

CURRICULUM VITAE

Name: ABBASALI; Surname: ALIAKBARI BIDOKHTI (Professor of Environmental Fluid Mechanics, Meteorology and Oceanography)

Date and place of birth: 27.8.1955, Gonabad, Iran.

Nationality: Iranian

Marital Status: Married

Work address: Institute of Geophysics, University of Tehran, and P.O. Box 14155-6466 Tehran, Iran. Telephone number: Tehran 88630541, Fax :(+98)21 88009560, Email: bidokhti@ut.ac.ir.

Education:

1983-1988: Engineering dept. Cambridge University, Post Doctorate Research associate, working with Prof. R. Britter on Geophysical Fluid Dynamics (stratified flows).

1979 - 1983: School of Physics, University of Newcastle upon Tyne, U.K. Ph.D. in Geophysical Fluid Dynamics (Turbulence in rotating fluids, supervised by Dr. D. J. Tritton).

1978-1979: School of Physics, University of Newcastle upon Tyne, U.K. M.Sc. in an Advanced Course in Geophysics, (Courses covered: Geophysical Fluid dynamics, Heat transfer, Gravity, Geomagnetism, Seismology, Mathematics, Instrumentation, Isotopes geophysics; including a project on instrumentation, supervised by Dr. W. O'Reilly).

1973 - 1976: Faculty of Sciences, Mashhad University, Iran. B.Sc.: Geophysics (with some geophysical courses).

Employment, Including Teaching and Research Experience:

1980-1983 Employer: School of Physics, University of Newcastle upon Tyne.

Duties: Part-time teaching and laboratory demonstration to Physics students.

Jan.-May 84 Part-time research assistant work, with Dr. D. J. Tritton. (Uni. Newcastle Dept. Phy., report GFD 90/1)

Oct.84-July 1988 Employer: Department of Engineering, Cambridge University.

Duties: Research Associate working with Dr. R.E. Britter, on various projects, (see below)

July1988-June 1992 Employer: Atomic Energy Organization of Iran, Tehran, Iran.

Duties: A Scientific Member of A.E.O.I,

Also supervising graduate physics students, working on oxidation in semiconductors (Si), CVD coating vessels. Numerical studies of pollution dispersion in urban areas (a report is available Jan. 1990)

June1992-Present Employer: Tehran University, Inst. of Geophysics, Tehran, Iran.

Duties: A Scientific Member, Reader Teaching and supervising graduate students, working on Urban diffusion modeling, CFD, Boundary layer Met., Gravity currents in the Persian Gulf, Atmospheric turbulence, Design of a Fluid dynamics laboratory.

Language ability and knowledge of English: Very Good!

Travel history: I have been in the following countries during the last 5 years, including the purposes:

- 1- Bangladesh, Invited speaker of the 13th. Asian Congress on Fluid Mechanics, 13-10-2010 to 12-01-2011.
- 2- Russia, A holiday tour, 03-08-2011- 11-08-2011.
- 3- United Arab Emhart, A holiday tour, 20-01-2012 to 23-01-2012.
- 4- USA, attending a conference as Invited speaker, On Resiliency of Urban areas, UCI, 1-21 June 2014.

Teaching experience:

Course	University	Level	Year	Units
Fluid dynamics	Beheshti (Physics Dept.)	BSc	1989	3
Fluid dynamics	Sanaati (Physics Dept.)	BSc	1990	3

Fluid dynamics (FD) Amirkabir (Physics Dept.)	BSc	1992	3
Geophysical FD Tehran (Geophy.Inst.)	MSc	1991	3
Fluid dynamics (FD) Azad (Ocean Phy.)	Ph. D. & MSc	1992	3
Geophysical FD Azad (Ocean Phy.)	MSc	1992	4
Thermohydraulics Amirkabir (Physics Dept.)	MSc	1991	4
Thermohydraulics Amirkabir (Physics Dept.)	MSc	1992	4
Thermohydraulics Amirkabir (Physics Dept.)	MSc	1993	4
Fluid Dynamics (FD) Amirkabir (Physics Dept.)	BSc	1993	3
Dynamic Meteorology Tehran (Geophysics Inst.)	MSc	since 1993	4
Micrometeorology Tehran (Geophysics Inst.)	MSc	since 1993	3
Geothermal heat flow Tehran (Geophysics Inst.)	MSc	since 1996	3
Fluid dynamics Tehran (Geophysics Inst.)	MSc	since 2002	3
Ocean Dynamics	Ph. D.	since 1993	3
Boundary layer meteorology Tehran	Ph. D.	since 2004	3
Air pollution Meteorology Tehran	Ph.D.	since 2004	3
Geophysical Fluid Dynamics Tehran	Ph.D.	since 2004	3
Air pollution and climate Chall. Tarbiat Moalem	Ph. D.	since 2006	3

