

# CURRICULUM VITA

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## DR AHMAD SEDAGHAT

*PhD, M.Sc., B.Eng.*

*Associate Professor, Mechanical Engineering, Full-time*

**Mailing Address:** Department of Mechanical Engineering, Isfahan Univ. of Tech., Isfahan 84156-83111, Iran  
**Phone:** +98 (311) 391 2667 (Office); +98 (913) 1676507 (Mobile)  
**Email:** [sedaghat@cc.iut.ac.ir](mailto:sedaghat@cc.iut.ac.ir), [ahmadsed@gmail.com](mailto:ahmadsed@gmail.com)  
<http://sedaghat.iut.ac.ir/>,  
**Home Pages:** [http://scholar.google.com/citations?user=sM\\_rHd8AAAAJ&hl=en](http://scholar.google.com/citations?user=sM_rHd8AAAAJ&hl=en),  
[https://www.researchgate.net/profile/Ahmad\\_Sedaghat/?ev=hdr\\_xprf](https://www.researchgate.net/profile/Ahmad_Sedaghat/?ev=hdr_xprf).  
**Date/Place of Birth:** 26/10/1965, Iran

### ❖ SUMMARY

Researched in several fields in Aerospace & Mechanical Engineering at highly-credited Universities in UK, Europe, & Iran including the MMARINE European project, three EPSRC postdoctoral in Aeroelasticity, Combustion, & Wind Energy all conducted at UK Universities. Actively worked in several fields of tech. & eng. included renewable energy, hydro-aerodynamics, & CFD with close Int. collaboration with leading institutions & industries through the last 15 years. Having well-developed research & teaching skills as well as strong capability in motivating both staff & students. Passionate to teach & do research at leading & prestigious institutions & industries.

### ❖ EDUCATION

1994 – 1997 **Aero. Eng. Division, Univ. of Manchester, UK**  
VIVA 1998 **PhD**, Aero. Eng. concentrated on Computational Aerodynamics, Full-time  
Graduation 1999 **Thesis:** A Finite Volume TVD Approach to Transonic Flow Computations.

- Developed high resolution TVD CFD codes for solving turbulent transonic flows around supercritical aerofoil sections.
- Joint theoretical & computational work with computer programming in FORTRAN & using Unix System.
- Degree awarded directly with no thesis correction required.

  
1992 – 1994 **Aero. Eng. Division, Univ. of Manchester, UK**  
Graduation 1994 **M.Sc.** (by course), Aero. Eng. (Fluid Mechanics & Applied Math), First Class, Full-time.  
**Dissertation:** Comparative Study on High Resolution Shock Capturing Schemes.

- Computational work using FORTRAN & UNIX System.
- Degree awarded directly with no thesis correction required.

  
1986 – 1990 **Faculty of Mech. Eng., Isfahan Univ. of Tech, Isfahan, Iran.**  
**B.Eng.** (honors), Mech. Eng. in Solid Mechanics & Design, First Class, Full-time  
**Project:** Developing a mechanism simulator for eng. application in Mech. & Aero. Eng.

### ❖ WORK EXPERIENCE

2014-present **Dept. of Mech. Eng., Isfahan Univ. of Tech., Iran**  
*Associate Professor, Mechanical Engineering, Full-time*  
2003-2014 *Assistant Professor, Mechanical Engineering, Full-time*

*Taught Units:* Fluid Mechanics I & II, Thermodynamics I & II, Heat Transfer, Turbomachinery, Hydro-Aerodynamics, Advanced Hydro-Aerodynamics, Advanced Fluid Mechanics, Hydrodynamics, Fuel & Combustion, Energy Conversion & Hydrodynamics Stability.

***Research Projects:***

- Wind and wave renewable energy evaluation in Iran, wind turbine design, testing & construction for Isfahan Power.
- Aerodynamics & Aeroelasticity of Shahed Helicopters,
- Development & Reconstruction of IUT Wind Tunnels (IUT),
- Simulation & optimization of Argon injection into liquid Steel of Folad Mobarake Industries.

2008-2009

**School of Computing, Eng. & Physical Sciences, Univ. of Central Lancashire, Preston, UK**

*Visiting Researcher, Sabbatical Leave in Renewable Energy, Full-time*

- Assisted a group of int. researchers in developing some laboratories for testing wind turbines including open jet aerodynamic testing, dynamometer & structural (fatigue) testing.
- Assisted the students in making a small innovated DIY wind turbine, making the wind turbine blades from composite materials, & some laboratory tests for measuring performance of a small commercial 500 Watt wind turbine.
- Supervised 15 Int. students during the sabbatical in fields of CFD & Wind Energy.

