

Hassan Masoud

CONTACT INFORMATION	Department of Mechanical Engineering-Engineering Mechanics 802 R. L. Smith Building Michigan Technological University Houghton, MI 49931	<i>Phone:</i> (906) 487-3025 <i>E-mail:</i> hmasoud@mtu.edu <i>Website:</i> http://masoud-lab.academy
EDUCATION	Ph.D. Mechanical Engineering Georgia Institute of Technology, Atlanta, GA Advisor: Alexander Alexeev Dissertation Committee: R. F. Salant, P. M. Goldbart, A. Fernandez-Nieves, and D. L. Hu GPA: 4.0/4.0	May 2009 – July 2012
	M.S. Mechanical Engineering State University of New York at Buffalo, Buffalo, NY Advisor: James D. Felske Thesis Committee: G. F. Dargush and C. S. Liu GPA: 4.0/4.0	August 2007 – April 2009
	B.S. Aerospace Engineering (Summa Cum Laude) Sharif University of Technology, Tehran, Iran GPA (based on WES): 3.7/4.0	September 2002 – July 2006
EMPLOYMENT	Assistant Professor Department of Mechanical Engineering-Engineering Mechanics Michigan Technological University, Houghton, MI	July 2017 – present
	Visiting Scientist Harvard-MIT Division of Health Sciences and Technology and Brigham and Women's Hospital Harvard Medical School, Boston, MA	May 2016 – August 2016
	Assistant Professor Department of Mechanical Engineering University of Nevada, Reno, NV	July 2015 – June 2017
	Lecturer Department of Mechanical and Aerospace Engineering Princeton University, Princeton, NJ	February 2015 – June 2015
	Post-doctoral Fellow Courant Institute of Mathematical Sciences, New York, NY Applied Mathematics Laboratory Advisor: Michael J. Shelley	September 2012 – June 2015
	Department of Mechanical and Aerospace Engineering Princeton University, Princeton, NJ Advisor: Howard A. Stone	
AWARDS & HONORS	Travel Fellowship, U.S. National Committee for Theoretical and Applied Mechanics Finalist, Society in Science – The Branco Weiss Fellowship Postdoctoral Fellowship, Institute for Complex Adaptive Matter TechSTAR Award, Georgia Institute of Technology GTRIC Fellowship, Georgia Institute of Technology Graduate Student Silver Award, Materials Research Society	2016 2014 2012 2012 2012 2011

Finalist, Frank J. Padden, Jr. Award for Excellence in Polymer Physics Research, American Physical Society Division of Polymer Physics 2011
 Elected to Who's Who Among Students in American Universities and Colleges 2011
 Elected Full Member, SIGMA XI, The Scientific Research Society 2010
 Engineering Graduate School Ambassador Award, State University of New York at Buffalo 2009
 Elected Member, Iranian National Elite Foundation 2008
 Outstanding Student Award, Sharif University of Technology and Iranian Aerospace Society 2007

UNIVERSITY &
 PROFESSIONAL
 SERVICE

Associate Editor, European Journal of Computational Mechanics 2017 – present
 Editorial Board Member and Guest Editor of “Fluid Flows with Interactive Boundaries” Special Issue, European Journal of Computational Mechanics 2016 – 2017
 Proposal Panelist, National Science Foundation 2016
 Symposium Organizer, 53rd Annual Technical Meeting of the Society of Engineering Science, College Park, MD 2016
 Organizer, ME Poster Competition, University of Nevada, Reno 2016
 Chair, ME Seminar Committee, University of Nevada, Reno 2015 – 2016
 Member, Thermal Science Search Committee, University of Nevada, Reno 2015 – 2016
 Symposium Organizer and Session Chair, 51st Annual Technical Meeting of the Society of Engineering Science, West Lafayette, IN 2014
 Minisymposium Organizer, U.S. National Congress on Theoretical & Applied Mechanics, East Lansing, MI 2014
 Session Chair, APS Division of Fluid Dynamics Annual Meeting, Pittsburgh, PA 2013
 Organizer, Bi-weekly Applied Math Lab Seminar and Monthly Chalk Talk Series, Courant Institute of Mathematical Sciences 2013 – 2015
 Session Chair, SES-ASME Annual Technical Meeting, Providence, RI 2013
 Symposium Assistant, Materials Research Society Fall Meeting & Exhibit, Boston, MA 2011
 Session Chair, Canadian-American-Mexican Graduate Student Physics Conference, Washington, DC 2011
 Member-at-large, American Physical Society Forum on Graduate Student Affairs Executive Committee 2011 – 2012
 Member-at-large, Sharif University of Technology Aerospace Engineering Student Association 2005 – 2006

