



DR. ROHAM RAFIEE

Faculty of New Sciences & Technologies,
University of Tehran,
North Karegar Street,
Tehran 14399-55941, IRAN

Direct Tel: +98 912 107 87 54
Tel: +98 21 61 11 85 06
Fax: +98 21 89 77 41 88
E-mail: Roham.Rafiee@ut.ac.ir
rm_rafiee@yahoo.com

Web Page:

<http://en.fnst.ut.ac.ir/membership/profile/rohamrafiee>
<http://www.COMRESLAB.com>

Table of Contents:

1. Personal
2. Academic Positions & Titles
3. Education
4. Research Interests
5. List of Publications
6. Teaching Experiences
7. Mentorship Experiences
8. Academic Projects
9. Industrial Experiences & Positions
10. Consultancy Services
11. Industrial and Funded Research Projects
12. Laboratory Establishment Experiences
13. Abroad Missions & International Trips
14. Skills
15. Academic & Community Services
16. Society, Association & Committee Services
17. Registered Patents
18. Honors, Awards & Achievements
19. Lectures
20. Media Coverage & Interviews

1. PERSONAL

- Date & Place of Birth: 20 Sept. 1978/Tehran, IRAN

2. ACADEMIC POSITIONS & TITLES



- Assistant Professor, Faculty of New Sciences & Technologies, *University of Tehran*, Iran (From 2011 – Now)
- Member of PhD Community, *Bauhaus University of Weimar*, *Germany* (From 2012 – Now)
<http://www.uni-weimar.de/Bauing/rabczuk/collaboration/>
- Founder & Director of Composites Research Laboratory (**COMRESLAB** ) , Faculty of New Sciences & Technologies, *University of Tehran*, Iran (From 2011 – Now)
<http://www.comreslab.com>
- Head of Industry Coordination Office, Faculty of New Sciences & Technologies, *University of Tehran*, Iran (From 2012 – 2013 & 2014 - Now)
- Coordinator of the 3rd Research Exhibition in Multidisciplinary Schools, *University of Tehran* (Nov. 2012)

3. INDUSTRIAL POSITIONS

- Manager of Technology Transfer Project,

3. EDUCATION

Doctorate of Philosophy

Iran University of Science & Technology (IUST)

Tehran, IRAN

Sept. 2006– Feb. 2010 (3 and half year): Mechanical Engineering with minor in Solid Mechanics

PhD dissertation: Engineering constants prediction of CNT/Epoxy using probabilistic multi-scale modeling

First ranked student

Master of Science

Iran University of Science & Technology (IUST)

Tehran, IRAN

2001 – 2003 (2 years): Mechanical Engineering with minor in Aero Structures Analysis and Design

Thesis: Investigation of fatigue phenomena in a wind turbine composite blade

Bachelor of Science

Iran University of Science & Technology (IUST)

Tehran, IRAN

1996 – 2000 (4 years): Mechanical Engineering with minor in Solid Mechanics

Final Project: Design of Power Transmission Poles Using Composite Materials

Diploma

Shahid Danesh High School

Tehran, IRAN

1991 – 1996: Mathematics – Physics

4. RESEARCH INTERESTS

- Carbon nanotube reinforced polymers
- Mechanics of composite materials
- Design and analysis of composite structures
- Fatigue modeling of composite structures
- Finite element modeling and analysis
- Stochastic modeling
- Wind turbine blades
- Glass Reinforced Plastic (GRP) pipes

Editorial Letters:

1. "Preface to the Special issue Computational modeling of polymeric composites", T. Rabczuk, R. Rafiee, X. Zhuang, Computational Materials Science, 2015; 96: pp. 381.
DOI: 10.1016/j.commatsci.2014.08.025
2. "Preface to the Special issue Computational modeling of polymeric composites", P. Harrison, A. S. Milani, R. Rafiee, Advances in Materials Science & Engineering, Volume 2013; Article ID 307615, 2 pages.
DOI:10.1155/2013/307615 (<http://www.hindawi.com/journals/amse/2013/307615/>)
3. "Preface to the Special issue Theoretical and Experimental Characterization of Composites", R. Rafiee, M. Haghighi-Yazdi, International Journal of Composite Materials, 2013; 3(6A): pp. 0.
DOI: 10.5923/s.cmaterials.201309

Book(s):

- Chapter 14 of "Fatigue life prediction of composites and composite structures" entitled as "*Fatigue life prediction of wind turbine rotor blades manufactured from composites*", Woodhead publishing, 2010, pp. 505-537.
Woodhead Publishing ISBN 978-1-84569-525-5 (book)
Woodhead Publishing ISBN 978-1-84569-979-6 (e-book)
CRC Press ISBN 978-1-4398-2789-5
CRC Press order number: N10159
- Chapter 7 of thematic book entitled as "*Multi-scale Modeling and Analysis of Graphene and Carbon Nanotube Based Composites*" entitled as "Multi-scale Modeling of CNT Composites: Stochastic Approach", Springer, 2013, pp. 201-238.
DOI: 10.1007/978-3-319-01201-8
ISBN: 978-3-319-01200-1 (Print)
978-3-319-01201-8 (Online)
- Chapter 5 of "*Recent Advances in Composite Materials for Wind Turbine Blades*" entitled as "On The Fluid-Structural Investigation of a Composite Wind Turbine Blade", World academic publishing, 2013, pp. 79-92.
ISBN 978-0-9889190-0-6, WAP-AMSA, Available from:
<http://www.academicpub.org/amsa/chapterInfo.aspx>
ISSN:2306-9325(Print)
ISSN:2306-9317(Online)
- A chapter of "*Chemical Functionalization of Carbon Nanomaterials: Chemistry and Applications*" entitled as "On The Mechanical Properties of Functionalized CNT Reinforced Polymer", Taylor and Francis-CRC press publisher, 2014, Accepted.

