BRIEF CURRICULUM VITAE

Constantinos G. Helmis

Marital Status: Married, three children

Place & Date of Birth: Piraeus, Greece, March 25, 1948.

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Organization of primary employment:

National & Kapodistrian University of Athens (NKUA)

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Title of primary employment: Professor

First Degree: BSc, University of Athens, Department of Physics, 1972

Post Graduate Titles: MSc in Electronics, University of Athens, 1975

MSc in Automation, University of Athens, 1976 PhD in Physics, University of Athens, 1981

Foreign Languages: English

Fields of Scientific and Professional activities:

- Atmospheric Physics
- Mean and turbulent structure of the Atmospheric Boundary Layer (ABL)
- Marine ABL, Air-Sea Interaction
- Local and meso-scale circulation (thermally and topographically)
- Design and development of direct (in-situ) and indirect (remote) meteorological instrumentation and techniques for ABL studies
- Urban air pollution (outdoor and indoor) Transboundary air pollution
- Climatology
- The Physics of buildings
- Air flow over complex terrain or behind a wind turbine
- Radio wave propagation

Publications

1	Publications in refereed journals	122
2	Publications in International Conferences	159
3	Publications in Workshops and Meetings	30
4	Publications in National Conferences	37
5	Technical Reports	94
6	Other publications	21

Teaching and Research experience:

- Teaching since 1974 at undergraduate and postgraduate Programmes of various Departments of NKUA and other Universities in Greece and abroad. The subjects taught are related with the previously mentioned fields of interest while lecturing notes for all these courses were available
- Supervision of eleven Ph.D.'s (eight have been completed), member of 15 Ph.D.'s Reading Committees and supervision of a large number of MSc (more than 30) and final year (more than 50) projects at the Department of Physics, NKUA
- Participation in 83 research project in Greece, England, U.S.A., Sweden, United Kingdom and Holland funded by various agencies. In 34 of the above I acted as Principal Investigator. Scientific collaboration with more than 40 Universities and Research Institutes abroad, in the frame of research projects
- Invited speaker at 15 International Conferences and 20 Workshops, Seminars, National Conferences. Participation in a large number of International Conferences and Workshops and presentation of seventy one papers.
- Participation in the European Environmental Agency (EEA) at the European Topical Center for Air Quality (ETC/AQ) for the period 1996-2000. The purpose of the work was the development of criteria for the design of the new European Air Quality Monitoring and Information Network (EUROAIRNET) and the evaluation of the networks and stations of different European countries, which were included in EUROAIRNET.
- Evaluator of research projects at National and European level. Chairman and member of International Scientific Committees. Chairman and Editor and Coeditor of the Edition of the Proceedings of International Conferences and Workshops on Environmental issues. Referee of 16 International Journals and Referee of Greek and Foreign Organizations, (Ministry of Education, Gen.Secr. for Research and Technology, EC, INTAS)
- Visits to various Universities and Research Centers (Washington D.C., Boulder, Colorado, Los Angeles, California) in the frame of the "United States Information Agency - International Visitor Programme" and "Fulbright Programme", during 1996 and 1980 respectively. Visits to Naval Postgraduate School (NPS), CA, USA, in the frame of scientific collaboration during summers 2001-2003, 2007-2008 (6 months sabbatical) in the frame of CBLAST-Low project and 2012 in the frame of DYNAMO project
- Over of 1.750 citations on publications in International Scientific Journals, excluding self-citations.

Related professional experience:

- 1. Chairman of the Department of Physics, NKUA (2008-2012)
- **2.** Vice President of the Board of the Committee of the Special account for Research (2010-2013) and member of the same Committee (2007-2010)
- **3.** Director of the Division of Applied Physics, Department of Physics, University of Athens (2000-2007)
- **4.** Head of the Lab. of Meteorology of Athens University (1997-2000)
- **5.** Vice President of the Board of Directors of the Centre of Renewable Energy Sources (CRES) for the period 1997-2000.