2007-2008

**Folad Mobarake Industries, Isfahan, Iran**

*Contract Researcher, Part time*

Argon bubbles are blown in liquid steel inside large ladles for maintaining a homogeneous mixture, uniform temperature, and for reducing impurities in the process of steel making. Computational simulation of present systems will assist in understanding formation and distribution of argon bubbles in the ladle. This may give guidelines for improving the location and jet angles of nozzles which release argon bubbles. The project commenced in 2007 and finalized by the end of 2008.

2006-2007

**Shahed Helicopter Industries, Isfahan, Iran**

*Contract Researcher, Part time*

Dr Sedaghat and a team of his students were involved in aerodynamics and aeroelasticity of a civil helicopter for satisfying JAR standard requirements. The group succeeded in passing the JAR standard requirements by various means of analytical, simulation, experimental and/or flight data.

2001-2003

**School of Mech. Eng., Univ. of Leeds, Leeds, UK**

*Research Fellow in Combustion, Full time*

- Developed CFD & Maple codes for computing turbulent premixed flame stretch rate PDFs & modelling turbulent burning instabilities.
- Produced correlation for flame curvature rates experimental data.
- Collaborated with CFD group of Daresbury laboratories & DNS group of Cambridge Univ. as a research visitor & presenter in COCCEFA meetings.

- 1998-2001      **Dynamics & Aeroelasticity Division, School of Eng., Univ. of Manchester, UK.**  
*Research Fellow, Full time*  
 Developed Matlab & Mathematica codes for solving Flutter & Limit Cycle Oscillation (LCO) in aeroelastic systems with non-linear aerodynamics. Collaborated with unsteady CFD group at Glasgow Univ. Presented our group at meetings with BAE systems, & DARP. Utilised chaos-bifurcation theories including normal form theory for developing mathematical models.
- 1997-1998      **Dept. of Computer Sciences, Univ. of Leuven, Belgium.**  
*Post-doctoral Research Fellow, Full time*
- Developed a Finite-Element CFD code based on sparse iterative linear solvers for turbulent sediment flows.
  - Being a part of the research team in European project: Application of High Performance Computing Techniques for the Modelling of Marine Ecosystems (MMARIE).
  - Collaborated with Leuven Hydraulic laboratory & computational team at Computer Science Dept.
- 1995-1998      **Aero. Eng. Division, School of Eng., Manchester Univ., UK**  
*Assistant Instructor, Part time*
- Conducting tutorials & teaching assistance in several courses.
  - Supervising aerodynamic laboratory.
  - Qualified from Manchester Univ. Training Centre in ‘Teaching Assistance & Demonstration Techniques’ in 1996.

#### ❖ POSITIVE QUALITIES & SKILLS

- **Organisation** –The head of publishing office of the electronic journal of applied fluid mechanics (JAFM). Continuously reviewing articles referred for publications in several societies & journals in Iran.
- **Supervision** – Supervised 55 undergraduate students who completed their theses in different subjects & also supervisor and advisor of 50 Master and 5 PhD students in Computational Hydro-Aero Magnetic Dynamics, Experimental Aeroelasticity, Thermal Fuel Cells, & Aerodynamics, CFD, Nano-technology etc.
- **Communication** – Delivered several technical & academic presentations at national & Int. Conferences
- **Industry** - Collaborated with BAE Systems, Daresbury laboratories, Cambridge Univ., Glasgow Univ., & UCLan & IUT.
- **E-Learning** – Developed 5 electronic courses currently in use from e-learning system in Fluid Mechanics, Thermodynamics, Aerodynamics, Turbomachinery, & Hydrodynamic Stability.
- **Numerical Methods** – Use of various numerical approaches such as finite-difference, finite-volume, finite-element, & high resolution TVD methods with explicit & implicit time-marching methods for solving large sets of partial differential equations.
- **Languages** – English (Fluent) and Persian (Mother language).
- **Driving** – Full, clean, and current UK & Iranian driving licenses.

## ❖ RESEARCH & TEACHING PROFICIENCY

### Engineering:

Computational Aerodynamics, CFD, Experimental Aerodynamics, Dynamics, Statics, Solid Mechanics, Boundary Layer Theory, Viscous Flow, Mech. & Aero. Eng. Workshops & Laboratories.