1. **"Modeling and experimental evaluation of functional failure pressures in glass fiber reinforced polyester pipes"**, R. Rafiee, F. Reshadi, S. Eidi, *Materials & Design*, 2015. Accepted [In English].
2. **"Uncertainty quantification for multi-scale modeling of polymer nanocomposites with dependent parameters "**, N. Vu-Bac, R. Rafiee, X. Zhuang, T. Lahmer, T. Rabczuk, *Composites Part B*, 2015; 68: 446-464. [In English]
DOI: [10.1016/j.compositesb.2014.09.008](https://doi.org/10.1016/j.compositesb.2014.09.008)
3. **"Multi-scale modeling of carbon nanotube reinforced polymers using irregular tessellation technique"**, R. Rafiee, V. Firouzbakht, *Mechanics of Materials*, 2014; 78: 74-84. [In English]
DOI: [10.1016/j.mechmat.2014.07.021](https://doi.org/10.1016/j.mechmat.2014.07.021)
4. **"Evaluating the influence of defects on the Young's modulus of carbon nanotubes using stochastic modeling"**, R. Rafiee, R. Pourazizi, *Journal of Materials Research*, 2014; 17(3):758-766. [In English]
DOI: [10.1590/S1516-14392014005000071](https://doi.org/10.1590/S1516-14392014005000071)
5. **"Influence of CNT functionalization on the interphase region between CNT and polymer"**, R. Rafiee, R. Pourazizi, *Journal of Computational Materials Science*, 2015; 96: 573-578. [In English]
DOI: [10.1016/j.commatsci.2014.03.056](https://doi.org/10.1016/j.commatsci.2014.03.056)
6. **"Simulation of functional failure in GRP mortar pipes"**, R. Rafiee, F. Reshadi, *Journal of Composite Structures*, 2014; 113:155-163. [In English]
DOI: [10.1016/j.compstruct.2014.03.024](https://doi.org/10.1016/j.compstruct.2014.03.024)
7. **"Modeling and experimental evaluation of functional failure pressures in glass fiber reinforced pipes"**, R. Rafiee, A. Amini, *Journal of Computational Materials Science*, 2015; 96: 579-588. [In English]
DOI: [10.1016/j.commatsci.2014.03.036](https://doi.org/10.1016/j.commatsci.2014.03.036)
8. **"Uncertainties propagation in methamodel-based probabilistic optimization of CNT/polymer composite structures using stochastic multi-scale modeling"**, H. Ghasemi, R. Rafiee, X. Zhuang, J. Muthu, T. Rabczuk, *Journal of Computational Materials Science*, 2014; 85:295-305. [In English]
DOI: [10.1016/j.commatsci.2014.01.020](https://doi.org/10.1016/j.commatsci.2014.01.020)
9. **"The influence of CNT contents on the electrical and electromagnetic properties of CNT/Vinylester"**, R. Rafiee, M. H. Sabour, A. Nikfarjam, M. Taheri, *Journal of Electronic Materials*, 2014; 3(9): 3477-3485. [In English]
DOI: [10.1007/s11664-014-3290-3](https://doi.org/10.1007/s11664-014-3290-3)
10. **"On the modeling of carbon nanotube: A critical review"**, R. Rafiee, R. Maleki Moghadam, *Journal of Composites Part B*, 2013; 56:435-449. [In English]
DOI: [10.1016/j.compositesb.2013.08.037](https://doi.org/10.1016/j.compositesb.2013.08.037)
11. **"Aeroelastic investigation of a composite wind turbine blade"**, R. Rafiee, M. Fakoor, *Journal of Wind and Structures*, 2013; 17(6):671-680. [In English]
DOI: [10.12989/was.2013.17.6.671](https://doi.org/10.12989/was.2013.17.6.671)

-
-
12. **"Challenges of the modeling methods for investigating the interaction between CNT and the surrounding polymer"**, R. Rafiee, T. Rabczuk, R. Pourazizi, J. Zhao, Y. Zhang, Journal of Advances in Materials Science and Engineering, Volume 2013; Article ID 183026, 10 pages. [In English]
[DOI:10.1155/2013/183026](https://doi.org/10.1155/2013/183026) (<http://www.hindawi.com/journals/amse/2013/183026/>)
 13. **"Fracture investigation of wood under mixed mode I/II loading based on maximum shear stress criterion"**, M. Fakoor, R. Rafiee, Journal of Strength of Materials 2013; 45(3): 169-178. [In English]
[DOI:10.1007/s11223-013-9468-8](https://doi.org/10.1007/s11223-013-9468-8)
 14. **"Transition angle, a novel concept for predicting the failure mode in orthotropic materials"**, M. Fakoor, R. Rafiee, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Mechanical Engineering Science, 2013; 227: 2155-2162. [In English]
[DOI:10.1177/0954406212470905](https://doi.org/10.1177/0954406212470905)
 15. **"Modal analysis of carbon nanotube reinforced polymer using multi-scale finite element method"**, A. Freridoon, R. Rafiee, R. Maleki Moghadam, Mechanics of Composite Materials 2013; 49(3): 325-332. [In English]
[DOI: 10.1007/s11029-013-9350-6](https://doi.org/10.1007/s11029-013-9350-6)
 16. **"Influence of carbon nanotube waviness on the stiffness reduction of CNT/polymer composites"**, R. Rafiee, Journal of Composite Structures 2013; 97: 304-309. [In English]
[DOI:10.1016/j.compstruct.2012.10.028](https://doi.org/10.1016/j.compstruct.2012.10.028)
 17. **"Simulation of impact and post-impact behavior of carbon nanotube reinforced polymer using multi-scale finite element modeling"**, R. Rafiee, R. Maleki Moghadam, Journal of Computational Materials Science 2012; 63:261-268. [In English]
[DOI:10.1016/j.commat.2012.06.010](https://doi.org/10.1016/j.commat.2012.06.010)
 18. **"Apparent hoop tensile strength prediction of GRP pipes"**, R. Rafiee, Journal of Composites Materials 2013, 47 (11): 1377-1386. [In English]
[DOI: 10.1177/0021998312447209](https://doi.org/10.1177/0021998312447209)
 19. **"Experimental and theoretical investigations on the failure of filament wound GRP pipes"**, R. Rafiee, Journal of Composites Part B 2012, 45(1): 257-267. [In English]
[DOI: 10.1016/j.compositesb.2012.04.009](https://doi.org/10.1016/j.compositesb.2012.04.009)
 20. **"Investigation of chirality and diameter effects on the Young's modulus of carbon nanotubes using non-linear potentials"**, R. Rafiee, M. Heidarhaei, Journal of Composite Structures 2012; 94: 2460-2464. [In English]
[DOI: 10.1016/j.compstruct.2012.03.010](https://doi.org/10.1016/j.compstruct.2012.03.010)
 21. **"Influence of non-bonded interphase on crack driving force in carbon nanotube reinforced polymer"**, R. Rafiee, A. Fereidoon, M. Heidarhaei, Journal of Computational Materials Science 2012; 56: 25-28. [In English]
[DOI:10.1016/j.commat.2011.12.025](https://doi.org/10.1016/j.commat.2011.12.025)
 22. **"Development of full range multi-scale model to obtain elastic properties of CNT/Polymer composites"**, M. M. Shokrieh, R. Rafiee, Iranian Polymer Journal 2012; 21(6): 397-402. [In English]
[DOI: 10.1007/s13726-012-0043-0](https://doi.org/10.1007/s13726-012-0043-0)
 23. **"Stochastic multi-scale modeling of CNT/polymer composites"**, M. M. Shokrieh, R. Rafiee, Journal of Computational Materials Science 2010; 50 (2):437-446. [In English]
[DOI:10.1016/j.commat.2010.08.036](https://doi.org/10.1016/j.commat.2010.08.036)