Reviewer for:

Nature Communications, Advanced Functional Materials, Physical Review Letters, Scientific Reports, Physical Chemistry Chemical Physics, Soft Matter, Journal of the Royal Society Interface, PLoS One, New Journal of Physics, Applied Physics Letters, Journal of Physical Chemistry, Physical Review E, Journal of Fluid Mechanics, Physical Review Fluids, Physics of Fluids, Chemical Engineering Science, AIP Advances, International Journal of Heat and Mass Transfer, International Journal of Multiphase Flow, Journal of Fluids and Structures, Computers and Fluids, Journal of Fluids Engineering, Journal of Thermophysics and Heat Transfer, European Journal of Computational Mechanics, Journal of Applied Fluid Mechanics

PUBLICATIONS

(Advisees' names are underlined)

22. The reciprocal theorem in fluid dynamics and transport phenomena
H. Masoud and H. A. Stone, *Journal of Fluid Mechanics*, In preparation (2017)
 (Invited “Perspective” article)

(Superscript * denotes authors of equal contribution)

21. Editorial: Fluid flows with interactive boundaries
H. Masoud and A. M. Ardekani, *European Journal of Computational Mechanics* 26, 1-3 (2017)
 20. Reverse Marangoni surfing

- V. Vandadi, S. Jafari Kang, and **H. Masoud**, *Journal of Fluid Mechanics* 811, 612-621 (2017)
19. Alternative mechanism for coffee-ring deposition based on active role of free surface
S. Jafari Kang, V. Vandadi, J. D. Felske, and **H. Masoud**, *Physical Review E* 94, 063104 (2016)
(Highlighted in *Materials Today*, *Nevada Today*, *Phys.org*, *Science Daily*, and *Membrane Quarterly*)
18. Reciprocal theorem for convective heat and mass transfer from a particle in Stokes and potential flows
V. Vandadi, S. Jafari Kang, and **H. Masoud**, *Physical Review Fluids (Rapid Communications)* 1, 022001(R) (2016)
17. Oscillatory Marangoni flows with inertia
O. Shardt, **H. Masoud**, and H. A. Stone, *Journal of Fluid Mechanics* 803, 94-118 (2016)
16. Drag and diffusion coefficients of a spherical particle attached to a fluid-fluid interface
A. Dörr, S. Hardt, **H. Masoud**, and H. A. Stone, *Journal of Fluid Mechanics* 790, 607-618 (2016)
15. Hydrodynamic schooling of flapping swimmers
A. Becker*, **H. Masoud***, J. Newbolt, M. J. Shelley, and L. Ristroph, *Nature Communications* 6, 8514 (2015)
(Highlighted in *National Science Foundation News*, *APS Physics Central Podcast*, *Science Daily*, and *Futurity*)
14. Mobility of membrane-trapped particles
H. A. Stone and **H. Masoud**, *Journal of Fluid Mechanics* 781, 494-505 (2015)
13. Collective surfing of chemically active particles
H. Masoud and M. J. Shelley, *Physical Review Letters* 112, 128304 (2014)
(Highlighted as PRL Editors' Suggestion)
12. A reciprocal theorem for Marangoni propulsion
H. Masoud and H. A. Stone, *Journal of Fluid Mechanics (Rapids)* 741, R4 (2014)
11. On the rotation of porous ellipsoids in simple shear flows
H. Masoud, H. A. Stone, and M. J. Shelley, *Journal of Fluid Mechanics (Rapids)* 733, R6 (2013)
10. Designing maneuverable micro-swimmers actuated by responsive gel
H. Masoud, B. I. Bingham, and A. Alexeev, *Soft Matter* 8, 8944 (2012)
(Highlighted in *IEEE Computer Society News*, *Science Daily*, *Phys.Org*, *MedGadget*, *ASME Nanotechnology Institute News*, *Soft Matter World*, *Communications of the ACM*, *Futurity Magazine*, *Georgia Tech's Homepage*, etc.)
9. Efficient flapping flight using flexible wings oscillating at resonance
H. Masoud and A. Alexeev, In *Natural Locomotion in Fluids and on Surfaces*, Edited by S. Childress, A. E. Hosoi, W. W. Schultz, and Z. J. Wang, pp. 235-245, Springer, New York (2012)
8. Controlled release of nanoparticles and macromolecules from responsive microgel capsules
H. Masoud and A. Alexeev, *ACS Nano* 6, 212 (2012)
7. Harnessing synthetic cilia to regulate motion of microparticles
H. Masoud and A. Alexeev, *Soft Matter* 7, 8702 (2011)
(Invited "Highlight" article)
6. Selective control of surface properties using hydrodynamic interactions
H. Masoud and A. Alexeev, *Chemical Communications* 47, 472 (2011)
(Highlighted in the *Virtual Journal of Nanoscale Science & Technology* 22, 25, 2010)
(Invited article for Emerging Investigators themed issue)
5. Permeability and diffusion through mechanically deformed random polymer networks
H. Masoud and A. Alexeev, *Macromolecules* 43, 10117 (2010)
4. Resonance of flexible flapping wings at low Reynolds number