Name and addresses of three referees (1988!):

Prof. R. E. Britter, Professor of Fluid Mechanics, Engineering Department, Trumpington Street, Cambridge, CB2 1PZ. Telephone 0223 332643. Now at: SENSEable City Laboratory. MIT 9-209. 77 Massachusetts.

Dr. D. J. Tritton, Reader in Physics, School of Physics, the University, Newcastle upon Tyne, NE1 7RU, Telephone 0912 328511 X.3408

Prof. W. O'Reilly, Prof. in Physics, School of Physics, the University, Newcastle upon Tyne, NE1 7RU, Telephone 0912 328511.

List of undertaken projects:

- *Post-doctoral research associate work with Prof. Rex Britter, Cambridge University, Engineering Department, U.K.:*

1. Development and testing of a newly devised conductivity probe (A report is available, March 1985).
2. Development of a multilayer recalculating density-stratified shear flow facility, including the relevant instrumentation and data processing system (A report is available, September 1986).
3. Study of grid-generated turbulence in stratified shear flows in this facility, including the measurements of turbulence intensities, Reynolds stress, density fluctuation and mass flux (A report is available, August 1986).
4. Physical and mathematical modeling of an instantaneous radial release of a dense fluid in a surrounding without or with density-stratification and motion (A report is available, Jan. 1987).
5. Experiments on towing bodies through stratified flows with uniform or step density profiles (Videos are available).
6. Study of the flows in a MOCVD reactor cell (Two reports are available, Aug. 1987, March 1988).
7. Development of numerical dense gas dispersion models, for continuous or instantaneous releases (the models are available).

- *Work done at the Atomic Energy Organization of Iran:*

A Scientific Member of A.E.O.I, Supervising graduate physics students, working on flow of gases in oxidation of semiconductors (Si), CVD coating cells.

- 1 - Numerical studies of pollution dispersion in urban areas
(A report is available Jan. 1990)

2- Study and simulation of diffusion of accidental release of hazardous gases and action plans computer software for the mitigation of their effects. (2 reports are available, 2003).

- *Some of the projects done at the Inst. of Geophysics, Tehran University:*

- 1 - Development of an air pollution prediction model for Tehran
- 2 - Study of thunderstorm outflows in Tehran area
- 3 - Effects of atmospheric turbulence on flying bodies
- 4 - Numerical model of line and point source plumes
- 5 - Feasibility study of small scale solar ponds

- 6 - Shallow sea fronts and gravity currents in the Persian Gulf
- 7 - Microstructures in the Persian Gulf
- 8 -Laboratory simulations of geophysical fluid dynamical phenomena e.g. baroclinic vortices flow over valleys and mountains.
- 9- Turbulence measurements in atmospheric boundary layer.
- 10- Role of internal waves in formation of ocean fine structures. (For Meteorological Organization)
- 11 -Numerical models for air flow over complex terrain and air pollution dispersion.
- 12- Outflows from semi-enclosed seas.
- 13- Turbulent schemes in numerical models of ocean circulations.
- 14- Numerical simulations of non-homogeneous atmospheric boundary layers.
- 15- Turbulence on warm cloud formation in laboratory.

Organizing activities for Conferences and Journals:

One of the organizers of the First National Conference on Fluid Dynamics, (12 times so far, 1992, 93, 94, 96, 98, 2001, 2003, 2005, 2006, 2007, 2008, 2010, 2013)

One of Scientific committee of Asian Fluid Dynamics Congress (9th.)

One of the organizers of the Eighth Iranian Geophysical Conference, Tehran, Iran, November 1993.

Asso. Editor of three journals: Applied Fluid Mechanics (Physical Society of Iran); Journal of Earth and Space Physics (Institute of Geophysics, Tehran University); Iranian Journal of Geophysics, (Geophysics Society of Iran).

A member of center of excellence: Environmental hazards and analysis, since 2005.

Supervision

So far I have supervised some 50 M. Sc Theses and 15 Ph.D. Theses in Meteorology, Physical Oceanography and physics.