### Computing & Information Technology:

- Computer programming for eng. applications using FORTRAN (77 & 90), Visual Fortran & BASIC.
- Programme development & data processing for experimental devices, wind-tunnel testing facilities, aircraft systems.
- Working experience with eng. software & systems such as word processors (MS Word), typesetters (Latex), graphics & presentation packages (Uniras, Unigraph, Unimap, XFIG, TECPLOT, Advanced Visualization System (AVS) & PowerPoint), mathematical packages (Matlab, Maple & Mathematica), & statistical package (Excel, SPSS).
- Professional usage of Microsoft Office & Internet search engines.
- Regularly worked with IT experts to analyse digital data for eng. design & management applications.
- Web design & homepage development using HTML.
- Familiar with major eng software such as CATIA-V16, AutoCAD, FLUENT-GAMBIT, NASTRAN-PATRAN, ANSYS-10/CFX, Digital DATCOM, & AAA.

## ❖ AWARDS & ACHIEVEMENTS

- NAFEMS prize for the best convergence tip in CFD programming (1999).
- Overseas studentship (ORS) from The Univ. of Manchester (1995).
- Awarded scholarship by Iran Ministry of Science & Higher Education for postgraduate studies in abroad, 91 & 94.
- Achieved top 10% of participants in Iran nationwide Univ. entrance exams for aero eng. postgraduate studies, summer 89.
- Achieved top 5% of participants in Iran nation-wide Univ. entrance exams for BSc studies, Summer 84.
- Leading a number of student teams with national and international awards such as UAV, MAV (France & Germany) , Model Boats, CanSat, Mini-Baja (South Korea 2010), Student Formula (Silverstone UK, 2009)

## ❖ PROFESSIONAL TALKS

- Chairman & session developer – Iranian Society of Mechanical Engineering, ISME Conference, Tehran, 11-13 May 2010.
- Session Developer & moderator, Iranian Society of Aerospace Engineering Conference, Tehran, 2008.
- Chairman & moderator – Iranian Society of Mechanical Engineering, ISME Conference, Isfahan, 2003, 2004, 2006.
- Invited speaker – Iranian Society of Combustion, Tehran, 2006.
- Keynote speaker – Iranian Society of Aerospace Engineering Conference, Tehran, 2006.
- Invited speaker - Iranian Society of Aerospace Engineering Conference, Tehran, 2004.
- Invited speaker - COCCEFA meetings, Uclan, Cambridge Univ., Imperial College, UK, from 2001 to 2003.
- Invited speaker - DARP meetings, BAE systems, Liverpool Univ., Manchester Univ., UK, from 1998-2001.

## ❖ ADDITIONAL INFORMATION

- **Personality:** Enthusiastic, persistent, independent, curious, optimistic, broad-minded, & determined.
- **Interests:** Travelling, Visiting new places & heritages, Watching movies & sport matches.
- **Hobbies:** Playing volleyball, chess, & Swimming.

## ❖ PROFESSIONAL MEMBERSHIPS

- Fellow Member of British Combustion Institute (BCI), 2001
- Member of American Institute of Aeronautics & Astronautics (AIAA), 1998.
- Fellow Member of UK Royal Aeronautical Society (RAeS), 1998.
- Associate member of Iranian Aerospace Society (IAS), 2003-present.
- Associate member of Iranian Combustion Institute (ICI), 2005-present.
- Associate member of Iranian Society Mechanical Engineers (ISME), 2003-present.
- Associate member of Iranian Wind Energy Society (IWES), 2010-present

## ❖ PUBLICATIONS

- Co-editor and Head of Publishing Office of JAFM (2004-2012)
- Reviewer of Elsevier and International Journals: ECM, RSER, IJHE, EE, IJSE, IJCAT, JPE, PE, JAFM, Scientia Iranica, JAST, JACM and National Journals: Esteghlal, Modares, Amir-Kabir, Shahroud, Semnan, ISME, Khaje Nasir, Kashan, Majlesi, Darya Fonon, ...
- Books and Book Chapters: 3
- Patents (Farsi): 1
- Conference Papers (English): 44
- Conference Papers (Farsi): 90
- Journal Papers (English): 44
- Journal Papers (Farsi): 8
- Professional Reports: 6

## ❖ BOOKS AND BOOK CHAPTERS

1. Ahmad Sedaghat, Comparative Study of High Resolution Shock Capturing TVD Schemes, MSc Thesis, University of Manchester, 1994.
2. Ahmad Sedaghat, A Finite Volume TVD Approach to Transonic Flow Computations, PhD Thesis, University of Manchester, 1997.
3. Ahmad Sedaghat, Progress in Magnus Type Wind Turbine Theories, Energy Vol. 8: Wind Energy, Chapter 808, Studium Press LLC, 2014.