-
-
24. **"Investigation of nanotube length effect on the reinforcement efficiency in carbon nanotube based composites "**, M. M. Shokrieh, R. Rafiee, Journal of Composite Structures 2010; 92 (10): 2415-2420. [In English]
[DOI:10.1016/j.compstruct.2010.02.018](https://doi.org/10.1016/j.compstruct.2010.02.018)
 25. **"Prediction of mechanical properties of an embedded carbon nanotube in polymer matrix based on developing equivalent long fiber"**, M. M. Shokrieh, R. Rafiee, Journal of Mechanics Research Communications 2010; 37(2):235-240. [In English]
[DOI:10.1016/j.mechrescom.2009.12.002](https://doi.org/10.1016/j.mechrescom.2009.12.002)
 26. **"A review of the mechanical properties of isolated carbon nanotubes and carbon nanotube composites"**, M. M. Shokrieh, R. Rafiee, Journal of Mechanics of Composite Materials 2010; 46(2): 155-172. [In English]
[DOI:10.1007/s11029-010-9135-0](https://doi.org/10.1007/s11029-010-9135-0)
 27. **"On the tensile behavior of an embedded carbon nanotube in polymer matrix with non-bonded interphase region"**, M. M. Shokrieh, R. Rafiee, Journal of Composite Structures 2010; 92(3): 647-652. [In English]
[DOI:10.1016/j.compstruct.2009.09.033](https://doi.org/10.1016/j.compstruct.2009.09.033)
 28. **"Prediction of Young's modulus of graphene sheets and carbon nanotubes using nanoscale continuum mechanics approach"**, M. M. Shokrieh, R. Rafiee, Journal of Materials and Design 2010; 31(2): 790-795. [In English]
[DOI:10.1016/j.matdes.2009.07.058](https://doi.org/10.1016/j.matdes.2009.07.058)
 29. **"Simulation of fatigue failure in a full composite wind turbine blade"**, M. M. Shokrieh, R. Rafiee, Journal of Composite Structures 2006; 74(3): 332-342. [In English]
[DOI: 10.1016/j.compstruct.2005.04.027](https://doi.org/10.1016/j.compstruct.2005.04.027)

Indexed by ISC or Non-ISI peer-reviewed journals:

30. **"Predicting Young's modulus of aggregated carbon nanotube reinforced polymer"**, R. Rafiee, V. Firouzbakht, Mechanics of Advanced Composite Structures 2014, In Press. [In English].
31. **"The effects of structural defects on the mechanical properties of CNT"**, R. Rafiee, R. Pourazizi, Modares Journal of Mechanical Engineering 2013; 13(13):165-175. [In Persian]
32. **"Characterization of the electrical and electromagnetic properties of CNT-based Nanocomposites"**, A. Nikfarjam, R. Rafiee, M. H. Sabour, M. Taheri, Modares Journal of Mechanical Engineering 2013; 13(12):88-100. [In Persian]
33. **"Analysis of non-linear vibrations of a carbon nanotube using perturbation technique"**, R. Rafiee, Modares Journal of Mechanical Engineering 2012; 12(3): 60-67. [In Persian]
34. **"Mechanical Properties Characterization of Biax and Triax Composites Based on Limited Experimental Data"**, M. M. Shokrieh and R. Rafiee, International Journal of Engineering Science 2006; 17(3-4): 29-35. [In English]

Proceedings (Refereed Conference Papers):

1. **"A novel formulation for predicting mechanical properties of CNT-based composites"**, R. Rafiee, V. Firouzbakht, MechComp 2014, Long Island, New York, US. [In English]
2. **"Investigation of functional failure of composite pipes"**, R. Rafiee, H. Hessamsadat, MechComp 2014, Long Island, New York, US. [In English]
3. **"Effects of defect density and distribution on mechanical properties of graphene: a molecular dynamic study"**, M. Easmaeili, R. Rafiee, R. Ansari, A.K. Haghi, 1st international conference on computational and experimental methods for composite materials and structures, Harbin 2014, China. [In English]
4. **"Predicting functional failure pressures in filament wound GRP mortar pipes"**, R. Rafiee, F. Reshadi, A. Amini, X-Mech 2014, Tehran, Iran. [In English]
5. **"On the meso-scale modeling of carbon nanotube reinforced polymer"**, R. Rafiee, V. Firouzbakht, X-Mech 2014, Tehran, Iran. [In English]
6. **"Stochastic determination of functional failure pressures in FRP pipes"**, R. Rafiee, S. H. Hesamsadat, X-Mech 2014, Tehran, Iran. [In English]
7. **"Comparative study on the creep modeling in polymeric composites"**, R. Rafiee, B. Mazhari, ISME2014, Ahwaz, Iran. [In Persian]
8. **"Developing a formulation for predicting mechanical properties of CNT-based composites"**, R. Rafiee, V. Firouzbakht, Aero2014, Tehran, Iran. [In Persian]
9. **"Stochastic analysis of the failure in composite pressure vessels"**, R. Rafiee, S. H. Hesamsadat, Aero2014, Tehran, Iran. [In Persian]
10. **"The influence of functionalization on the mechanical properties of CNT-based composites"**, R. Rafiee, R. Pourazizi, Aero2014, Tehran, Iran. [In Persian]
11. **"Hoop tensile strength prediction of filament wound mortar pipes"**, R. Rafiee, ICCS17 (2013), Porto, Portugal. [In English]
12. **"On the mechanical properties of defected graphene sheets and CNTs"**, R. Rafiee, R. Pourazizi, ICCS17 (2013), Porto, Portugal. [In English]
13. **"Evaluation of the electrical and electromagnetic properties of CNT-based composites"**, R. Rafiee, M. H. Sabour, A. Nikfarjam, M. Taheri, ICCS17 (2013), Porto, Portugal. [In English]
14. **"Numerical study of heat transfer for an external natural convection using Cu/Water and CuO/Water"**, A. Kasaeian, S. Nasiri, S. Mohaseb, R. Rafiee, 7th MIT conference on Computational Fluid and Solid Mechanics (2013), Cambridge, MA 02139 USA. [In English]
15. **"Investigation of electrical and electromagnetic properties of CNT-based nanocomposites using in-situ polymerization"**, R. Rafiee, A. Nikfarjam, M. Sabour, M. Taheri, AERO2013, Tehran, Iran. [In Persian]
16. **"Hoop tensile strength prediction of glass fiber reinforced polymer pipes"**, R. Rafiee, IranPipeTech2012, Tehran, Iran. [In Persian]
17. **"Failure analysis of GRP pipes under internal pressure"**, R. Rafiee, CCFA-3 (2012), Tehran, Iran. [In English]
18. **"Impact analysis of nanocomposites reinforced by CNT using multi-scale finite element method"**, R. Rafiee, R. Maleki, ICMEAT 2012, Isfahan, Iran. [In Persian]