- **6.** Consultant for the Greek Public Power Corporation for coordination the cooperation between Greek Universities, Research Centres and the PPC (1985-1986) on environmental issues
- 7. Member of the Council of Scientists-INTAS (International Association for the promotion of cooperation with scientists from the Independent States of the former Soviet Union) for the period 1996-1998.
- **8.** Founding member and board member of the Greek Wind Energy Association (1990-1993). Member of the Hellenic Meteorological Society, the European Wind Energy Association (EWEA) and the European Environmental Research Organisation (EERO)
- **9.** Board member (1988-1991 and 1997-1999) and President (1994-1996) of the Board of the Greek Physical Society.
- **10.** Participation in Scientific Committees, Organisation of Scientific Conferences and Seminars and Institutional Representative

PUBLICATIONS

INTERNATIONAL SCIENTIFIC JOURNALS

- 1. Asimakopoulos D.N., Lalas D.P., **Helmis C**. and Caroubalos C., 1980: "An atmospheric turbulence Probe", <u>IEEE-Geoscience and Remote Sensing</u>, GE-18 (4), pp 347-353.
- 2. Lalas D.P., Asimakopoulos D.N., Deligiorgi D.G. and **Helmis C.G.**, 1983: "Sea breeze circulation and photochemical pollution in Athens, Greece", <u>Atmospheric Environment</u>, 17 (9), pp 1621-1632.
- 3. **Helmis C.G.**, Asimakopoulos D.N., Caroubalos C.A., Cole R.S., Medeiros Filho E.C. and Jayasuriya D.A.R., 1983: "A Quantitative comparison of the refractive index structure parameter determined from refractivity measurements and amplitude scintillation measurements at 36 GHz, "IEEE-Geoscience and Remote Sensing, GE-21 (2), pp 221-224.
- 4. Asimakopoulos D.N., Moulsley T.J., **Helmis C.G.**, Lalas D.P. and Gaynor J. 1983: "Quantitative low level acoustic Sounding and comparison with direct measurements", <u>Boundary Layer Meteorology</u>, 27 (1), pp 1-26.
- 5. Medeiros Filho F.C., Jayasuriya D.A.R., Cole R.S. and **Helmis C.G**. 1983: "Spectral density of millimetre wave amplitude scintillations in an absorption region", <u>IEEE Trans. on Antennas and Propagation</u>, AP-31 (4), pp 672-676.
- 6. **Helmis C.G.**, Asimakopoulos D.N., Lalas D.P. and Moulsley T.J., 1983: "On the local isotropy of the Temperature field in an urban area" <u>Journal of Climate and Applied Meteorology</u>, 22 (9), pp 1594-1601.
- 7. Lalas D.P., Asimakopoulos D.N., Deligiorgi D.G. and **Helmis C.G.**, 1984: "Sea breeze circulation and photochemical pollution in Athens, Greece", Reply, <u>Atmospheric Environment</u>, 18, pp 1037-1038.
- 8. **Helmis C.G.**, Asimakopoulos D.N. and Cole R.S., 1985:"A low-level atmospheric vertical velocity comparison between a high resolution acoustic sounder and a turbulence probe", IEEE-Geoscience and Remote Sensing, GE-23 (2), pp 164-170.
- 9. Moulsey T.J., Asimakopoulos D.N., **Helmis C.G.**, Lalas D.P. and Gaynor J., 1985: "A quantitative comparison of horizontal and vertical acoustic sounding with in-situ measurements", <u>Boundary Layer Meteorology</u>, 33 (1), pp 85-100.
- 10. Asimakopoulos D.N., **Helmis C.G.**, and Stephanou G.I., 1987:"Atmospheric acoustic mini-Sounder", <u>Journal of Atmospheric and Oceanic Technology</u>, 4, pp 345-347.
- 11. **Helmis C.G.**, Asimakopoulos D.N., Deligiorgi D.G. and Lalas D.P., 1987: "Observations of the sea-breeze front structure near the shoreline", <u>Boundary Layer Meteorology</u>, 38 (4), pp 395-410.
- 12. Lalas D.P., Tombrou-Tsella M., Petrakis M., Asimakopoulos D.N. and **Helmis C.G.**, 1987: "An experimental study of horizontal and vertical distribution of ozone over Athens", <u>Atmospheric Environment</u>, 21 (12), pp 2681-2693.

