Workshop on the Mechanics of Materials and Structures (NEW.Mech 2012)
- 2013      **Symposium Organizer**, Plasticity 2013  
Mini-symposium: *Mechanics of Cellular Structures*
- 2013      **Workshop co-Organizer**, Fourth New England Workshop on the Mechanics of Materials and Structures (NEW.Mech 2013)