19. **"Multi-scale modeling of impact behavior of carbon nanotube reinforced polymer"**, R. Rafiee, R. Maleki, ICCE20 (2012), Beijing, China. [In English]
20. **"Numerical modal analysis of an embedded carbon nanotube in a polymer matrix"**, R. Rafiee, M. Maleki, ICCE20 (2012), Beijing, China. [In English]
21. **"Investigation of strain energy release rate in carbon nanotube-based composites"**, R. Rafiee, M. Heidarhaei, ICNMMCS (2012), Turin, Italy. [In English]
22. **"On the reinforcement efficiency of wavy carbon nanotubes"**, Roham Rafiee, ICNMMCS 2012, Turin, Italy. [In English]
23. **"Progressive failure analysis of GRP pipes: Modeling and experimental evaluation"**, R. Rafiee, K. Derakhshan, X-Mech-2012, Tehran, Iran. [In English]
24. **"Modal analysis of carbon nanotube based composites using multi-scale finite element modeling"**, R. Rafiee, R. Maleki, Aero2012, Tehran, Iran. [In Persian]
25. **"Investigation of CNT diameter and chirality effect on Young's modulus using non-linear finite element model"**, R. Rafiee, M. Heidarhaei, A. Fereidoon, ISME2011, Birjand, Iran. [In Persian]
26. **"Development of a stochastic simulation to predict elastic properties of carbon nanotube reinforced composites"**, M. M. Shokrieh, R. Rafiee, ICCS16 (2011), Porto, Portugal. [In English]
27. **"Young's modulus prediction of carbon nanotube using full non-linear interatomic potentials"**, R. Rafiee, M. Heidarhaei, ICCS16 (2011), Porto, Portugal. [In English]
28. **"Extracting optimum thickness of composite layers to rehabilitate corroded buried steel gas pipe"**, R. Rafiee, IranPipeTech2011, Tehran, Iran. [In Persian]
29. **"Development of a full-range multi-scale model to obtain elastic properties of CNT/polymer composites"**, M. M. Shokrieh, R. Rafiee, CCFA-2 (2010), Kish Island, Iran [In English]
30. **"Stochastic determination of CNT/Epoxy properties using random volume fractions and random CNT lengths"**, M. M. Shokrieh, R. Rafiee, CST2010, Valencia, Spain. [In English]
31. **"Load transfer efficiency in CNT/Epoxy: A parametric study on the effect of CNT length and non-bonded interphase"**, M. M. Shokrieh, R. Rafiee, NS2010, Kish Island, Iran. [In English]
32. **"Calculation of Young's moduli of graphene sheets and carbon nanotubes using analytical solution and numerical simulation"**, M. M. Shokrieh, R. Rafiee, ICMAT2009, Singapore, A00317-620, pp. 10. [In English]
33. **"On the non-linear tensile behavior of an embedded CNT in a polymer matrix with non-bonded inter-phase region"**, M. M. Shokrieh, R. Rafiee, ICCS15 (2009), Porto, Portugal. [In English]
34. **"On the effective stiffness of carbon nanotubes and graphene sheets"**, M. M. Shokrieh, R. Rafiee, ICCS15 (2009), Porto, Portugal, [In English]
35. **"Investigation of Honeycomb materials with negative Poisson's ratio using energy method"**, R. Rafiee and H. Bisadi, 7th International Conference of Aerospace Engineering, Aero2008, Tehran, Iran, Vol. 2, p. 3. [In Persian]
36. **"Extraction of required mechanical properties for FEA of multi directional composites using CLT approach"**, M. M. Shokrieh and R. Rafiee, CANCOM 2005, Vancouver, Canada, Characterization Section, Paper ID #5. [In English]
37. **"Stochastic fatigue analysis of HAWT composite blade"**, M. M. Shokrieh and R. Rafiee, ICCST5, Sharjah, UAE, pp. 197-202. [In English]
38. **"Lifetime prediction of a horizontal axis wind turbine composite blade"**, M. M. Shokrieh and R. Rafiee, 12th International Conference of Mechanical Engineering, ISME2004, Iran, p. 240. [In Persian]

-
-
39. "Structural design of composite power transmission poles", M. M. Shokrieh and R. Rafiee, International Symposium of Composites, Singapore, K18-02, p. 327, ICMAT2001. [In English]
 40. "Design & analysis of composite power transmission poles", M. M. Shokrieh and R. Rafiee, 9th International Conference of Mechanical Engineering, ISME2001, Iran, Vol. 1, pp. 77-84.[In Persian]

Technical Papers:

1. "Vehicle Suspension Systems", PAJOOHESH Magazine (see "Honors & Achievements")
2. "NISA Aided Finite Element Modeling", PAJOOHESH Magazine
3. "NISA & SAP In Comparison", Civil-Online Magazine (Scientific magazine of civil students of Iran University of Science & Technology)
4. "Role of Composites in Power Transmission Lines", Magazine of Iran Composite Institute, No. 1.
5. "Application of Composites in Wind Turbines", Magazine of Iran Composite Institute, No. 2.
6. "Introduction of Wind Turbines & How They Work", Car Magazine, Sequential No. 246.
7. "Glass Fiber Production Process", Magazine of Iran Composites Institute, No. 23.

6. TEACHING EXPERIENCES (Descending)

(i) Academics:

Graduate Courses:

- ✓ Advanced Mechanics of Composites
- ✓ Advanced Analysis of Aircraft Structures
- ✓ Theory of Elasticity
- ✓ Finite Element Methods
- ✓ Structural Dynamics
- ✓ Advanced Mathematics
- ✓ Advanced Mathematics (PhD)

Under-graduate Courses:

- ✓ Mechanics of Composites
- ✓ Design of Mechanical Components
- ✓ Computer Aided Machine Design
- ✓ Statics
- ✓ Dynamics
- ✓ Vibrations
- ✓ Solid Mechanics Lab.

(ii) Non-academics:

- ✓ Quality Considerations for FRP-boats
- ✓ General Aspects on GRP pipes and Its Advantages in Comparison with Traditional Pipes
- ✓ Inspection of GRP Pipes
- ✓ Weight Reductions Using Composites
- ✓ Structural Design of GRP Pipes
- ✓ Auto-CAD
- ✓ ANSYS
- ✓ EMRC-NISA
- ✓ Hardware

(i) BSc Final Projects:

1. **“Damage & Repair Assessment of Airplane Composite Structures & Repair Methods”**, Project for the award of B.Sc. degree in Aircraft Maintenance Eng., Civil Aviation Technology College, A. A. Alikhani & S. Khaiati, May 2005. [Supervisor]
2. **“Design of A Light Aircraft Landing Gear Specially for Tricycle Type”**, Project for the award of B.Sc. degree in Aircraft Maintenance Eng., Civil Aviation Technology College, A. Taghinejad, July 2006. [Supervisor]
3. **“Effect of CNT waviness on stiffness reduction of nanocomposites”**, Project for the award of B.Sc. degree in Mechanical Eng., Mech. Eng. Dept., Iran University of Science & Tech., A. Farajzadeh, May 2009. [Co-supervisor]

(ii-a) MSc Theses: [University of Tehran]