H. Masoud and A. Alexeev, *Physical Review E* 81, 056304 (2010)
(Featured in the spring 2011 issue of Georgia Tech Research Horizons Magazine)
(Highlighted in *National Science Foundation News*, *U.S. News & World Report*, *Innovations Report*,
ScienceMagNews, *Georgia Tech's Homepage*, etc.)

3. Modeling magnetic microcapsules that crawl in microchannels

H. Masoud and A. Alexeev, *Soft Matter* 6, 794 (2010)
(Highlighted in the *Virtual Journal of Nanoscale Science & Technology* 21, 9, 2010)
(Invited article for Emerging Themes in Soft Matter: Responsive and Active Soft Materials issue)

2. Analytical solution for Stokes flow inside an evaporating sessile drop: Spherical and cylindrical cap shapes

H. Masoud, J. D. Felske, *Physics of Fluids* 21, 042102 (2009)

1. Analytical solution for inviscid flow inside an evaporating sessile drop

H. Masoud, J. D. Felske, *Physical Review E* 79, 016301 (2009)

CONFERENCE
ABSTRACTS

(Advisees' names
are underlined)

40. Interfacial transport alone accounts for coffee-ring deposition

V. Vandadi, S. Jafari Kang, J. D. Felske, and **H. Masoud**, 69th Annual Meeting of the APS Division of Fluid Dynamics, Portland, OR, November 20–22, 2016

39. Towards designing miniature surfing robots*

S. Jafari Kang, V. Vandadi, and **H. Masoud**, 69th Annual Meeting of the APS Division of Fluid Dynamics, Portland, OR, November 20–22, 2016

*Also presented at the American Institute of Chemical Engineers Annual Meeting, San Francisco, CA, November 13–18, 2016 and at 53rd Annual Technical Meeting of the Society of Engineering Science, College Park, MD, October 4–7, 2016

38. A reciprocal theorem for convective heat and mass transfer in Stokes and potential flows*

H. Masoud, V. Vandadi, and S. Jafari Kang, 69th Annual Meeting of the APS Division of Fluid Dynamics, Portland, OR, November 20–22, 2016

*Also presented at the American Institute of Chemical Engineers Annual Meeting, San Francisco, CA, November 13–18, 2016 and at 24th International Congress of Theoretical and Applied Mechanics, Montreal, Canada, August 21–26, 2016

37. Mobility of membrane-trapped particles

H. Masoud and H. A. Stone, 68th Annual Meeting of the APS Division of Fluid Dynamics, Boston, MA, November 22–24, 2015

36. Marangoni-driven flow oscillations during the dissolution of surfactant powders*

O Shardt, H. Kim, **H. Masoud**, and H. A. Stone, 68th Annual Meeting of the APS Division of Fluid Dynamics, Boston, MA, November 22–24, 2015

*Also presented at the American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT, November 8–13, 2015 and at the 65th Canadian Chemical Engineering Conference, Calgary, AB, October 4–7, 2015

35. Drag and diffusion coefficient of a spherical particle attached to a fluid interface

A. Dörr, S. Hardt, **H. Masoud**, and H. A. Stone, 68th Annual Meeting of the APS Division of Fluid Dynamics, Boston, MA, November 22–24, 2015

