

## CURRICULUM VITAE

### DIAMANDO VLACHOGIANNIS

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<b>Address:</b> Chrisolora 3-5, Gerakas 153 44, Greece	<b>Date of Birth:</b> 4-4-1969
<b>Tel:</b> 210 6503417; 6947278844	<b>Marital Status:</b> Married, 2 children
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#### Expertise

Atmospheric Physics; Coordination and Management of Collaborative R&D large scale Projects with the participation of European industries and Academic entities; Funded by the EC: DG-Research and DG-Energy and Transport and National (Greek) Funding Entities.

#### Scientific and Research Interests

- Atmospheric Physics with applications in Environmental Quality and Climatic Change.
- Atmospheric modelling (2D- and 3D-codes).
- Studies of impact of Energy Processes on the Environment.
- Study of distribution of greenhouse gases and their impact on global change.
- Emission Inventories and urban pollution.
- Climatology on local and regional scale.
- Application of Artificial Neural Networks for atmospheric dispersion studies.
- Hydrogen Economy - Environmental Implications.
- Mechanisms of ozone depletion in the stratosphere.
- Atmospheric data processing (meteorological and air quality) of the troposphere and stratosphere. Remote Sensing and Earth Observation.
- Scientific involvement in numerous EC and National funded collaborative R&D projects.

#### Current Employment

**Senior Researcher:** National Centre for Scientific Research “Demokritos”;  
Environmental Research Laboratory, Institute of Nuclear Technology-Radiation Protection, 153 10,  
Ag-Paraskevi, Attikis (Greece).

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#### Education

**1993-1997:** Ph.D. in Atmospheric Physics and Diploma of Imperial College (DIC), (Imperial College of Science, Technology and Medicine, London).

**1992-1993:** MSc. and Diploma in Remote Sensing. University College London and Imperial College, London.

**1989-1992:** Astrophysics B.Sc. (Honours) First Class. University College London.

## **Working experience**

**2010-today:** Senior Researcher at NCSR "Demokritos", in the Environmental Research Laboratory of the Institute of Nuclear Technology, Radiation-Protection.

**2006-2010:** Associate Researcher at NCSR "Demokritos", in the Environmental Research Laboratory of the Institute of Nuclear Technology, Radiation-Protection.

**2001-2006:** Research Scientist, at NCSR "Demokritos", in the Environmental Research Laboratory of the Institute of Nuclear Technology, Radiation-Protection.

**1998-2001:** Research Associate, at NCSR "Demokritos", in the Environmental Research Laboratory of the Institute of Nuclear Technology, Radiation-Protection.

**1993-1997:** Research Assistant, at Imperial College, London, in the Space and Atmospheric Physics Group, Physics Department, South Kensington campus, London SW7 2AZ, UK .

## **Experience in Project Management**

**2010-2013:** Coordinator of the Research Project (Study of climatic changes and atmospheric pollution in Greece: Evaluation of the environmental and social-economic impact on local scale) funded by the General Secretariat of Research and Technology (National Strategic Framework, ESPA 2007-2013), Ministry of Education.

**2009-2010:** Scientific person in charge in the project "Measurements and Dispersion Modelling of Air Pollutants from the PAPASTRATOS industry", Service Contract with Papastratos Cigarette Manufacturing Company.

**2009:** Coordinator of the project "The Study of Impact of Atmospheric Dispersion of Volatile Organic Compounds (VOC) Concentrations from an Oil Storage Tank Farm of the Construction Project "Burgas – Alexandroupoli Pipeline And Associated Installations / Greek Part", Near The City Of Alexandroupoli"; Service Contract with ILF Beratende Ingenieure GmbH.

**2009:** Coordinator of the project "Study of atmospheric concentrations and dispersion of pollutants from the Coproduction Electricity and Thermal Power Station in the area of Serres, (Greece); Service Contract with ECOMED & Associates.