1. **“Influence of materials mechanical properties on the structural behavior of a composite wind turbine blade”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Khanpour, In Progress. [Supervisor]
2. **“Investigation of fatigue phenomenon in GRP pipes”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, F. Eslami, In Progress. [Supervisor]
3. **“Predicting mechanical properties of fuzzy fiber relying on cohesive zone method”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, A. Ghorban-Hosseini, In Progress. [Supervisor]
4. **“Multi-scale modeling of Nano-clay reinforced polymer”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, S. Mozafarian, In Progress. [Supervisor]
5. **“Multi-scale modeling of graphene reinforced polymer”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Mirzaei, In Progress. [Supervisor]
6. **“Investigation of the influence of interphase region on mechanical properties of CNTRP using MD simulation”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Mahdavi, In Progress. [Supervisor]
7. **“Simulating Longterm Behavior of Composite Materials”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, B. Mazhari, In Progress. [Supervisor]
8. **“Aeroelastic Investigation of A Wind Turbine Blade”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Moradi, Sept. 2014. [Supervisor]
9. **“Investigation of crack propagation with respect to the fiber direction in composites”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Sheikh-Ansari, Sept. 2014. [Co-supervisor]
10. **“Investigating the influence of interphase region on mechanical properties of CNTRP using continuum modeling”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, R. Pourazizi, Dec. 2013. [Supervisor]
11. **“Development of suitable formulation for predicting mechanical properties of carbon nanotube reinforced polymer”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and

12. **“Investigation of effective parameters on mechanical properties of filament wound pipes”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, H. Hessamsadat, Jan. 2014. [Supervisor]
13. **“Investigation of electromagnetic properties of carbon nanotube reinforced polymers”**, Thesis for the award of M.Sc. degree in Aerospace Eng., Faculty of New Sciences and Technologies, University of Tehran, M. Taheri, Jan. 2013. [Supervisor]

(ii-b) MSc Theses: [Other universities]

1. **“Structural analysis of filament wound GRP pipes”**, Thesis for the award of M.Sc. degree in Mechanical Eng., Mech. Eng. Dept., Parand branch, Azad University, S. Eidi, Sept. 2014. [Supervisor]
2. **“Simulation of GRP pipes deformation subjected to transverse loading using FEM”**, Thesis for the award of M.Sc. degree in Mechanical Eng., Mech. Eng. Dept., Parand branch, Azad University, A. Araghi, Sept. 2014. [Supervisor]
3. **“Investigation of impact effects on carbon nanotube reinforced polymers”**, Thesis for the award of M.Sc. degree in Mechanical Eng., Mech. Eng. Dept., Semnan University, R. Maleki, Jan., 2011. [Advisor]
4. **“Finite element modeling of crack in matrix of carbon nanotube reinforced polymer composites”**, Thesis for the award of M.Sc. degree in Mechanical Eng., Mech. Eng. Dept., Semnan University, M. Heidarhaei, Dec., 2010. [Advisor]

(iii) PhD Theses:

1. **“Synthesis and modeling of CNT-carbon fiber composites”**, Thesis for the award of PhD degree in Chemical Eng., Department of Chemical and Environmental Engineering, University Putra Malaysia, S. Rahmanian, In Progress. [External Advisor]
2. **“Uncertainty Quantifications in Polymeric Nanocomposites”**, Thesis for the award of PhD degree in Mechanical Eng., Department of Mechanical Engineering, Bauhaus University of Weimar, Vu Bac Nam, In Progress [Co-Supervisor]
3. **“Multi-scale Optimization of Polymeric Nanocomposites”**, Thesis for the award of PhD degree in Mechanical Eng., Department of Mechanical Engineering, Bauhaus University of Weimar, H. Ghassemi, In Progress [Co-Supervisor]
4. **“Multi-scale modeling of CNT/Polymer”**, Thesis for the award of PhD degree in Mechanical Eng., Department of Mechanical Engineering, Islamic Azad University of Tehran, M. Esmaili, In Progress [Co-Supervisor]

(iv) Post-Doc Researches:

1. **“Computational Materials Characterization of Polymeric Nanocomposites”**, Post Doctorate Research, Bauhaus University of Weimar, Dr. Y. Zhang, In Progress [Co-Supervisor]
2. **“Multi-scale Modeling of Polymers”**, Post Doctorate Research, Bauhaus University of Weimar, Dr. J. Zhao, In Progress [Co-Supervisor]

8. ACADEMIC PROJECTS

- Investigation of hysteresis phenomenon in systems using perturbation methods (Advanced Mathematics, PhD)
 - Hybrid elements for composite materials (FEM II, PhD)
 - Comparison of Prandtl theory and Saint-venant methods with FEM results for torsion of an arbitrary cross
-

section (Theory of Elasticity, PhD)

- Investigation of mechanical behavior of honeycombs using energy methods (Energy Methods, PhD)
- Effects of Open & Breathing Cracks Existence on Modal Parameters (Structural Dynamics, MSc)
- Finite Element Modeling of any Desired Truss Structures Using Prepared MATLab Code (Finite Element Theory I, MSc)
- Hybrid Composite Analysis Using Prepared Mathematica Based on Classical Lamination Theory (Mechanics of Composites, MSc)
- Fatigue Investigation of Metallic Screw Using Both Stress and Strain Approaches (Creep, Fatigue and Fracture, MSc)
- On The Tire of the Vehicle (Technical English, BSc)
- Bending & Torsion Fatigue of a Crank Shaft & Connecting Rod (Fracture Mechanics, BSc)
- Pressure Vessels (Mechanics of Materials Lab. I, BSc)

9. INDUSTRIAL EXPERIENCES & Positions (Ascending)

Iran Composites Institue (ICI)

Tehran, IRAN

Company Profile: Iran Composites Institute is a research center on composite materials in IRAN.

Position(s):

- ❖ Coordinator of Wind Turbine Technology Transfer Project between Iran and Denmark (2000 - 2002)
- ❖ Project Manager of Strategic Planning Project (2004 - 2005)
- ❖ Project Manager of Export Project to Europe Community (2005 - 2006)

Sadid Saba Niroo Co./Sabaniroo Co. (SSN)

Tehran, IRAN

Company Profile: Affiliated to Sadid Industrial Group, Sadid Saba Niroo Co. is the only manufacturer of wind turbine in IRAN and the Middle and presents its products in compliance with the world leader wind turbine manufacturer, Vestas Wind System A/S.

Position(s):

- ❖ Head of Blade Section of Design & Technology Dept. (2002 - 2004)
- ❖ Member of The Boards (2011 till 2014)
- ❖ Senior Technical Consultant (2012 till 2014)

OJT (On the Job Training):

1. Statistical Process Control (SPC),
2. Business Planning,
3. Strategic Planning.

ALH Co.

Tehran, IRAN

Company Profile: Affiliated to Fahameh Industrial Group, ALH Co. is producer of GRP pipes using filament winding technology for both water and sewage applications.