34. Schooling of flapping wings: Simulations

H. Masoud, A. Becker, L. Ristroph, and M. J. Shelley, 67th Annual Meeting of the APS Division of Fluid Dynamics, San Francisco, CA, November 23–25, 2014

33. Schooling of flapping wings: Experiments

L. Ristroph, A. Becker, **H. Masoud**, J. Newbolt, and M. J. Shelley, 67th Annual Meeting of the APS Division of Fluid Dynamics, San Francisco, CA, November 23–25, 2014

32. Chemical surfing of active particles and connection to chemotaxis of slime mold colonies

H. Masoud, H. A. Stone, and M. J. Shelley, The Society of Rheology 86th Annual Meeting, Philadelphia, PA, October 5-9, 2014

31 Individual and collective surfing of chemically active particles*

H. Masoud, M. J. Shelley, and H. A. Stone, Aspen Center for Physics Winter Conference, Aspen, CO, January 27-February 1, 2014

* Also presented at the U.S. National Congress on Theoretical & Applied Mechanics, East Lansing, MI, June 2014

30 Rotation of porous ellipsoids in simple shear flows

H. Masoud, H. A. Stone, and M. J. Shelley, 66th Annual Meeting of the APS Division of Fluid Dynamics, Pittsburgh, PA, November 24–26, 2013

29. Marangoni-driven chemotaxis, chemotactic collapse, and the Keller-Segel equation

M. J. Shelley and **H. Masoud**, 66th Annual Meeting of the APS Division of Fluid Dynamics, Pittsburgh, PA, November 24–26, 2013

28 Rotational behavior of porous elliptical cylinders in a simple shear flow

H. Masoud, H. A. Stone, and M. J. Shelley, SES 50th Annual Technical Meeting and ASME-AMD Annual Summer Meeting, Providence, RI, July 28–31, 2013

27. Friction of elastomers on directional surfaces

H. Masoud and A. Alexeev, Materials Research Society Fall Meeting & Exhibit, Boston, MA, November 25–30, 2012

26. Swimming micro-robot powered by stimuli-sensitive gel

H. Masoud and A. Alexeev, 65th Annual Meeting of the APS Division of Fluid Dynamics, San Diego, CA, November 18–20, 2012

25. Harnessing responsive gels to design synthetic microswimmers

H. Masoud and A. Alexeev, 49th Annual Technical Meeting of Society of Engineering Science, Atlanta, GA, October 10-12, 2012

24 Harnessing polymer gels to regulate friction between sliding surfaces

H. Masoud and A. Alexeev, American Physical Society, APS March Meeting, Boston, MA, February 27–March 2, 2012

23. Modeling controlled release from responsive microgel capsules

A. Alexeev and **H. Masoud**, American Physical Society, APS March Meeting, Boston, MA, February 27–March 2, 2012

22. Modeling nanoparticle release from responsive microcapsules

H. Masoud and A. Alexeev, Materials Research Society Fall Meeting & Exhibit, Boston, MA, November 28–December 2, 2011

21. Regulating solute transport using nano-structured surfaces

H. Masoud and A. Alexeev, Materials Research Society Fall Meeting & Exhibit, Boston, MA, November 28–December 2, 2011

20. A novel release mechanism from responsive microgel capsules

H. Masoud and A. Alexeev, American Physical Society, 64th Annual Meeting of the APS Division of Fluid Dynamics, Baltimore, MD, November 20–22, 2011

19. Designing self-propelling micro-swimmers using responsive gels

B. I. Bingham, **H. Masoud**, and A. Alexeev, American Physical Society, 64th Annual Meeting of the APS Division of Fluid Dynamics, Baltimore, MD, November 20–22, 2011