Some of the Publications including thesis titles: (THE ONES IN BLUE ARE JOURNAL PAPERS)

1. Bidokhti, A. A. 1979, A microprocessor controlled magnetometer, for measuring rotational hysteresis loss. M.Sc. thesis (in partial qualification), School of Physics, University of Newcastle upon Tyne.
2. Bidokhti, A. A. 1982, Study of turbulent mixing layers in a rotating fluid. In proc. of European Geophysical Society Meeting, Aug. 1982, Leeds.
3. Bidokhti, A. A. 1983, Turbulent mixing layers in a rotating fluid. Ph.D. thesis, School of Physics, University of Newcastle upon Tyne.
4. Bidokhti, A.A. and Tritton, D.J. 1990 University of Newcastle upon Tyne, Dept. Phys. Rep. GFD 90/1.
5. Bidokhti, A. A. and Tritton, D. J. 1992, Turbulent mixing layers in a rotating fluid. *J. Fluid Mech.* Vol.241, 469-502.
6. Tritton, D. J., Bidokhti, A.A, 1985, Turbulent shear layers in rotating fluids. Presented at a course on "Turbulence and Predictability in Geophysical Fluid Dynamics and Climate Dynamics" at Varenna, Italy. LXXXVIII Corso, Soc. Italiana di Fisica - Bologna-Italy, P. 181-189.
7. Bidokhti, A. A. and Britter, R. E. 1986, Development of a multiplayer density-stratified shear flow water channel, study of grid turbulence in stratified shear flows. In Proc. of 3rd. International Conference on Wind and Water Tunnel Modeling of Atmospheric Flows and Dispersion, Lausanne, Switzerland.
8. Bidokhti, A.A 1989, Some aspects of physical modeling of flash releases of heavy gases. Presented at Physics Conf. Tehran University, Iran.
9. Bidokhti, A.A. 1990, Some turbulent flows with buoyancy effects, AEOI Scientific Bulletin No.10, Tehran, PO Box 14155-1339.
10. Bidokhti, A.A., Fathy, D. and Eftekhari, M. 1990, Dynamics of gas flow in a CVD reactor. Presented at the Iranian Physics Conf. Hamedan, Iran (in Farsi).
12. Bidokhti, A.A. 1989, A stepper-motor controller for a traversing system. In proceeding of the International Conf. on Control and University, 17-20 of July. Modeling, School of Eng., Tehran
13. Bidokhti, A.A., Banihashem, T., Tatavoosian, V. and Meshkoti, A.H., 1991, A pollution dispersion model for Tehran. in the *Journal of Earth and Space Physics of Tehran University, Iran, Vol. 22, pp. 43-50. (in Farsi).*
15. Bidokhti, A.A. 1992, Physical investigations and a numerical model for heavy gas dispersion. Presented at the First Iranian Fluid Dynamics Conference, Kerman, Iran.
16. Bidokhti, A.A. and Britter, R. 1992, Some experiments on strongly stratified grid generated turbulence. Presented at Euromech 288, Lyon, France.