Position(s):

- ❖ Vice President (2011 till Now)
- ❖ R&D Manager (2007 till 2014)
- ❖ Commercial Manager (2006 - 2007)
- ❖ Management Representative (2007 - 2011)

OJT (On the Job Training):

1. Quality Management System,
2. Internal Audit.

Sadid Industrial Group. (SIG)**Tehran, IRAN**

Company Profile: Sadid Industrial Group is the biggest holding company in Iran consisting of 13 different companies manufacturing different machinery ranging from wind turbine to gas pipes.

Position(s):

- ❖ Member of the board of Saba Niroo Co. – Manufacturer of Large Wind Turbines (2011 till 2014)
- ❖ Senior consultant of Mahshahr Pipe Mill Co. (2009 - 2011)
- ❖ Member of Research Committee (2009 till 2014)
- ❖ Senior consultant of Production deputy (2008 - 2009)

Fields of Activity:

1. Design development for wind turbines
2. Local manufacturing of different components of pipe mill
3. Improvement of automation level of pipe mill
4. Rehabilitation of rejected pipes using composites
5. Investigation on GRP pipe factory establishment as a future business development
6. Characterization and procurement of required prepreg materials for wind turbine blades

RUN-Iran Co.**Tehran, IRAN**

Company Profile: RUN-Iran Co. is a manufacturer of Volvo high deck intercity buses.

Position: Senior Consultant of Managing Director (May 2006 – November 2006)

Fields of Activity:

1. Organizing composite production workshop of front and back panels of coaches,
2. Investigation of metallic components replacement by composite ones,
3. Investigation of manufacturing composite components based on RTM method instead of hand lay-up,
4. Modifying and reorganizing supply chain of composite raw materials.

Kariz Caspian Loshan Co.**Tehran, IRAN**

Company Profile: Kariz Caspian Loshan Co. is intending to establish a production line for GRP production as JV with AMIANTIT Co.

Position: Senior Technical and Contractual Consultant (2008 – 2009)

Fields of Activity:

1. Revising FS
2. Development of purchasing strategy of machinery
3. Technical investigation of proposals
4. Comparison of raw materials consumption
5. Technical and contractual negotiations with technology owner

PARMIS business development Co.**Tehran, IRAN**

Company Profile: The company is a trading company was intending to import CNG pressure vessels (Type II) for passenger cars made of glass fiber.

Position: Senior Inspector (April 2008)

Fields of Activity:

1. Reviewing design process and inspecting production process, documentations and products to coincide with rules and regulations of ISO 11439 standard.

Moudjandisheh Co.**Tehran, IRAN**

Company Profile: The company is a private Co. active in the field of rubber industry.

Position: Senior consultant of Managing Director (2009 – 2010)

Fields of Activity:

1. Investigation on local production of EPDM gaskets for GRP pipes

11. INDUSTRIAL AND FUNDED RESEARCH PROJECTS

Industrial Research/Technical Reports:

- Investigation of Stresses Arisen from Thermal Effects on the Blade of Aircraft Jet Engine. 1999.
- Different Suspension Systems and Their Effects on Ride Quality, Handling and Steering of Passenger Cars, Pars Khodro Co., 2000.
- Aerodynamic and Structural Design of A Wind Turbine Blade for 660 kW Wind Turbine, 12 Reports, Renewable Energy Center, 2002.
- Glass Fiber Production Process, Fahameh Industrial Group, 2005.
- Inspection of production process, documentations and products for composite CNG vessels of passenger cars (type II), Parmis Co., 2008.
- Reduction of raw materials consumption in manufacturing GRP pipes using discontinuous filament winding method on the basis of structural design and analysis, Arkan Looleh Hamedan Co. (ALH), 2009.
- Development of "COMPIPE" software to design GRP pipes for different diameters, pressure classes and stiffness classes, ALH Co., 2010.
- Prediction of hoop tensile strength of GRP pipes incorporating sand layer, ALH Co., 2011.
- Defining different tests for a wind turbine blade based on multi-level approach, Sabaniroo Co., 2011.
- Aeroelasticity study of wind turbine blades, Sabaniroo Co., 2011.
- Theoretical and experimental investigations on the mechanical properties of multi-walled carbon nanotube based composites, Iranian National Science Foundation, 2013.
- Predicting functional failure pressures in GRP mortar pipes, ALH Co., 2013

Technology Transfer Projects:

- "Production of Wind Turbine Blade", Technology transfer from VESTAS Wind System (Denmark) to Sabaniroo Co., 2000-2002.
- "Production of GRP Pipes using Discontinuous Filament Winding Technology", Technology transfer from KNT FRP Co. Ltd. (China) to Arkan Looleh Hamedan Co., 2007-2009.

Strategic Planning Projects

- "Development of Composite Industries in Iran for The Next 20 Years Based on Investment Opportunities", IDRO, 2004.
- "Development of Composites in Construction & Vehicle Industries", Iranian Ministry of Industries & Mining, 2005.
- "Comprehensive analysis of Composites industry in Iran and roadmap to the successful future, Presidential Manifest", Iranian Science and Technology Deputy of Presidency, 2010.

Feasibility Studies:

- Feasibility Study on Filament Winding production line of GRP pipes, 2006.
- Feasibility Study on CC-GRP production line, 2007.
- Feasibility Study on Glass Fiber Plant, 2007.
- Technical section of Feasibility Study on 5-layer pipes production line, 2008.
- Feasibility Study on polymer-concrete sanitary ware production line, 2009.

12. LABORATORY ESTABLISHMENT EXPERIENCES

- Composites Research Laboratory, Faculty of New Sciences & Technologies, University of Tehran (COMRESLAB)
- Equipped laboratory for incoming inspection on raw materials, QC tests and qualification experiments on GRP pipes, ALH Co.