## ❖ JOURNALS (in English)

1. **Ahmad Sedaghat**, Mohammad Ali Badri, Mohsen Saghafian, Iman Samani, An Innovative Treadmill-Magnus Wind Propulsion System for Naval Ships, **Recent Patents on Engineering** 8, 2014 (in press)
2. **A Sedaghat**, Magnus type wind turbines: Prospectus and challenges in design and modelling, **Renewable Energy** 62 (2014), 619-628.
3. Ali Mostafaeipour, Behnoosh Bardel, Kasra Mohammadi, **Ahmad Sedaghat**, Yagob Dinpashoh, Economic evaluation for cooling and ventilation of medicine storage warehouses utilizing wind catchers, **Renewable and Sustainable Energy Reviews** 38 (2014), 12–19.
4. Ali Mostafaeipour, Mohsen Jadidi, Kasra Mohammadi, **Ahmad Sedaghat**, An analysis of wind energy potential and economic evaluation in Zahedan, Iran, **Renewable and Sustainable Energy Reviews**, 30 (2014), 641-650.
5. Mostafa Hassanalian, Mohammadreza Radmanesh, **Ahmad Sedaghat**, Increasing flight endurance of MAVs using multiple quantum well solar cells, **International Journal of Aeronautical and Space Sciences** 15(2) (2014), 112-121.
6. **A Sedaghat**, A H Mohamadzadeh, Simulations of Particle Filtration and Tracking in Electrical Field, **Scientia Iranica** 21(1) (2014), 109-118.