**2008-2009:** Coordinator of the project "Study of the atmospheric concentrations and dispersion of pollutants from the Coproduction Electricity and Thermal Power Stations along the Greek-Italian natural gas pipeline (IGI); Service contract with DESFA Inc.

**2006-2008:** Coordinator of the Research Project (ETHIR) funded by the General Secretariat of Research and Technology, Greek Ministry of Development.

**2001-2004:** Coordinator of the EC Research Project (5FP) AEOLOS, contract number ENK6-CT-2001-00501, Title: "Assessment of Impact of SF6 and PFC Reservoir Tracers on Global Warming".

**1998-to date:** Management support of numerous EC (FP4, FP5, FP6, FP7) funded RTD projects and Thematic Networks with collaborators from the European Industry and Academic Research Institutes.

## **Other Experience**

**May 2009:** Invited by the EC FP7 Evaluator: Evaluator of Proposals submitted under the IRSES (PEOPLE Programme - the Marie Curie International Research Staff Exchange Scheme, FP7-PEOPLE-2009-IRSES). Appointment Letter: CT-EX2002B065282-101.

**February 2010:** Invited by the RESEARCH PROMOTION FOUNDATION OF CYPRUS Evaluator: Evaluator of Proposals submitted under the FP for Research, Technological Development and Innovation 2009-2010 (Action: Public Health).

**May 2010:** Invited by the EC FP7 Evaluator: Evaluator of Proposals submitted under the IRSES (PEOPLE Programme - the Marie Curie International Research Staff Exchange Scheme, FP7-PEOPLE-2010-IRSES). Appointment Letter: CT-EX2002B065282-102.

### **Research Collaborations with Academic Entities**

1. ICSTM, Imperial College of Science, Technology and Medicine, University of London, UK.
2. UCL, University College London, University of London, UK.
3. IFE, Institute For Energy Technology, Norway.
4. ARCS, Austrian Research Centers, Austria.
5. AEA Technology-Environment, Oxfordshire, UK.
6. IVL, Swedish Environmental Research Institute, Sweden.
7. JRC Ispra, Joint Research Centre, Italy; .
8. University of Aveiro, Portugal.
9. Technical University of Graz, Austria.
10. Meteorological Institute of Hamburg, Germany.
11. Ecole Polytechnique Fédérale de Lausanne, Switzerland.
12. VITO, Flemish Institute for Technological Research, Belgium.
13. Mullard Space and Science Laboratory, UK.
14. Universidad Politecnica de Madrid, Spain.
15. Vrije Universiteit Brussels, Belgium.
16. University of Karlsruhe, Germany.
17. Netherlands Organisation for Applied Research , TNO.
18. The University of Hertfordshire.
19. Universidad de Santiago de Chile.

### **Research Collaborations with the Industry**

1. STATOIL ASA, Norway;
2. SFT, Norwegian Pollution Control Authority, Norway;
3. Atkins Process, Surrey, UK;
4. Metria Miljoanalys, Sweden;
5. ASL di Lecco, Lecco, Italy;
6. TerrAria srl, Milano, Italy;
7. Regione Lombardia, Italy;
8. Manager of Natural Gas System DESFA Inc.;
9. ECOMED Kollias & Associates;
10. Papastratos (Cigarette Manufacturing Industry);
11. ILF Beratende Ingenieure GmbH;
12. Sira Ltd., UK;

### **Financial Awards**

1992-1993: Science and Engineering Research Council (SERC) Studentship, Britain.  
1993-1996 : Science and Engineering Research Council (SERC) Studentship, Britain.  
1994-1996: British Meteorological Office Award.

### **Languages**

Native Greek; English (professional level).

### **Other skills**

Programming language: FORTRAN

Programming and development of web pages using *html*.  
PC platforms, Microsoft Office, UNIX, LINUX, UNIGRAPH, TECPLOT.