- 13. Medeiros F.C., Jayasuriya D.A.R., Cole R.S., **Helmis C.G**. and Asimakopoulos D.N., 1988: "Correlated humidity and temperature measurements in the urban atmospheric boundary layer", <u>Meteorology and Atmospheric Physics</u>, 39 (3-4), pp 197-202.
- 14. Hogstrom U., Asimakopoulos D.N., Kambezidis H., **Helmis C.G**. and Smedman A., 1988: "A field study of the wake behind a 2 MW wind turbine", <u>Atmospheric Environment</u>, 22 (4), pp 803-820.
- 15. Deligiorgi D.G., **Helmis C.G.**, Asimakopoulos D.N. and Lalas D.P., 1989: "Quantitative acoustic sounding from the top of a steep mountain", <u>International Journal of Remote Sensing</u>, 10 (1), pp 211-226.
- 16. **Helmis C.G.**, Asimakopoulos D.N., Deligiorgi D.G. and Petrakis M., 1990: "Some observations on the destruction of the morning temperature inversions in a large and broad mountain valley", <u>Journal of Applied Meteorology</u>, 29 (5), pp 396-400.
- 17. Kambezidis H.D., Asimakopoulos D.N.and **Helmis C.G.**, 1990: "Wake measurements behind a horizontal-axis 50 kw wind turbine" <u>Solar and Wind Technology</u>, 7 (2-3), pp 177-184.
- 18. Amanatidis G.T., Papadopoulos K.H., Bartzis J.G. and **Helmis C.G.**, 1992: "Evidence of katabatic flows deduced from a 84m meteorological tower in Athens, Greece", <u>Boundary Layer Meteorology</u>, 58 (1-2), pp 117-132.
- 19. Asimakopoulos D., Deligiorgi D., Drakopoulos C., **Helmis C**., Kokkori K., Lalas D, Sikiotis D. and Varotsos C., 1992: "An experimental study of night-time air-pollutant transport over complex terrain in Athens", <u>Atmospheric Environment Part B. Urban Atmosphere</u>, 26 (1), pp 59-71.
- 20. Varotsos C., **Helmis** C. and Cartalis C., 1992: "Annual and semi-annual waves in ozone as derived from SBUV vertical Global ozone profiles", <u>Geophysical Research Letters</u>, 19 (9), pp 925-928.
- 21. Papadopoulos K.H., **Helmis C.G**. and Amanatidis G.T., 1992: "An analysis of wind direction and horizontal wind component fluctuations over complex terrain", <u>Journal of Applied Meteorology</u>, 31 (9), pp 1033-1040.
- 22. Varotsos C. and **Helmis C.G.**, 1992: "Deviations of the temperature models derived by remote and in situ sensing techniques for the global middle Atmosphere", <u>Int. Journal of Remote Sensing</u>, 13 (16), pp 3127-3133.
- 23. Varvayianni M., Bartzis J.G., **Helmis C.G**. Asimakopoulos D.N., 1993: "Simulation of the sea breeze under opposing synoptic conditions", Environmental Software, 8 (1), pp 19-27.
- 24. Asimakopoulos D.N., **Helmis C.G.**, Petrakis M. and Tombrou M., 1993: "Atmospheric Boundary Layer field measurements over coastal areas", <u>Environmental Software</u>, 8 (1), pp 9-18.
- 25. Kalogiros J.A. and **Helmis C.G.**, 1993: "Fast Response Humidity Measurements with the Psychrometric Method", <u>Journal of Applied Meteorology</u>, 32 (9), pp 1499-1507.
- Papageorgas P.G., Helmis C.G., Soilemes A.T., Asimakopoulos D.N. and Metaxaki-Kosionides C. 1993: "Real-Time color display techniques for High Resolution Acoustic Sounder Echoes", <u>Applied Physics</u>, B57, pp 37-39.
- 27. Soilemes A., **Helmis C.G.**, Papageorgas P. and Asimakopoulos D.N. 1993: "A tethered balloon profiler system", <u>Measurement Science and Technology</u>, 4 (10), pp 1163-1167.
- Varvayianni M., Helmis C.G., Amanatidis G.T., Asimakopoulos D.N., Bartzis J.G., Soilemes A., Papadopoulos K.H. and Kambezidis H.D., 1993: "Effects of onshore and offshore topography on sea breeze circulation: an observational study at Eastern Attica, Greece" <u>Pure and Applied Geophysics (PAGEOPH)</u>, 140, pp 681-720.
- 29. Asimakopoulos D.N. & **Helmis C.G.**, 1994: "Recent advances on Atmospheric Acoustic Sounding", (a review paper) Int. Journal of Remote Sensing, 15 (2), pp 223-233
- 30. **Helmis C.G.**, Deligiorgi D.G., Asimakopoulos D.N. and Lalas D.P., 1994: "Evidence of sea breeze flow at the top of Hymettus mountain", <u>Int. Journal of Remote Sensing</u>, 15 (2), pp 479-487.
- 31. Asimakopoulos D.N., **Helmis C.G.** and Deligiorgi D.G., 1994: "Climatological evaluation of Sodar recordings over complex terrain", <u>Int. Journal of Remote Sensing</u>, 15 (2), pp 383-392.
- 32. **Helmis C.G.**, Kalogiros J.A., Papadopoulos K.H., Soilemes A.T. and Asimakopoulos D.N., 1994: "Estimation of the atmospheric surface momentum and heat fluxes using a high resolution Acoustic Radar". Journal De Physique, 4 (5), pp 287-290.
- 33. **Helmis C.G.**, Papadopoulos K.H., Asimakopoulos D.N., Papageorgas P.G. and Soilemes A.T., 1995: "An experimental study of the near wake structure of a wind turbine operating over complex terrain", <u>Solar Energy</u>, 54 (6), pp 413-428.