7. **Ahmad Sedaghat**, Mojtaba Mirhosseini, Mahdi Moghimi Zand, Aerodynamic design and economical evaluation of site specific horizontal axis wind turbine (HAWT), **Energy Equipment and Systems** 2 (2014), 43-55.
8. **I. Samani, A Sedaghat**, A novel MAV with treadmill motion of wing, **Theoretical and Applied Mechanics Letters** 3, 062002 (2013).
9. **A Sedaghat**, MA Badri, Numerical study on flow separation control over NACA0015 aerofoil using electromagnetic fields, **Theoretical and Applied Mechanics Letters** 3 (5), (2013) 052003-052003-7.
10. **A Sedaghat**, A Tahmasebi, R Kalbasi, M Moghimi Zand, Performance assessment of a hybrid fuel cell and micro gas turbine power system, **Energy Equipment and Systems** 1 (1), (2013) 58-72.
11. M Ahmadi-Baloutaki, **A Sedaghat**, M Saghafian, M Ali Badri, A computational study on robust prediction of transition point over NACA0012 aerofoil surfaces from laminar to turbulent flows, **Theoretical and Applied Mechanics Letters** 3 (4), (2013), 042004-042004-3.
12. **Ahmad Sedaghat**, S Mokhtarian, Numerical Simulation of Rayleigh-Taylor Instability, **International Journal of Advanced Design and Manufacturing Technology** 6(1), (2013) 33-40.
13. R Alipour, **A Sedaghat**, Accurate modeling of gearbox and wind turbines with the bond graph method, **Majlesi Journal of Mechatronic Systems** 2 (1), 2013.
14. E Chaparian, MJ Amini, **A Sedaghat**, Free turbulent flow emanating from a large plane square nozzle: A theoretical and experimental study, **Scientia Iranica**, 2013.
15. Saeidi, D., **Sedaghat, A.**, Alamdari, P., Alemrajabi, A.A., Aerodynamic design and economical evaluation of site specific small vertical axis wind turbines, **Applied Energy** 101 (2013) 765-775.
16. Mostafaeipour, A., **Sedaghat, A.**, Ghalishooyan, M., Dinpashoh, Y., Mirhosseini, M., Sefid, M., Pour-Rezaei, M., Evaluation of wind energy potential as a power generation source for electricity production in Binalood, Iran, **Renewable Energy** 52 (2013) 222-229.
17. Mostafaeipour, A., **Sedaghat, A.**, Hazrati, A., Vahdatzad, M.A., The use of Statistical Process Control Technique in the Ceramic Tile Manufacturing: a Case Study, **International Journal of Applied Information Systems (IJAIS)**, 2(5), (2012), 14-19.
18. **Sedaghat, A.**, and Mirhosseini, M., Aerodynamic design of a 300 kW horizontal axis wind turbine for province of Semnan, **Energy Conversion and Management** 63 (2012) 87-94.
19. **Sedaghat, A.**, Liu, X., Whitty, J., and Tang, X., Wind Power of Small Wind Turbines in Turbulent Open Jets, **Scientia Iranica B** (2012) 19 (2), 272-281.
20. Memarzadeh, M., Bidabadi, M., Jadidi, M., **Sedaghat, A.**, Predictions of laminar flame in aluminium dust clouds with a cylindrical two-dimensional analytical model, **Proc. IMechE** Vol. 226 Part C: J. Mechanical Engineering Science, DOI: 10.1177/0954406211414999, 2012.
21. Vafaei Rostami, M.J., Saghafian, M., **Sedaghat, A.**, and Miansari, Mo., Numerical investigation of turbulent flow over a stationary and oscillatory NACA0012 airfoil using overset grids method, **Int. J. Numer. Meth. Fluids** 2011; 67:135-154.
22. Ghayour, M., **Sedaghat, A.**, Mohammadi, M., Wave Propagation Approach to Fluid Filled Submerged Visco-Elastic Finite Cylindrical Shells, **Journal of Aero. Science & Tech. (JAST)**, Vol. 8, No. 1, pp. 1-11, 2011.
23. Saeidia, D., Mirhosseini, M., **Sedaghat, A.**, and Mostafaeipour, A., Feasibility Study of Wind Energy Potential in Two Provinces of Iran: North and South Khorasan, **Renewable and Sustainable Energy Reviews**, 15 (2011) 3558– 3569.
24. Mostafaeipoura, A., **Sedaghat, A.**, Dehghan-Niri, A.A., and Kalantar, V., Wind energy feasibility study for city of Shahr Babak in Iran, **Renewable and Sustainable Energy Reviews** 15, 2011, p. 2545-2556.
25. Mirhosseini, M., Sharifi, F., & **Sedaghat, A.**, Assessing the wind energy potential locations in province of Semnan in Iran, **Renewable and Sustainable Energy Reviews** 15, 2011, p. 449-459.
26. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of temperature on radiative properties of nanoscale multilayer with coherent formulation in visible wavelengths, **Iranian Journal of Mechanical Engineering** 11(2), 5-14, 2010.
27. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of thin film thickness on emittance, reflectance and transmittance of nano scale multilayers, **International Journal of the Physical Sciences**, 5(5) 465-469, 2010.
28. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of Thin Films' Thickness on Radiative Properties of Doped Silicon Multilayer Structures, **Middle-East Journal of Scientific Research**, 5(4) 210-213, 2010.

29. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Thermal Radiative Properties of Nanoscale Semiconductors with Incoherent Formulation, **Majlesi Journal of Mechanical Engineering (MJME)**, 3(2), 2010.
30. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Comparison Radiative Properties of Thin Semiconductor Films by Coherent and Incoherent Formulation, **World Applied Sciences Journal**, 9(4) 372-379, 2010.
31. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of incidence polarization on radiative properties of doped silicon multilayer structures, **Scientific Research and Essays** 5(14), 1840-1844, 2010.
32. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of Thin Films' Number on Nano Scale Radiative Properties, **World Applied Sciences Journal**, 11(11) 1398-1402, 2010.
33. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Effects of Incidence Angle on Nanoscale Radiative Properties of Doped Silicon Multilayer structures, **World Applied Sciences Journal**, 8(10) 1234-1239, 2010.
34. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Parametric Study of Nanoscale Radiative Properties of Doped Silicon Multilayer Structures, **World Applied Sciences Journal**, 8(10) 1200-1204, 2010.
35. Oloomi, A., Sabounchi, A., and **Sedaghat, A.**, Parametric Study of Nanoscale Radiative Properties of Thin Film Coatings, **Nano Trends: A Journal of Nanotechnology and its Application**, 7(3) 1-7, 2009.
36. **Sedaghat, A.**, An investigation into preconditioning iterative solvers for hydrodynamic problems, **Iranian Journal of Science & Technology (IJST)**, Shiraz University, 31(B4), 2007.
37. **Sedaghat, A.**, Normal form solution of reduced order oscillating systems, **Journal of Aerospace Science and Technology (JAST)**, 3(3), 2006.
38. Bradley, D., Gaskell, P. H., Gu, X. J., and **Sedaghat, A.**, Premixed flamelet modelling: Factors influencing the turbulent heat release rate source term and the turbulent burning velocity, **Combust. Flame**, 143, pp. 227-245, 2005.
39. **Sedaghat, A.**, Cooper, J.E., Leung, A.Y.T and Wright, J.R., Curve Fitting Approach for Transonic Flutter Prediction, **Aeronautical Journal**, 107 (1075), 2003.
40. Bradley, D., Gaskell, P. H., Gu, X. J. and **Sedaghat, A.**, Generation of PDFS for Flame Curvature and for Flame Stretch Rate in Premixed Turbulent Combustion, **Combust. Flame**, 135 (4), 2003.
41. **Sedaghat, A.**, Cooper, J.E., Leung, A.Y.T and Wright, J.R., Limit cycle oscillation prediction for non-linear aeroelastic systems, **Aeronautical Journal**, 106 (1055), 2002.
42. **Sedaghat, A.**, Cooper, J.E., Leung, A.Y.T and Wright, J.R., Estimation of Hopf bifurcation point for aeroelastic systems, **Sound and Vibrations**, 248 (1), 2001.
43. **Sedaghat, A.**, Ackroyd, J.A.D. and Wood, N.J., Turbulence Modelling for Supercritical Flows including Examples with Passive Shock Control, **Aeronautical Journal**, 103 (1020), 1999.
44. **Sedaghat, A.** and Shahpar, S., Comparative Study of High-Resolution Shock-Capturing TVD Schemes, **Iranian Journal of Science & Technology**, 22 (1), 1998.