18. Polymer networks: modeling and emerging applications

H. Masoud, American Institute of Chemical Engineers Annual Meeting, Minneapolis, MN, October 16–21, 2011

17. Mesoscale modeling of transport through polymer gels
H. Masoud, 5th Canadian-American-Mexican Graduate Student Physics Conference, Washington, DC, September 29–October 1, 2011
16. Fast release of nanoparticles from microgel capsules
H. Masoud, 5th South–East Workshop on Soft Materials and Interfaces, Atlanta, GA, May 25, 2011
15. Transport properties of mechanically deformed polymer networks
H. Masoud and A. Alexeev, American Physical Society, APS March Meeting, Dallas, TX, March 21–25, 2011
14. Designing self-propelling micro-swimmer that navigates in microfluidic channels
B. Bingham, **H. Masoud**, and A. Alexeev, American Physical Society, APS March Meeting, Dallas, TX, March 21–25, 2011
13. Designing patterned microchannels to separate colloid-polymer suspensions
H. Masoud and A. Alexeev, American Physical Society, 63rd Annual Meeting of the APS Division of Fluid Dynamics, Long Beach, CA, November 21–23, 2010
12. Efficient flapping flight using flexible wings oscillating at resonance
A. Alexeev and **H. Masoud**, American Physical Society, 63rd Annual Meeting of the APS Division of Fluid Dynamics, Long Beach, CA, November 21–23, 2010
11. Transport through random biological networks in tension
H. Masoud, From Computational Biophysics to Systems Biology Workshop, Traverse City, MI, June 6–8, 2010
10. Low Reynolds number aerodynamics of flexible flapping wings at resonance
H. Masoud and A. Alexeev, IMA Workshop on Natural Locomotion in Fluids and on Surfaces: Swimming, Flying, and Sliding, Minneapolis, MN, June 1–5, 2010
9. Transport through random polymer networks in tension
H. Masoud, 4th South-East Workshop on Soft Materials and Interfaces, Atlanta, GA, May 13, 2010
8. Effective diffusion rate through a random polymer network in tension
H. Masoud and A. Alexeev, American Physical Society, APS March Meeting, Portland, OR, March 15–19, 2010
7. Modeling flexible flapping wings oscillating at resonance
A. Alexeev and **H. Masoud**, American Physical Society, APS March Meeting, Portland, OR, March 15–19, 2010
6. Regulating motion of magnetic capsules in microfluidic systems
H. Masoud, A. Kilimnik, and A. Alexeev, ASME First Global Congress on NanoEngineering for Medicine and Biology, Houston, TX, February 7–10, 2010
5. Modeling magnetically driven synthetic microcapsules
H. Masoud and A. Alexeev, American Physical Society, 62nd Annual Meeting of the APS Division of Fluid Dynamics, Minneapolis, MN, November 22–24, 2009
4. Particle deposition in evaporating colloidal sessile drops
J. D. Felske and **H. Masoud**, American Physical Society, 62nd Annual Meeting of the APS Division of Fluid Dynamics, Minneapolis, MN, November 22–24, 2009
3. Flow in an evaporating sessile drop
H. Masoud and J. D. Felske, American Physical Society, 61st Annual Meeting of the APS Division of Fluid Dynamics, San Antonio, TX, November 23–25, 2008
2. Analytical solution for stress field in problem of contact between symmetrical wedge and a half space

D. Naderi, S. Adibnazari, A. Abedian, and **H. Masoud**, 6th Conference of Iranian Aerospace Society, Tehran, Iran, February 24–26, 2007

1. Non-symmetrical plane contact

D. Naderi, **H. Masoud**, S. Adibnazari, and A. Abedian, International Conference of Solid Mechanics, Crakow, Poland, September 4–8, 2006

SEMINARS
& INVITED
PRESENTATIONS

26. Department of Mechanical Engineering, University of Delaware, Newark, DE, February 27, 2017

25. Department of Mechanical Engineering–Engineering Mechanics, Michigan Tech, Houghton, MI, January 30, 2017

24. Department of Mechanical Engineering, University of Houston, Houston, TX, January 19, 2017

23. Biomaterials Innovation Research Center, Harvard-MIT Division of Health Sciences and Technology, Boston, MA, June 10, 2016

22. Meet Future Collaborators – Lightning Talks, University of Nevada, Reno, NV, April 5, 2016

21. Fluid Mechanics Seminar Series, Department of Mechanical and Process Engineering, ETH Zurich, Switzerland, May 18, 2015

20. Department of Mechanical Engineering, University of Nevada, Reno, NV, March 6, 2015

19. Department of Biomedical Engineering and Mechanics, Virginia Tech, Blacksburg, VA, February 23, 2015

18. Department of Chemical Engineering, Virginia Tech, Blacksburg, VA, February 2, 2015

17. Applied Mathematics Colloquium, Department of Engineering Sciences and Applied Mathematics, Northwestern University, Evanston, IL, January 12, 2015