- 34. **Helmis C.G.**, Kalogiros J.A., Asimakopoulos D.N., Papadopoulos K.H. and Soilemes A., 1995: "Acoustic Sounder measurements of atmospheric turbulent fluxes on the shoreline". <u>The Global Atmosphere-Ocean System</u>, 2, pp 351-362.
- 35. Kalogiros J.A. and **C.G. Helmis**, 1995: "Second-Order Spectral Local Isotropy of the Humidity and Temperature fields in an Urban Area", <u>Quarterly Journal of the Royal Meteorological Society</u>, 121 (523), pp 545-567.
- 36. **Helmis C.G.**, Papadopoulos K.H., Kalogiros J., Soilemes A.T. and Asimakopoulos D.N., 1995: "The influence of the background flow on the evolution of the Saronic Gulf Sea Breeze", <u>Atmospheric Environment</u>, 29 (24), pp 3689-3701.
- 37. Triantafyllou A.G., **Helmis C.G.**, Asimakopoulos D.N. and Soilemes A.T., 1995: "Boundary layer evolution over a large and broad mountain basin", <u>Theoretical and Applied Climatology</u>, 52 (1-2), pp 19-25.
- 38. Papadopoulos K.H., **Helmis C.G.**, Soilemes A.T., Papageorgas P.G. and Asimakopoulos D.N., 1995: "Study of the turbulent characteristics of the near-wake field of a medium-sized turbine operating in high wind conditions" <u>Solar Energy</u>, 55 (1), pp 61-72.
- 39. Kalogiros J.A., **Helmis C.G.**, Asimakopoulos D.N., Papageorgas P.G. and Soilemes A.T., 1995: "A Layer Detection and Classification Algorithm for Sodar Facsimile Records", <u>Int. Journal of Remote Sensing</u>, 16 (15), pp 2939-2954.
- 40. Dascalaki E., Santamouris M., Argiriou A., **Helmis C.G.**, Asimakopoulos D.N., Papadopoulos K. and Soilemes A., 1995: "Predicting single side natural ventilation rates in buildings", <u>Solar Energy</u>, 55, pp 327-341.
- 41. Whale J., Papadopoulos K.H., Anderson C., **Helmis C.G.**, Skyner D.J. 1996: "A study of the near wake structure of a wind turbine comparing measurements from laboratory and full-scale experiments", <u>Solar Energy</u>, 56 (6), pp 621-633.
- 42. Papadopoulos K.H., Soilemes A.T., **Helmis C.G.**, Asimakopoulos D.N. Santamouris M., Argiriou A. and Dascalaki E., 1996: "A triple Hot-Wire system for indoor air flow measurements", <u>Journal of Solar Energy Engineering</u>, 118 (3), pp 168-176.
- 43. Asimakopoulos D.N., **Helmis C.G.**, and Petrakis M., 1996: "Mini Acoustic Sounding A powerful tool for ABL applications, recent advances and applications of Acoustic Mini Sodars", <u>Boundary Layer Meteorology</u>, 81 (1), pp 49-61.