### Society Member

Member of the Institute of Physics (London) since 2001 (Membership Grade AFPW).  
Member of the Royal Meteorological Society, UK (1992-1997).

### Scientific Research Projects

12/2010-11/2013	<b>Coordinator</b> of the Research Project (Study of climatic changes and atmospheric pollution in Greece: Evaluation of the environmental and social-economic impact on local scale) funded by the General Secretariat of Research and Technology (National Strategic Framework, ESPA 2007-2013), Ministry of Education.
11/09-	<b>FAIRMODE</b> - Forum for Air Quality Modelling (Joint response action of the European Environment Agency (EEA) and the European Commission Joint Research Centre (JRC) towards the new Air Quality Directive)- Preparation of Benchmarking exercise (emission inventories and air quality modelling).
2009-2011	<b>REGPOT-PERL</b> , Enhancing the Research Potential of the NCSR “Demokritos” Environmental Research Laboratory in the European, National and Regional Research Areas, (Coordination and Support Action, Grant Agreement nu 229773. Μέλος της ερευνητικής ομάδας της Ποιότητας της Ατμόσφαιρας (Air Quality).
2006-2008	<b>Coordinator of the</b> Research Project (ETHIR) funded by the Greek General Secretariat of Research and Technology.
2001- 2004	<b>Coordinator</b> of the European Community research project “Assessment of Impact of SF6 and PFCs Reservoir Tracers on Global Warming” (AEOLOS, Contract No: ENK6-2001-00501), of total budget 1.91 MEuro, and participation of Institute for Energy Technology (Norway), STATOIL (Norway), MOL Hungarian Oil and Gas (Hungary), Norwegian Environmental Authority (Norway), Imperial College (UK).  <b>Research involvement</b> in the following projects funded by the EC or National Greek Organisations:
2002-2005	OSCAR - Optimised Expert System for Conducting Environmental Assessment of Urban Road Traffic (EVK4-CT-2002-00083)
2001- 2004	BOND – Biogenic Aerosols and Air Quality in the Mediterranean Area (EVK2-CT-2001-00107)
2001-2004	AEOLOS – Assessment of Impact of SF6 and PFCs Reservoir Tracers on Global Warming (ENK6-CT-2001-00501)
2000-2003	REVEAL-Remote Measurement of Vehicle Emissions at Low Cost (EU: Growth-1999-10657)
2000	Study of the diffusion and dispersion of air pollutants from the power electricity unit of Limnos (National Establishment of Electricity, 15/2/2000)
2000-2004	QNET-CFD-A Thematic Network for Quality and Trust in the Industrial Application of Computational Fluid Dynamics (EU: GTC1-1999-10030)
2000-2002	Development of advanced methods for the air pollution prognosis in areas of complex topography, building and urban street geometry. (Greek Ministry of Development; 7EA-77, EIET-II)
1999-2001	IMPRESAREO (Improving the Spatial Resolution of Air Emissions Inventories using Earth Observation Data) (EU: ENV-4-CT98-0752)
1999	RODOS-Real time On line DecisiOn Support system for nuclear emergencies, (EU: FI4P-CT95-0007)