- **France (Paris):** Visiting JEC expo, 2014.
- **Portugal (Porto):** Presenting three papers in ICCS17 conference and chairing a session, 2013.
- **Malaysia (Sordeng):** Invited lecturer from University Putra Malaysia, 2012.
- **Germany (Weimar):** Invited lecturer from Bauhaus University of Weimar, 2012.
- **Italy (Turin):** Presenting two papers in ICNMMCS, 2012.
- **China (Shanghai):** Visiting Composites expo and wind turbine plants, 2011.
- **Portugal (Porto):** Presenting two papers in ICCS16 conference and chairing two sessions, 2011.
- **Spain (Valencia, Madrid):** Oral presentation of a paper in CST2010, visiting a GRP plant, 2010.
- **Italy (San Giorgio):** Attending dry-test of continuous filament winding machinery of VEM Co. and visiting Technobell Co., 2010.
- **Italy (San Giorgio):** Technical & Contractual negotiation for GRP continuous production line, 2009.
- **UAE (Dubai):** Visiting Polychem Co. in the field of resin, 2009.
- **Germany (Frankfurt):** Contractual negotiation with polymer-concrete pipe producer, 2009.
- **Portugal (Porto):** Presenting two papers in ICCS15 conference, 2009.
- **Germany (Frankfurt, Düsseldorf, Brüggen):** Visiting, Negotiation and Finalizing contract of polymer-concrete plant, 2008.
- **China (Shanghai):** Inspection of CNG pressure vessels type II, 2008.
- **China (Beijing, Jingzhu):** Inspection of GRP machinery, 2008.
- **France (Paris):** Visiting JEC expo, 2007.
- **Saudi Arabia (Mecca, Medinah):** Pilgrimage of Hajj, Umrah, 2007.
- **China (Shanghai, Hengshui, Lianyungang, Beijing):** Technical & Contractual negotiation for GRP production line, 2007.
- **China (Shanghai, Tongxiang):** Visiting Glass Fiber Production Plant of Jushi Co., 2006.
- **Republic of Korea (Seoul):** Visiting Glass Fiber Production Plant of KCC Co., 2006.
- **Turkey (Istanbul):** Recreational trip, 2006.
- **UAE (Dubai, Sharjah):** Visiting some suppliers of wind turbine blades raw materials, 2004.
- **Belarus (Minsk, Brest):** Technical & Economical negotiation with ministry of energy for establishment of wind farm, 2003.

14. SKILLS

Computer:

- Proficient in using ANSYS, EMRC-NISA, Auto-CAD, Solid Works, Mathematica and MATLAB.
- Capable of programming in GW-Basic, Q-Basic and Pascal.
- Proficient in using Microsoft Office including Outlook, Word, Excel and Power-point.
- Some experience with Adobe Photoshop.
- Knowing operating systems such as DOS, Windows 95, 98, ME, 2000, XP, Vista and Seven very well.
- Familiar with network concepts and INTERNET.
- Expert with Hardware.

Languages:

- Persian (Mother tongue)
- Fluent in English

Misc.:

- Strong communication and presentation skills
- Professional and efficient project management and team leadership
- Excellent in team working

15. ACADEMIC & COMMUNITY SERVICES

Editorship:

- Guest editor for a special issue in journal of "Computational Materials Science" entitled as "Computational Modeling of Polymeric Composites", Elsevier.
<http://www.journals.elsevier.com/computational-materials-science/call-for-papers/computational-modeling-of-polymeric-composites/>
- Editorial board member of Journal of Mechanical Engineering and Automation
 - ✓ p-ISSN: 2163-2405
 - ✓ e-ISSN: 2163-2413
 - ✓ Website: <http://journal.sapub.org/jmea>
 - ✓ <http://www.sapub.org/journal/editorialdetails.aspx?JournalID=1030&PersonID=13089>
- Guest Editor of special issue in Journal of Advances in Materials Science and Engineering entitled as "Modeling, Characterization and Processing of Advanced Composites", Hindawi Publishing Cooperation.
 - ✓ Website: <http://www.hindawi.com/journals/amse/si/165109/cfp/>
- Lead Guest Editor of special issue in International Journal of Composite Materials entitled as "Theoretical and Experimental Characterization of Composites", Scientific & Academic Publication.
 - ✓ Website: <http://www.sapub.org/journal/specialissue.aspx?journalid=1109>
 - ✓ International Journal of Composite Materials. 2013 3 (6A). doi: 10.5923/s.cmaterials.201309

Referee for:

- National congress of distinguished managers, organized by Assembly of Iranian Experts (Sept. 2014)
- Iranian National Science Foundation (INSF)
- The Intellectual Property Office of University of Tehran
- Science and Technology Park (Incubator Center), University of Tehran (UTSTP)

Reviewer for (books):

- University of Tehran Press (UTP)
- Shahrood Technical University
- Apple Academic Press

Reviewer for (Journals):

- Journal of Composite Materials (Indexed by ISI)
- Journal of Applied Composite Materials (Indexed by ISI)
- Journal of Theoretical and Applied Fracture Mechanics (Indexed by ISI)
- Journal of Composite Structures (Indexed by ISI)
- Journal of Computational Materials Science (Indexed by ISI)
- Journal of Composites Part A (Indexed by ISI)
- Journal of Composites Part B (Indexed by ISI)
- Journal of Materials and Design (Indexed by ISI)
- KSCE Journal of Civil Engineering (Indexed by ISI)
- Journal of Polymer Composites (Indexed by ISI)
- Journal of Energy (Indexed by ISI)
- Journal of Materials Research (Indexed by ISI)
- Journal of Scientia Irania (Indexed by ISI)
- The Modares Journal of Mechanics Engineering (Indexed by ISC)
- International Journal of Aerospace Science & Technology (Indexed by ISC)
- Journal of Computational Methods in Engineering (Indexed by ISC)
- The Tabriz University of Mechanical Engineering (Indexed by ISC)
- Journal of Mechanical Engineering and Automation
- International Journal of Engineering

Reviewer for (Conferences):

- “International Conference on Composite Materials & Renewable Energy Applications, ICCMREA 2014”, Tunisia
- “2nd Global Conference on Materials Science and Engineering, CMSE 2013”, China
- “The 22nd conference of Iranian Mechanical Engineering Society, ISME2014”, Iran
- “The 13th conference of Iranian Aerospace Society – AERO2014”, Iran
- "The 2nd renewable energy conference – ICREDG2012", session of "Wind Energy: Mechanical Aspects"
- “The 12th conference of Iranian Aerospace Society – AERO2013”, Iran
- "The 11th conference of Iranian Aerospace Society – AERO2012", Iran
- “The 1st Iran Wind Energy Conference - IWEC”, Iran
- “The 4th International Conference on Metamaterials, Photonic Crystals and Plasmonics, META'13”, Sharjah, UAE.

Organizing of national/international conferences:

- Member of Scientific Committee of XIII International Conference on Wood Adhesives, ICWA 2015, USA, 2015.
- Member of Scientific Committee of XIII International Conference on Advanced Nanomaterials and Nanotechnology, ICANN 2015, Italy, 2015.
- Member of Scientific Committee of International Conference on Composite Materials & Renewable Energy Application, ICCMREA 2015, Rome, Italy, 2015.
- Organizer of “1st International Conference on Composite Pipes, Vessels and Tanks”, Tehran, Iran, 2015.
- Member of Scientific Committee of the 18th International Conference on Composite Structures, ICCS18, Lisbon, Portugal, 2015.
- Member of Scientific Committee of the International Conference on Advances in Composite Materials and Structures, Istanbul, Turkey, 2015.
- Symposium organizer of “Modeling and Analysis of Nano-composites” in the 11th International Conference on Computational Methods in Scientific and Engineering (ICCMSE 2015), Athene, Greece, 2015.
- Member of International Scientific Committee of the International Conference on Biobased Chemicals and Materials, ICBCM 2014, London, UK, 2014.
- Member of International Scientific Committee of the International Conference on Advanced Nanomaterials and Nanotechnology. ICANN 2014, Florence, Italy, 2014.