17. Daneshyar, H. and Bidokhti, A.A 1992, Structure of small scale turbulence in internal combustion engines. Presented at the 1st Fluid Dynamics Conference, Kerman, Iran.
18. Bidokhti, A.A. and Tatavoosian, V. 1992, A numerical model for air pollution concentration prediction for Tehran. Presented at the 1st Iranian Fluid Dynamics Conference, Kerman, Iran.
19. Bidokhti, A.A. 1991 A numerical model for heavy gas dispersion, AEOI Scientific Bulletin No.11, Tehran, PO Box 14155-1339.
20. Bidokhti, A.A. and Britter, R.E. 1992 Experiments on the structure of grid turbulence in a stratified shear flow. Presented in the Meeting-Workshop on Geophysical flows, Barcelona, Spain, Dec. 16th-18th.
21. Bidokhti, A.A. 1993 Turbulence in rotating fluids. Presented at the Eighth Iranian Geophysical Conference, Tehran, and Oct.93. Published in the Journal of Air and Space Physics of Tehran University (1996).
22. Bidokhti, A.A. 1994, A numerical model for the instantaneous release of a buoyant puff in a calm environment, in Proc. of Third Fluid Dynamics Conference, Sherif University, Tehran,(also another three other joint papers). 23. Bidokhti, A.A., 1995, An air pollution dispersion model for Tehran, in Abstracts of IUGG XXI General Assembly, Boulder, Colorado, USA, p. A297.
24. Bidokhti, A.A. and Mohamadnejad, A. 1996, Thermal performance and efficiency of a small solar pond, Journal of Esteghlal, 16, no.1, P.67-75 Esfahan Technical University.
25. Meamarian, M.H. and Bidokhti, A.A. 1996, Simulation of mountain waves (lee waves), in Proc. of Fourth Fluid Dynamics Conference, Tarbiat Modares University, Tehran, (another four other papers also have been Pub.ed in this proceeding).
26. Bidokhti, A. and Ranjbar, A. 1997, Physical simulation of thunderstorm gust fronts, Seventh Asian Congress of Fluid Mechanics, Vol. 1, P.83-86, and Madras, India.
27. Bidokhti, A. and Sahraeian, F. 1997, Experiments on convective erosion of GZ of a small solar pond, Seventh Asian Congress of Fluid Mechanics, Vol. 2, P.837-840, Madras, India.
28. Bidokhti, A. and Hadari-Nejad, M. 1998, Study of hydrodynamics microstructures in the Persian Gulf. Fifth Fluid Dynamics conference, Mashhad, Oct. 98, Vol. 2, P. 147-155.
29. Bidokhti, A. and Bani-Hashem, T. 1998, Urban Mixed Layer and Air Pollution, J. Environmental Studies, Uni. of Tehran, Faculty of Environment, Vol. 23, p. 51-60.
30. Bidokhti, A. and Saghfi, M. 1998, Hydrodynamics microstructures in the Persian Gulf, Third Int. Conf. on Coastal Ports and Marine Structures, Tehran Iran, Vol. 2, p. 147-158.
31. Bidokhti, A. and Saghafi, M. Fine scale thermohaline structures in the Persian Gulf. Presentation and pub. in 8th Asian Congress of Fluid Mechanics, Dec. 1999, China.
32. Bidokhti, A., Vakilli, G. and Rastegaar, F., Direct measurements of turbulence in atmospheric surface layer, presentation and pub. In 8th Asian Congress of Fluid Mechanics, Dec. 1999, China.
33. Bidokhti, A. and Saghafi, M. Energy transfer near a density interface near a stratified layer, presentation and pub. in 8th Asian Congress of Fluid Mechanics, Dec. 1999, China.
34. Bidokhti, A. and Saghafi, M., Study of layered structures in semi-enclosed seas (Persian Gulf), IUGG Conference, B.233, Birmingham, UK, 1999.
34. Bidokhti, A. and Saghafi, M., Energy transfer and mixing near a density interface, IUGG Conference, B.162, Birmingham, UK, 1999.
35. Bidokhti, A. Saghafi, M. Physical simulation of intrusive flows, 6th. Fluid Dynamics Conference, Vol. 2, Iran, Feb. 2000, Tehran.
36. Bidokhti, A., A newly developed low drift fast response salinity meter, Rev. of Scientific Instruments, Vol 71, p 3539, 2000, AIP,.
37. Bidokhti, A. Vakili, G. Observations of turbulence in atmospheric surface layer under stable condition, 6th. Fluid Dynamics Conference, Vol. 2, Iran, Feb.2000, Tehran.
38. Bidokhti, A. A. and Nazarian, M. 1999, Thermal conductivity measurements of a few rocks using a newly constructed conductivity meter, Journal of Earth and Space Physics of Tehran University, Iran, Vol. 26, pp. 14-24.
39. Bidokhti, A. and Hadari-Nejad, M. 1998, Hydrodynamics of microstructures in the Thermocline of Persian Gulf. Nevar, 1998, No. 38, P. 23-33.
40. Bidokhti, A. Banihashem, T., Structure of thunderstorm gust fronts with topographic effects, Int. Journal of Advances in Atmospheric Sciences, Chinese Academic of Sciences, 2000, Vol. 18, no. 6, PP. 1-15.
- 41 Bidokhti, A. and Britter, R. A large stratified shear flow water channel for the study of turbulence shear flows and internal flows, Experiments in Fluids, 2002, vol. 33, 281-28.
42. Bidokhti, A. and Griffiths, R. The role of internal waves in generation of layered structures in outflows from semi-enclosed seas, Australasian Fluid Mech. Conf. Adelaide Australia, 2001.