❖ **CONFERENCE (in English)**

- 1 Iman Samani, Ahmad Sedaghat, Treadmill Motion of Wing: Possibility of MAV with Vertical Take-Off, International Micro Air Vehicle Conference and Flight Competition, Toulouse, France, September 17-20, 2013.
- 2 Mohammadreza Radmanesh, Iman Samani, Mostafa Hassanalian, Omid Nematollahi, Ahmad Sedaghat, and Mahdi Niliahadabadi, IUT MAV2013, Part I: Aerodynamic design of tailless wing and body configuration, International Micro Air Vehicle Conference and Flight Competition, Toulouse, France, September 17-20, 2013.
- 3 Mohammadreza Radmanesh, Iman Samani, Mostafa Hassanalian, Omid Nematollahi, Ahmad Sedaghat, and Mahdi Niliahadabadi, IUT MAV2013, Part II: Flight test results, International Micro Air Vehicle Conference and Flight Competition, Toulouse, France, September 17-20, 2013.
- 4 Mojtaba Mellati Nokhandan, Amirreza Hashemi, Ahmad Sedaghat, Design and simulation of an efficient winglet to enhance aerodynamic performance of a MAV, 21st Annual International Conference on Mechanical Engineering-ISME2013, 7-9 May, 2013, School of Mechanical Eng., K.N.Toosi University, Tehran, Iran.