- 44. **Helmis C.G.**, K.H. Papadopoulos, 1996: "Some aspects of the variation with time of Katabatic flow over a simple slope", <u>The Quarterly Journal of the Royal Meteorological Society</u>, 122 (531), pp 595-610.
- 45. Dascalaki E., Santamouris M., Argiriou A., **Helmis C.G.**, Asimakopoulos D.N., Papadopoulos K. and Soilemes A., 1996: "On the combination of air velocity and flow measurements in single sided natural ventilation configurations", <u>Energy and Buildings</u>, 24 (2), pp 155-165.
- 46. **C.G. Helmis**, Tombrou M., Asimakopoulos D.N., Soilemes A., Gósten H., Moussiopoulos N. and Hazaridou A.,1997:"Thessaloniki '91 Field Measurement Campaign; Part I: Wind field and Atmospheric Boundary Layer structure over the Greater Thessaloniki Area under light background flow", <u>Atmospheric Environment</u>, 31 (8), pp 1101 -1114.
- 47. **Helmis C.G.**, Papageorgas P.G., Asimakopoulos D.N., Tombrou M., and Petrakis M., 1997: "Evaluation of mini-sodar performance operating in high wind conditions", <u>International</u> Journal of Remote Sensing, 18 (11), pp 2289-2302.
- 48. **Helmis C.G.**, Asimakopoulos D.N., Papadopoulos K.H., Kalogiros J.A., Kassomenos P., Papageorgas P.G. and Blikas S., 1997: "Air mass exchange between the Athens Basin and the Messogia Plain of Attika, Greece", <u>Atmospheric Environment</u>, Vl. 31 (22), pp. 3833-3849.
- 49. K.H. Papadopoulos, **Helmis C.G.**, Soilemes A., Kalogiros J., Papageorgas P. and Asimakopoulos D.N., 1997: "The structure of katabatic flows down a simple slope", Quarterly Journal of the Royal Meteorological Society, 123 (542), pp 1581-1601.
- 50. H.A. Flocas, **C.G. Helmis**, S.N. Blikas, D.N. Asimakopoulos, J.G. Bartzis, D.G. Deligiorgi, 1998: "Mean Characteristics of the katabatic flow of a 1024m high knife edge mountain", <u>Theoretical and Applied Climatology</u>, 59 (3-4), pp 237-249.
- 51. Kalogiros, J.A. and C. G. Helmis, 1999: "Automatic Detection of fixed echoes in Sodar Facsimile records using the Wavelet Transform", <u>Journal of Atmospheric and Oceanic Technology</u>, 16 (6), pp 734-738.
- 52. Papadopoulos, K.H., A.T. Soilemes, C.G. Helmis, and P.G. Papageorgas, 1999: "A hot-wire based research atmospheric turbulence probe: design analysis and performance", Measurement: Journal of the International Measurement Confederation, 25 (1), pp 53-69.
- 53. Asimakopoulos, D.N., C.G. Helmis, K.H. Papadopoulos, J.A. Kalogiros, P. Kassomenos and