- Member of Scientific Committee of International Conference on Chemical Structures, ICCS 2014, Tokyo, Japan, 2014.
- Member of Scientific Committee of the World Symposium on Mechatronics Engineering & Applied Physics, WSMEAP' 2014, Sousse, Tunisia, 2014
- Chair of the "Structure" topic in the 13th conference of Iranian aerospace society, AERO2014, Tehran, Iran.
- Member of Scientific Committee of the 13th conference of Iranian aerospace society, AERO2014, Tehran, Iran.
- International affair secretary of the 13th conference of Iranian aerospace society, AERO2014, Tehran, Iran.
- Member of Scientific Committee of the International Conference on Composite Materials, ICCM2014, San Francisco, USA, 2014.
- Member of Scientific Committee of the International Conference on Materials Science, Metals and Manufacturing, ICMSMM2014, Prague, Czech Republic, 2014.
- Member of Scientific Committee of International Conference on Composite Materials & Renewable Energy Application, ICCMREA 2014, Sousse, Tunisia, 2014.
- Member of Scientific Committee of the International Conference on Composite Materials, ICCM2014, Amsterdam, The Netherlands, 2014.
- Member of Scientific Committee of the International Conference on Composite Materials, ICCM2013, Dubai, UAE, 2013.
- Session organizer of "Modeling & characterization of CNT-polymer composites", ICCS17 conference, Porto, Portugal, 2013.

Chairman of national/international conferences and conference sessions:

- Chair of "1st International Conference on Composite Pipes, Vessels and Tanks", Tehran, Iran, 2015.
- Chairman of six sessions on mechanics of composites, structural design and analysis and special issues, Aero2014 conference, Tehran, Iran, 2012.
- Chairman of three sessions of Advanced materials and composites, X-Mech2014 conference, Tehran, Iran, 2014.
- Chairman of Modeling & Characterization of CNT-Polymer Composites session, ICCS17 conference, Porto, Portugal, 2013.
- Chairman of Design & Analysis of Structures session, AERO2013 conference, Tehran, Iran.
- Chairman of Fatigue session, X-Mech2012 conference, Tehran, Iran, 2012.
- Chairman of Modeling & Characterization of CNT-Polymer Composites sessions (Two sessions), ICCS16 conference, Porto, Portugal, 2011.

16. SOCIETY, ASSOCIATION AND COMMITTEE SERVICES

- Member of Iranian Wind Energy Association (IrWEA)
- Member of the Iranian Composites Association (IRCOMAS)
- Member of the GRP Pipes Quality committee in Iranian Composites Association (IRCOMAS)
- Member of National Committee of Iranian Electrical Power (INEC) affiliated to Institute of Standards and Industrial Research of Iran (ISIRI)
- Member of Wind Energy committee of Renewable Energies Council of Iran
- Member of revising national standard committee for GRP pipes
- Member of formulating charter committee for Iranian GRP pipe producers
- Coordinator of PT 61400-5 subgroup affiliated to INEC/TC88 for preparation of IEC 61400-5 entitled as "Part 5: Rotor Blades"
- Member of MT23 subgroup affiliated to INEC/TC88 for preparation rules and regulations entitled as "Full-scale structural testing of rotor blades"

- Member of MT13 subgroup affiliated to INEC/TC88 for preparation rules and regulations entitled as “Measurement of mechanical load”

17. REGISTERED PATENTS

- Registered **Patent** of "Full-scale and full-stochastic multi-scale process to predict elastic properties of CNT/Polymer Composites", Iranian Research Organization of Science & Technology (IROST): ID No. 68152.
- Registered **Patent** of "Developing a new approach to predict hoop tensile strength of GRP pipes with sand layer", Iranian Research Organization of Science & Technology (IROST): ID No. 75731.
- Registered **Patent** of "Structural design procedure of GRP pipes", Iranian Research Organization of Science & Technology (IROST): ID No. 75733.

18. HONORS, AWARDS & ACHIEVEMENTS

- **First ranked** student in PhD program
- Ranked **33rd** in MSc matriculation exam with more than 7,000 participants (2001)
- Selected trainee during training ship II
- The most active student in publishing papers at university during B.S program (2000)
- **Editor in Chief** of the first scientific-research magazine of mechanical engineering students of Iran University of Science & Technology which is called "**PAJOOHESH**" (Persian word for **Research**)
- **Awarded fellowship** for PhD program from Iranian NANOTECHNOLOGY initiative council (2006-2010)
- **Appreciation Certificates** from Iranian Composites Association for delivering lecture about GRP Pipes
- **Appreciation Certificates** from ALH Co. for the start-up of GRP Pipe production

19. LECTURES

- Invited lecturer on “**Stochastic Multi-scale Modeling of Carbon Nanotube Reinforced Polymer**”, Bauhaus University of Weimar, Invited by Prof. Dr. Ing. Timon Rabczuk, Oct. 2012.
- Invited lectured on “**The Prediction of Mechanical Properties of Carbon Nanotube-Based Composites**”, Colloquium on Composite Materials organized by Japanese Society of Material Science and University Purta Malaysia, Nov. 2012.
- “**Introduction of GRP Pipes and Their Advantages**”, East Azarbaijan Water Organization, 2012.
- Invited lecturer on “**Application of FRP Pipes in Oil & Gas Industries**”, one day seminar on “Application of Composites in Oil, Gas and Petrochemical Industries”, Ministry of Oil, 2012.
- Invited lecturer on “**Exporting Iranian Composite Products**”, one day seminar on “Export of products and technical services in the field of Composites”, University and industry coordination center (Composite Materials), 2012.
- Invited lecturer on “**Application of Composites in Pipes**”, One day seminar on “GRP pipes”, Dec. 2009.

- **“Introduction to Nanotechnology”**, Sadid Industrial Group, 2011.
- Invited lecturer on **“Introduction of technical parameters of GRP pipes”**, one day seminar on “GRP pipes”, Hamdan Water Organization, 2011.
- **“Composites & Their Applications”**, Sadid Industrial Group, 2008.
- Invited lecturer on **“Application of Composite Materials in Wind Turbine Industry”**, One day seminar on “Development of Composites In Iran”, Dec. 2003.

20. MEDIA COVERAGE & INTERVIEWS

- **Youth Radio**: Live interview about developed method to predict mechanical properties of carbon nanotube reinforced polymers
- **COMPOSITES**: Introducing Composite materials and their applications in the world and current industry of Iran. (A three-episode, 90 minute scientific program broadcasted on channel 4 & SAHAR channel)
- **NOAVARIHA** (Persian word for **Innovations**): Introducing wind power plants. (A single episode, 30 minute informative program broadcasted on NEWS Channel)
- **Scientific-Technical Monthly Magazine of Electrical Power Industry**: Wind Power for Generation of Electricity, No. 90, Nov. 2003, pp. 10-15. [In Persian]

REFERENCE(S)

- Available Upon Request