- 5 Sedaghat, A., Zamani, A.R., Design of Chamber and Wells Turbine for an Oscillating Column of Water for Extracting Wave Energy from Anzali Port, The 14th Marine Industries Conference (MIC2012), Tehran, 26 & 27 December 2012.
- 6 Sedaghat, A., Zamani, A.R., Evaluation of Wave Energy Potentials in Chahbahar port using two methods of water-wind model and wave measurements, The 14th Marine Industries Conference (MIC2012), Tehran, 26 & 27 December 2012.
- 7 Sedaghat, A., Innovative Design of New Generation of Horizontal Axis Wind Turbines (HAWT), Iranian Wind Energy Conference (IWEC2012), Tehran, 2012.
- 8 Mirhosseini, M., Sedaghat, A., Alemrajabi, A.A., AERODYNAMIC MODELING OF WIND TURBINE BLADES AND LINEAR APPROXIMATIONS, SET2011, 10th International Conference on Sustainable Energy Technologies, İstanbul, TÜRKİYE, 4-7 Sep. 2011.
- 9 Mirhosseini, M., Alaiian, M., Sedaghat, A., Alemrajabi, A.A., AERODYNAMIC DESIGN OF A 300 KW HORIZONTAL AXIS WIND TURBINE, SET2011, 10th International Conference on Sustainable Energy Technologies, İstanbul, TÜRKİYE, 4-7 Sep. 2011.
- 10 Jahangiri, M., Abdollahi, A., Haji-Malayeri, A.R., Sedaghat, Feasibility of installing wind turbines in Qazvin province Case study: Jarandagh station, The 4th National Conference in Mechanical Engineering, Khomeini Shahr, 2011.
- 11 Jahangiri, M., Abdollahi, A., Sedaghat, A., Saghafian, M., Assessing the wind energy potential locations in province of Qazvin in Iran, ETEC2011, Proceedings of the 1st International Conference on Emerging Trends in Energy Conservation – ETEC Tehran, Tehran, Iran, 20-21 November 2011.
- 12 Hajagha-Onour, K., Jahangiri, M., Sedaghat, A., Feasibility of installing wind turbine to generate electricity power in Iran, Case Study: the Khuzestan province, ETEC2011, Proceedings of the 1st International Conference on Emerging Trends in Energy Conservation – ETEC Tehran, Tehran, Iran, 20-21 November 2011.
- 13 Jahangiri, M., Abdollahi, A., Sedaghat, A., Saghafian, M., Statistical analysis of wind energy in Markazi Province Case Study: Saveh Station, ETEC2011, Proceedings of the 1st International Conference on Emerging Trends in Energy Conservation – ETEC Tehran, Tehran, Iran, 20-21 November 2011.
- 14 Hajagha-Onour, K., Jahangiri, M., Sedaghat, A., Theoretical Aerodynamic analysis of six airfoils for use on small wind turbines, ETEC2011, Proceedings of the 1st International Conference on Emerging Trends in Energy Conservation – ETEC Tehran, Tehran, Iran, 20-21 November 2011.
- 15 Oloomi, A., Saboonchi, A., Sedaghat, A., Effects of Donors and Acceptors on Radiative Properties of Nanoscale Multilayer Structures at Infrared Wavelengths, 6th WSEAS International Conference on APPLIED and THEORETICAL MECHANICS (MECHANICS '10), ATHENS, Greece, 2010.
- 16 Oloomi, A., Saboonchi, A., Sedaghat, A., Effects of Incidence Angle on Thermal Radiative Properties of Nanoscale Semiconductors, 6th WSEAS International Conference on APPLIED and THEORETICAL MECHANICS (MECHANICS '10), ATHENS, Greece, 2010.
- 17 Oloomi, A., Saboonchi, A., Sedaghat, A., Effects of Dopant Concentrations on Radiative Properties of Nanoscale Multilayer with Incoherent Formulation for Visible Wavelengths, National Conference in Chemical Engineering, Islamshahr, 2010.
- 18 Oloomi, A., Saboonchi, A., Sedaghat, A., Effects of Thin Film Coatings on Radiative Properties of Nanoscale Multilayer in Infrared Wavelengths, National Conference in Chemical Engineering, Islamshahr, 2010.
- 19 Oloomi, A., Saboonchi, A., Sedaghat, A., Effects of Dopant Concentrations on Radiative Properties of Nanoscale Multilayer with Incoherent Formulation for Infrared Wavelengths, 1st Conference on Mathematics and its Applications in Engineering Sciences, Jouybar, 2010.
- 20 Mohamadzadeh, A.H., Sedaghat, A., Particle tracking for incompressible flow in electrical field, 13th Annual and 2nd International Fluid Dynamics Conference, FD2010, Shiraz, Iran.
- 21 Chaparian, E., Amini, M.J., Sedaghat, A., NUMERICAL SOLUTION AND EXPERIMENTAL RESULTS OF A PLANE TURBULENT FREE JET BY MODELING IN A WIND TUNNEL, 13th Annual and 2nd International Fluid Dynamics Conference, FD2010, Shiraz, Iran.
- 22 Tang, X., Liu, X., Sedaghat, A., Shark, L.K., Rotor Design and Analysis of Stall-regulated Horizontal Axis Wind Turbine, The 44th International Universities' Power Engineering Conference, Glasgow, UK, 2009.



- 23 Khoshkho R., Adami M., Sedaghat A., NUMERICAL SIMULATION OF ARGON FLOWS IN CYLINDRICAL SELF-FIELD MPD THRUSTERS, 59th International Astronautical Congress, Glasgow, UK, 2008.
- 24 Oloomi, A., Saboonchi, A., Sedaghat, A., Predict Thermal Radiative Properties of Nanoscale Multilayer Structures, International Conference Nanotechnology and Applications, NANO 2008, ATHENS, Greece, 2008.
- 25 Oloomi, A., Saboonchi, A., Sedaghat, A., Computing Thermal Radiative Properties of Nanoscale Multilayer, ICMSSC 2009, Dubai, United Arab Emirates, 2009.
- 26 Oloomi, A., Saboonchi, A., Sedaghat, A., Thermal Radiative Properties of Nanoscale Multilayer Structures, 2nd International Congress on Nanoscience & Nanotechnology, Tabriz, Iran, 2008.
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❖ *Referees*