43. Bidokhti, A. and Griffiths, R. Effects of double diffusion convection and internal waves on fine-structures near a T/S ocean front, *J. Geophys. Res.* In preparation.
44. Bidokhti, A. and Griffiths, R. Low frequency internal waves and the layering in outflows from the semi-enclosed seas, *J. Geophysical Research*, submitted.
45. Bidokhti, A. Shear splitting of plume outflows in an enclosed stratified region. *Indian Journal of Marine Sciences*, 34(2), 192-211, 2005.
- 46 Bidokhti A. Babaeian, I. Physical simulation of baroclinic waves and vortices in the atmosphere, *JAST*, 2(2), 19-29, 2005.
47. Bidokhti A. and Malekifard F. A numerical Model for the prediction of sand transport in deserts, *Biaban*, 8(1), 127-137, 2003.
48. Bidokhti A. and Kashani, Z. Effect of double diffusion convection and temperature inversion of the outflow from the Persian Gulf. *Journal of Earth and Space Physics of Tehran University*, 29, 33-47, 2003.
49. Bidokhti A., Buke N. and Saghafi, M. Vertical structure of thunder storm gust fronts in Tehran, *Journal of Earth and Space Physics of Tehran University*, 31, 23-36, 2003.
50. Eghtesadi, S. and Bidokhti, A. Role of internal waves in formation of layered structures in the Persian Gulf. *Tehran University, Journal of Engineering*, 4, 132-145, 2004.
51. Malekifard F. and Bidokhti A. Prediction of nocturnal cooling for southern Khorasan Province, *Biaban*, 9(2), 331-345, 2003.
52. Lari, K., Bidokhti, A. and Shafifar, M. Comparison of the results of different models for the predictions of waves in the Persian Gulf. *Journal of Earth and Space Physics of Tehran University*, 31(1), 15-27, 2005.
- 53 Bidokhti, A. A. and M. Moradi, 2004, An observational study of sea breeze in Boushehr area, *Nevar*, 57, 7-32.
53. Ranjbar, A., Azadi, M., Bidokhti, A. and Sadeghi, A. Study of Tehran heat island and its numerical prediction. *Journal of Earth and Space Physics of Tehran University*, 31(1), 63-79, 2005.
54. Bidokhti A. The role of internal waves in the formation of layered structure in the Caspian Sea mid waters. *Nevar*, 43, 24-42, 2003.
55. Bidokhti A. and Malekifard F. Impulsive release of an annular buoyant puff. *Journal of Earth and Space Physics of Tehran University*, 30(1), 29-37, 2004.
56. Bidokhti A. and Drafshi, M. Study of surface eddied in a two layer system, *Ocean*, 1, 1-12, 2004.
57. Bidokhti, A. and Farnoosh, B. A model for the estimation of the ocean mixed layer in the Caspian Sea. *Ocean*, 1, 13-27, 2004.
58. Bidokhti A. and Shekar Baghani A. The role of internal waves in formation layers in exchange flows between too enclosed basins, *Pajooohesh Physics*, no. 4, 2005.
59. Griffiths, R. and Bidokhti, A. A. 2008 Interleaving intrusions produced by internal waves: a laboratory experiment, *J. Fluid Mech.*, 602,219-239.
- 60 Bidokhti, A. A. and Noroozi F. 2005, Physical simulation of down slope winds, 10th Asian Fluid Mechanic Congress, May, SeriLanka.
- 61 Bidokhti, A. A. and M. Khoshshima, 2006, Non-uniform entrainment near a density interface. 10th Asian Fluid Mechanic Congress, June, Kuala Lumpur, Malaysia.
- 62 Bidokhti, A. A , E. Pasandideh, and M. Arabhossaini, 2006, Effect of precipitation removal in an air pollution model for Tehran, 1st Air pollution and its effect on human, Tehran.
- 63 Bidokhti, A. A., M. Arabhossaini, and B. Fallah, 2006, Effect of surface topography in an air pollution model (DNS) for Tehran, 1st Air pollution and its effect on human, Tehran.
- 64 Shareepour, Z. and Bidokhti, A. A. 2006, An observational study of air pollution related to meteorological condition for Tehran, 1st Air pollution and its effect on human, Tehran.
- 65 Bidokhti A. A., A. Ranjbar, and R. Saidy, 2005, Structure of the Speedroud gap flow for 3 days in July 2005, 12th Geophysical Conference of Iran. Tehran, Sept. 2005.
- 67 Fazabadi, N. and A. A. Bidokhti, 2005, A physical model for atmospheric downburst in Tehran area. 12th Geophysical Conference of Iran, Tehran, Sept. 2005.
- 68 Ranjbar, A., Bidokhti, A., and A. Sadeghi-Hossaini, 2006, Effects of heat Island and urbanization on weather and local climate in Tehran, *Journal of Environmental Research*, 39, 59-68.
- 69 Bidokhti, A. A. and N. Broumand, 2006, Study of gap wind in Lut valley, *Biaban*, 11(1), 13-28.
- 70 Gader, S., A. A. Bidokhti and A. Barkhordarian, 2007, Compact finite difference scheme for simulation of the sea breeze over Bushehe area, *Geophysical Research Abstract*, European Geoscience Union, 9, 04877.
- 71 Bidokhti, A. A. and M. Ezam, 2007, The structure of the Persian Gulf outflow, *IUUG 2007*, PS005, Italy.