- M. Petrakis 1999: "Inland propagation of sea breeze under opposing offshore wind", Meteorology and Atmospheric Physics, 70 (1-2), pp 97-110.
- 54. Papadopoulos K.H. and **C.G. Helmis**, 1999: "Evening and morning transition of katabatic flows" <u>Boundary-Layer-Meteorology</u>, 92 (2), pp 195-227.
- 55. Kalogiros J.A., C.G. Helmis, D.N. Asimakopoulos and P.G. Papageorgas 1999: "Estimation of the ABL parameters using the vertical velocity measurements of an Acoustic Sounder", <u>Boundary-Layer-Meteorology</u>, 91 (3), pp 413-449.
- 56. **Helmis C.G.**, J.A., Kalogiros, D.N. Asimakopoulos and A.T. Soilemes, 2000: "Estimation of potential Temperature Gradient in turbulent stable layers using Acoustic Sounder Measurements", Quarterly Journal of the Royal Meteorological Society, 126 (562), pp 31-61.
- 57. **Helmis C.G.**, H. A. Flocas, J.A. Kalogiros and D.N. Asimakopoulos, 2000: "Strong down slope winds and application of hydraulic-like theory", <u>Journal of Geophysical Research</u> Climate and Physics of the Atmosphere, 105 (D14), pp 18039-18051.
- 58. Koloutsou-Vakakis S., **Helmis C.G.**, Asimakopoulos V. and Gusten H., 2001: "Middle and lower troposphere aerosol characteristics and ozone concentrations over northwestern Greece during STAAARTE 1997", <u>Atmospheric Environment</u>, 35 (8), pp 1517-1526.
- 59. **Helmis C.G.**, Jakovides C., Asimakopoulos D.N. and Flocas H.A., 2002: "Experimental study of the vertical structure of the lower troposphere over a small island in the Aegean Sea, Greece", <u>Journal of Atmospheric and Oceanic Technology</u>, Vol. 19 (8), pp 1181-1192.
- 60. Mihalakakou G., Flocas H.A., Santamouris M. and **Helmis C.G.**, 2002: "Application of Neural Networks to the simulation of the Heat-Island over Athens, Greece, using synoptic types as a Predictor", <u>Journal of Applied Meteorology</u>, 41 (5), pp 519-527.
- 61. **Helmis C.G.**, Moussiopoulos N., Flocas H.A., Sahm P., Assimakopoulos V.D., Naneris C.and Maheras P., 2003: "Estimation of Transboundary Air Pollution on the basis of Synoptic Scale Weather Types", <u>International Journal of Climatology</u>, 23 (4), pp 405-416.
- 62. Assimakopoulos V.D. and **Helmis C.G.**, 2003: "Sodar Mixing Height estimates and Air Pollution characteristics over a mediterranian big city" <u>Environmental Technology</u>, Vol. 24 (10), pp. 1191-1200.
- 63. Flocas H.A., Assimakopoulos V.D., **Helmis C.G.** and Gusten H., 2003: "VOCs and O₃ distributions over the densely populated area of Greater Athens, Greece" <u>Journal of Applied Meteorology</u>, , 42 (12), pp 1799-1810.
- 64. Asimakopoulos D.N., **Helmis C.G**.and Mihopoulos J., 2004: "Evaluation of Sodar Methods for the Determination of the Atmospheric Boundary Layer Mixing Height", <u>Meteorology and Atmospheric Physics</u>, 85 (1-3), pp 85-92.
- 65. Moussiopoulos N., **Helmis C.G.**, Flokas H.A., Louka P., Assimakopoulos V.D., Naneris C. and Sahm P. 2004: "A Modelling Method for estimating Transboundary Air Pollution in South-Eastern Europe" <u>Environmental Modelling and Software</u>, 19 (6), pp 549-558.
- 66. Assimakopoulos V.D. and **Helmis C.G**. 2004: "On the study of a Sick Building-The case of the Athens Air Traffic Control Tower" <u>Journal of Energy and Buildings</u>, Vol. 36 (1), 1, pp. 15-22.
- 67. Halios C., Assimakopoulos V.D., **Helmis C.G**. and Flocas H.A., 2005: "Investigating Cigarette-Smoke Indoor Pollution in a Controlled Environment". <u>The Science of the Total Environment</u>, Vol. 337, pp 183-190.
- 68. Mitsakou C., **Helmis C.G**. and Housiadas C., 2005: "Eulerian modelling of Lung Deposition with Sectional Representation of Aerosol Dynamics", <u>Journal of Aerosol Science</u>, Vol. 36/1, pp. 75-94.
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- 70. Ch. Vassilakos, D. Saraga, Th. Maggos, J. Michopoulos, S Pateraki and C. G. Helmis, 2005: "Temporal variations of PM_{2.5} in the ambient air of a suburban site in Athens", <u>Science of the Total Environment</u>, 349, pp 223-231.
- 71. **Helmis C.G.**, C.H. Halios, G. Sgouros, G. Katsouvas and Q. Wang, 2005: "On the mean vertical structure of the marine Atmospheric Boundary Layer", <u>WSEAS Transactions on Environment and Development</u>, Issue 2, Vol. 1, pp 199-204.
- 72. Halios C.H. and **Helmis C.G**., 2005: "An Indoor Air Quality study regarding outdoor originating pollutants", <u>IASME Transactions Issue</u> 4, Vol. 2, pp 646-650.
- 73. Flocas H.A., Assimakopoulos V.D. and **Helmis C.G.**, 2006: "An experimental study of aerosol distribution over a Mediterranean urban area", <u>Science of the Total Environment</u>,