16. Applied Math Lab Seminar, Courant Institute of Mathematical Sciences, New York University, New York, NY, September 11, 2014

15. Annual ICAM–I2CAM Conference, Davis, CA, May 19, 2014

14. Benjamin Levich Institute for Physico–Chemical Hydrodynamics, City University of New York, New York, NY, March 25, 2014

13. Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, March 17, 2014

12. Department of Mechanical Engineering, Rice University, Houston, TX, March 10, 2014

11. School of Mechanical Engineering, Purdue University, West Lafayette, IN, February 13, 2014

10. The Fourth Collaborative Workshop Initiative, Mathematical Institute, Oxford University, Oxford, UK, January 2014

9. Fluid Mechanics Seminar, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, February 25, 2013

8. Applied Math Lab Seminar, Courant Institute of Mathematical Sciences, New York University, New York, NY, September 20, 2012

7. Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, ON, January 18, 2012

6. Department of Mechanical Engineering, Iowa State University, Ames, IA, January 13, 2012

5. Squishy Physics Seminar Series, School of Engineering and Applied Sciences and Department of Physics, Harvard University, Cambridge, MA, November 30, 2011

4. Department of Polymer Engineering, The University of Akron, Akron, OH, November 14, 2011

3. GaP Seminar Series, Parker H. Petit Institute of Bioengineering and Biosciences, Georgia Institute of Technology, Atlanta, GA, September 7, 2011
2. Gordon-Kenan Research Seminar on Soft Condensed Matter Physics, New London, NH, August 14, 2011
1. Colloid & Soft Matter Seminar Series, Georgia Institute of Technology, Atlanta, GA, June 28, 2011

GRANTS

Collaborative Research: Individual and collective dynamics of Marangoni surface tension effects between particles
 \$380,000 – *National Science Foundation (CBET-FD)*, PIs: **H. Masoud** and J. P. Rothstein, 08/01/2017 – 07/31/2020

Acquisition of a high-performance computer cluster
 \$15,000 – *UNR College of Engineering*, PIs: **H. Masoud**, M. Aureli, L. Yliniemi, and M. Greiner, April 2016

Acquisition of two high-speed cameras
 \$9,000 – *UNR College of Engineering*, PIs: **H. Masoud**, H. Fu, and L. Yliniemi, April 2016

Environmental sensing using autonomous underwater vehicles
 \$10,000 – *Nevada Advanced Autonomous Systems Innovation Center (NAASIC)*, PIs: M. Aureli and **H. Masoud**, 05/01/2016 – 01/31/2017

Development of autonomous water vehicles to sense environmental change in freshwater ecosystems
 \$10,000 – *Nevada Advanced Autonomous Systems Innovation Center (NAASIC)*, PIs: S. Chandra, M. Aureli, K. Alexis, **H. Masoud**, E. Folmer, Z. Hogan, and S. Tyler, 05/01/2016 – 01/31/2017

Harnessing self-oscillating gels to design active soft matter systems
 \$55,000 – *Institute for Complex Adaptive Matter (Post-doctoral Fellowship)*, PI: **H. Masoud**, 09/01/2012 – 08/31/2014

TEACHING EXPERIENCE

Michigan Technological University
 Advanced Heat Transfer (MEEM 5230) Spring 2018

University of Nevada, Reno
 Convection Heat Transfer (ME 761) Spring 2016 and 2017
 Intermediate Heat Transfer (ME 414/614) Fall 2015 and 2016

Princeton University
 Mathematics in Engineering II (MAE 306/MAT 302) Spring 2015

GRADUATE STUDENTS & POST-DOCTORAL ADVISEES

Esmail Dehdashti, Ph.D. Student August 2016 – present

Saeed Jafari Kang, Ph.D. Student August 2015 – present
 Recipient of UNR’s Outstanding International Graduate Student Scholarship (2017)
 Recipient of American Physical Society Division of Fluid Dynamics Travel Award (2016)

Dr. Vahid Vandadi, Post-doctoral Fellow September 2015 – August 2017
 Recipient of UNR’s Postdoctoral Award for Professional Development (2016)

PROFESSIONAL MEMBERSHIP

American Society of Mechanical Engineers
 American Physical Society
 Society of Engineering Science

American Institute of Chemical Engineers