- 72 Bidokhti A. A. and A. Shekarbaghani, 2007, The role of internal waves in layer formation in exchange flow between two basins, IUUG 2007, PS005, Italy.
- 73 Tajbakhsh, S., A. A. Bidokhti, and M. Azadi, 2006, Study of clear air turbulence over Iranian Plateau, JAST (Sanati University of Technology, Tehran), 3(2), 87-95.
- 74 Habibi.S., Bidokhti, A. A. and Torabi Azad. M., 2008, A Numerical model for the prediction of movement of gas condensate from spill accidents in the Assalouyeh Marine Region, Indian Journal of Marine Sciences, 37(3), 227-232.
- 75- Arkian, F., Salahinejad, M., Bidokhti, A. and Meshkatee, A., 2007, Analysis of gross alpha, gross beta activities and beryllium-7 concentrations in surface air: their variations and statistical prediction model. J. Environ Monit. Assess, 10.1007/s10661-007-9870-4.
76. Bidokhti, A. A. and Sharipour, Z. 2007, Investigation of surface ozone variations in Geophysics synoptic station for 2002. Mohit Shenasi, 33, 63-74.
77. Bidokhti, A. A. Ghader, S. and Shahsavari, M., 2007, Numerical simulation of internal gravity waves generated by buoyancy forcing. In Proc. of Jogja Int. Physics Conf., Jogjakarta, Sept. 2007.
78. Bidokhti, A. A., Khoshsima, M. and Sabetghadam, S., 2008, Estimation of Urban Mixed Layer Height in Zanzan Using LIDAR Observations and Numerical Modeling, accepted JESS.
79. Bidokhti, A. and Ezam, M., 2008, Structure of the Persian Gulf outflow subjected to density change, OSD, 5(2), 135-161.
80. Sedaghatkardar, A., Sehat, S. and Bidokhti, A. A., 2008, an observational study of a gap wind: A case study for Sepeed-road valley, Iran. Research J. Envi. Sc., 1819, 1-11.
81. Rezapour, N., Bidokhti, A. A. and Fatahi, M. 2008, Thermal properties of the ground as an earthquake precursor. In advanced Topics on Geology and Seismology, WSEAS Press, 63-66.
82. Bidokhti, A. A., Malkifard, F. and Khoshsima, M. 2007, Study of turbulent mixing near a density interface, J. Earth and Space Physics, 33(3), 87-97.
83. Griffith, R. and Bidokhti, A. A., "Interleaving Intrusions Produced by Internal Waves: a Laboratory Experiment", J. Fluid Mech., Vol. 602, pp,219-239, 2008.
84. Fazabadi N. and Bidokhti A.A. Field study and physical modeling of a few downbursts in Tehran area. Journal of Earth and Space Physics, 34(4), 133-154, 2008.
85. Bidokhti, A. A. and Ezam, M., 2009, The Structure of the Persian Gulf outflow subjected to density change, Ocean Sci., 5, 1-12.
86. Bidokhti, A. A., M Khoshsima, S Sabetghadam and H M Khalesifard, 2008, Estimation of urban mixed layer height in Zanzan using LIDAR observations and numerical modeling. J. Earth Sys. Sci., 117, No. 6, 925-935.
87. Arkian, F., Meshkatee, and Bidokhti, A. A., 2009, The effects of large-scale atmospheric flows on beryllium-7 activity concentration in surface air. J. Environ Monit. Assess, DOI 10.1007/s10661-009-1124-1.
88. Mashayekhi1, R., P. Irannejad, J. Feichter, and A. A. Bidokhti, Implementation of a new aerosol HAM model within the Weather Research and Forecasting (WRF) modeling system. Geosci. Model Dev. Discuss., 2, 681-707, 2009.
89. Jalal Kamali, H., A. A. Bidokhti, and H. Amiri, Relation between integral effect of sub-surface temperature variation (I) and seismic effects. Nat. Hazards Earth Syst. Sci., 9, 1815-1821, 2009.
90. Mosaddad, M., A. A. Bidokhti, and H. Basirparsa, 2009, Development of Summer Thermocline in the Persian Gulf. Inter. J. Climate Change, Impacts and Responses, Vol 1, 1-9, 2009.
91. 6. Ezam, M., A. A. Bidokhti, and A. H. Javid, 2009, Numerical simulations of spreading of the Persian Gulf outflow into the Oman Sea. Ocean Sci. Discuss., 6, 3057-3100.
92. Sedaghatkardar, A., Sehat, S. Bidokhti, A. A. and Majborian, A. A., 2009, study of a gap wind in Speed road of Iran using a hydraulic model. Research. J. Envi. Sc., 3(2), 232-238.