- 367, pp 872-887.
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- 75. Petrakakis, M., Kelessis, A., Flocas, HA., Zoumakis, N., **Helmis, CG**., Tsougas, M., 2006: "Meteorological conditions during air pollution episodes in Thessaloniki, Greece", <u>Fresenius Environmental Bulletin</u>, Vol. 15, No 8b, pp 916-922.
- Maggos, Th., J. Bartzis, D. Kotzias, Ch. Vassilakos, Ch. Agriodimas, J. Michopoulos and C. G. Helmis, 2006: "Traffic related air pollution measurements in two streets with different geometry in Athens Greece", <u>Fresenius Environmental Bulletin</u>, Vol. 15, No 8b, pp 910-915.
- 77. **Helmis C. G.**, Q. Wang, G. Katsouvas, Z. Gao, C.H. Halios, J.A. Kalogiros, S.W. Wang, G. Sgouros and J. Edson, 2006: "On the turbulent structure of the marine Atmospheric Boundary Layer from CBLAST Nantucket measurements", <u>Global NEST Journal</u>, Vol. 8, No 3, pp 210-217.
- 78. Vassilakos, Ch., S Pateraki, D. Veros, Th. Maggos, J. Michopoulos, D. Saraga and C. G. Helmis, 2007: "Temporal determination of heavy metals in PM_{2.5} aerosols in a suburban site of Athens, Greece", <u>Journal of Atmospheric Chemistry</u>, 57, pp 1-17.
- 79. Mitsakou, C., Housiadas, C., Eleftheriadis, K., Vratolis, S., **Helmis C.**, and Asimakopoulos, D., 2007: "Lung deposition of fine and ultrafine particles outdoors and indoors during a cooking event and a no activity period", <u>Indoor Air</u>, Vol. 17, pp 143-152.
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- 81. Katsouvas G.D., **C.G. Helmis** and Q. Wang, 2007: "Quadrant analysis of the Scalar and Momentum Fluxes in the stable marine Atmospheric Surface Layer", <u>Boundary Layer Meteorology</u>, 124, pp 335-360.
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- 2. Participation with an article on "Mini Acoustic Sounding, a powerful tool for ABL applications-recent advances" in the special edition "Acoustic Remote SensingApplications" edited by S.P. Singal, 1997 Narossa Publishing House, pp 850.
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