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**Professor Ebrahim Shirani**

Position in Organisation: Professor in nano-technology  
Address: Department of Mechanical Engineering, Isfahan  
University of Technology, Isfahan 84156-83111, Iran  
Tel: +98-311-391 5205  
Email: [eshirani@cc.iut.ac.ir](mailto:eshirani@cc.iut.ac.ir)

**Professional relationship:**

Colleague and Head of  
Department from 2008 to  
2010 & Editor-in-Chief of  
JAFM (I was co-Editor &  
Head of Publishing Office of  
JAFM for 8 years since 2004)

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**Professor Ahmad Reza Azimian**

Position in Organisation: Professor in Turbomachines  
Address: Department of Mechanical Engineering, Isfahan  
University of Technology, Isfahan 84156-83111, Iran  
Tel: +98 (311) 391 5225  
Email: [azimian@cc.iut.ac.ir](mailto:azimian@cc.iut.ac.ir)

**Professional relationship:**

My teacher during  
undergraduate studies and  
colleague since 2003

---

**Professor Mostafa Ghayour**

Position in Organisation: Professor in Vibration & Control  
Address: Department of Mechanical Engineering, Isfahan  
University of Technology, Isfahan 84156-83111, Iran  
Tel: +98 (311) 391 5247  
Email: [ghayour@cc.iut.ac.ir](mailto:ghayour@cc.iut.ac.ir)

**Professional relationship:**

My teacher and supervisor on  
my BSc thesis in Solid  
Mechanics and colleague  
since 2003

---

**Prof. LEUNG, Andrew Y T**

Position in Organisation: Chair Professor  
Address: College of Science and Engineering · Department of Civil and  
Architectural Engineering, City University of Hong Kong  
Tel: 3442-7600  
Email: [andrew.leung@cityu.edu.hk](mailto:andrew.leung@cityu.edu.hk)

**Professional relationship:**

Co-principal coordinator during  
the post-doctoral position from  
1998-2001 at the Univ. of  
Manchester in Nonlinear  
Aeroelasticity

---

**Prof. Majid Molki**

Position in Organisation: Professor in Thermofluids  
Address: Southwest Illinois Advanced Manufacturing Center, 2061  
Engineering Building, Department of Mechanical and Industrial  
Engineering, School of Engineering, Southern Illinois University  
Edwardsville, IL 62026-1805, USA  
Tel: 618-650-2372  
Fax: 618-650-2555  
E-mail: [mmolki@siue.edu](mailto:mmolki@siue.edu)

**Professional relationship:**

My teacher and close colleague  
since some 20 years ago

---

**Professor Xiong Liu**

Position in Organisation: Chair Professor of Sustainable Engineering,  
Address: University of Cumbria, UK  
Tel: +44 (0)161 275 4348  
Email: [xiongwei.liu@cumbria.ac.uk](mailto:xiongwei.liu@cumbria.ac.uk)

**Professional relationship:**

Principal coordinator during the  
one year lecturer in 2008-2009  
and research associate position  
at UCLAN, UK in innovative  
wind turbines

---

---

**Prof. Jonathan E. Cooper**

Position in Organisation: RAEng Airbus Sir George White Professor of Aerospace Engineering

Address: Office 1.53, Queen's Building, University Walk, Clifton BS8 1TR, UK

Tel: +44 (0) 117 954 5388

Email: [j.e.cooper@bristol.ac.uk](mailto:j.e.cooper@bristol.ac.uk)

**Professional relationship:**

Principal director for the postdoctoral position from 1998-2001 at the Univ. of Manchester in Nonlinear Aeroelasticity

---

**Dr S Olutunde Oyadiji**

Position in Organisation: Reader in Dynamics & Aeroelasticity

Address: School of Mech., Aero. & Civil Eng., Manchester Univ, Sackville Street, Manchester M60 1QD, UK

Tel: +44 (0)161 275 4348

Email: [s.o.oyadiji@manchester.ac.uk](mailto:s.o.oyadiji@manchester.ac.uk)

**Professional relationship:**

Principal coordinator during the honorary visit in summer 2008 & Advisor since the applicant postgraduate studies at the Univ. of Manchester

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