After 2010

93. Rezapour, N., Fatahi, M. and Bidokhti, A. A., Possible soil thermal response to seismic activities in Alborz region (Iran). *Nat. Hazards Earth Syst. Sci.*, 10, 459–464, 2010.
94. Sadatabadi, A. R. and Bidokhti, A. A., 2010, Urbanization effects on local climate in Tehran Mega polis, *Research J. Envi. Sc.*, 5(1), 1-20.
95. Ezam, M., A. A. Bidokhti, and A. H. Javid, 2010, Numerical simulations of spreading of the Persian Gulf outflow into the Oman Sea. *Ocean Sci.*, 6, 887–900, doi:10.5194/os-6-887-2010.
96. Bidokhti, A.A and Ezam, M., 2010, On the dynamics and spreading pathway of the Persian Gulf outflow, *13ACFM*, 17-22 Dec. 2010, Dhaka, 107-112.
97. Mashayekhi, R., Irannejad, P., Aliakbari-Bidokhti, A.A., 2010, The simulation of aerosols and its radiative forcing using the new coupled system of aerosol HAM model with the Weather Research and Forecasting (WRF) model, *Journal of the Earth and Space Physics* 36 (2).
98. Gharaylo, M., Mazraeh Farahani, M., Aliakbari-Bidokhti, A.A. ,2010,Review of cumulus convective parameterization schemes in large and meso-scale models *Journal of the Earth and Space Physics* 36 (1).
99. Ghader, S., Aliakbari-Bidokhti, A.A., Falahat, S., 2010,Numerical solution of unsteady and non-linear Rossby adjustment problem using fourth-order compact MacCormack scheme , *Journal of the Earth and Space Physics* 36 (3).
100. Pegahfar, N., Bidokhti, A.A., Zawar-Reza, P., Farahani, M.M. , 2011, Study of vertical wind profiles in an urban area with complex terrain (Tehran) , *Journal of Earth System Science* 120 (5) , pp. 825-841.
101. Soltanzadeh, I., Zawar-Reza, P., Aliakbari-Bidokhti, A.A., Jalali, A.A., Torkzadeh, A.H. 2011,Study of local winds over Tehran using WRF in ideal conditions *Iranian Journal of Physics Research* 11 (2) , pp. 199-213 .
102. Ghader, S., Aliakbari-Bidokhti, A., Falahat, S. , 2011, Numerical solution of conservative form of two-dimensional compressible and non-hydrostatic equations of the atmosphere using second-order MacCormack method , *Journal of the Earth and Space Physics* 37 (2).
103. Sadighrad, E., Ahmadi-Givi, F., Bidokhti, A.A. 2011,Finite element modeling of surface layer circulation in the Caspian Sea *OCEANS'11 - MTS/IEEE Kona*, Program Book , art. no. 6106903.
104. Alijani, B., Mofidi, A., Jafarpour, Z., Bidokhti, A.-A. 2011Atmospheric circulation patterns of the summertime rainfalls of southeastern Iran during July 1994, *Journal of the Earth and Space Physics* 37 (3), pp. 205-227.
105. Bidokhti, A.-A., Ghader, S., Shahsavari, M. 2011,Numerical simulation of downslope flows in a confined stratified region *Journal of the Earth and Space Physics* 37 (3) , pp. 229-240.
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