1998-1999	BEMA-Biogenic Emissions in the Mediterranean Area (JRC:14212-198-08 FIED ISP GR)
1998	MESOCOM-Mesoscale Model Intercomparison (JRC-ISPRA)
<b>Management Support of the following research projects of EC funding:</b>	
2009-2011	REGPOT-PERL, Enhancing the Research Potential of the NCSR “Demokritos” Environmental Research Laboratory in the European, National and Regional Research Areas, (Coordination and Support Action, Grant Agreement nu 229773.
2005-2010	NESSHY: Novel Efficient Solid Storage for Hydrogen (IP, FP6 518271)
2006-2008	HySIC: Enhancing International Cooperation in running FP6 Hydrogen Solid Storage activities.
2002-2005	HYSTORY, Hydrogen Storage in Hydrides for Safe Energy Systems, (ENK6-CT-2002-00600)
2002-2006	ENVITRACER, Development of Environmentally Friendly Tracer Technology for Improved Reservoir Description (ENK6-CT2002-00602)
2002-2005	MOREOIL, Evaluation of the Miscible Gas Injection in Oil Reservoirs by Monitoring the Asphaltene Concentration (NNE5-2001-250)
2001-2004	ARISSTON, Development and Validation of an integrated numerical tool for scaling control and squeeze treatment optimization (ENK6-2000-00052)
2000-2004	QNET-CFD-A Thematic Network for Quality and Trust in the Industrial Application of Computational Fluid Dynamics (EU: GTC1-1999-10030)
1999-2001	QUOWADIS Tool For Quantifying Toxic Organic Solutes In Discharge Waters From Petroleum Platforms Using Integrated Approach (NNE5-1999-359)
1999-2002	ADONIS-Advanced Determination of Drainage Patterns and Unswept Oil from Natural Oil Components (EU: OG/277/98/HE/UK/NO/FR)
1999- 2000	TRACESIM-Advanced Tracer Simulation module to improve Oil Recovery (EU: OG/00007/97/HE/NO/FR)
1999-2000	HEADCARE-Heterogeneous and Damaged Core Analysis for Reservoir Evaluation (EU: OG/263/98/HE/NO/FR)

### Total Scientific Production

Number of publications in international refereed journals: 14  
 Number of publications in referred conference proceedings: 35  
 Number of Final Technical Reports: 26  
 Number of other technical reports: more than 40  
 Average “Impact Factor” (of published articles): 3.1 (2008)  
 Number of collective publications: 11

### Publications in Scientific Journals

1. A. Sfetsos and D. Vlachogiannis, “A new approach to discovering the causal relationship between meteorological patterns and PM<sub>10</sub> exceedances”, *Atmospheric Research*, Vol 98, Issues 2-4, 400-511, 2010.
2. A. Sfetsos and D. Vlachogiannis, “A comparison of different methodologies for the regulatory forecasting of PM10. Application in the Greater Athens Area”, *Atmospheric Environment*, Vol 44, Issue 26, 3159-3172, 2010.
3. A. Sfetsos, D. Vlachogiannis, Time series forecasting of hourly PM10 using Localized Linear Models, *Journal of Software Engineering and Application*, Vol 3, 374-383, 2010.

4. S. Andronopoulos, A. Sfetsos, D. Vlachogiannis, A. Yiotis and N. Gounaris, Application of adjoint CMAQ chemical transport model in the Athens Greater Area: sensitivities study on ozone concentrations, submitted to *IJEP (International Journal of Environmental Pollution)*, 2009.
5. Ch. Economides, D. Keramidas, A. Demertzi, N. Stromplos, A. Sfetsos, D. Vlachogiannis, The compilation of a Greek Environmental Input Output matrix for 2005 and its application as a methodological framework for assessing emission reduction options. *Accepted for publication in Spoudai*, 2009.
6. P. Neofytou, A.G. Venetsanos, D. Vlachogiannis, J. G. Bartzis, A. Scaperdas, CFD simulations of the wind environment around an airport terminal building, *Environmental Modelling Software*, vol. 21, 520-524, 2006.
7. D. Vlachogiannis, A. Sfetsos, A. Stubos, R. E. P. Sotiropoulou, E. Tagaris, C. Pilinis, W. Zhong, J. D. Haigh, D. O. Eriksen, S. Hartvig, C. Chatzichristos, J. Muller, R. Kleven and I. Nielsen, Assessment of the Impact of SF<sub>6</sub> and PFCs Reservoir Tracers on Global Warming, the AEOLUS study, *Environmental Sciences*, June-September 2005, 2(2-3), 263-272, 2005.
8. Sfetsos A., D. Vlachogiannis, N. Gounaris and A. K. Stubos, A methodology for the identification of representative days from large data sets, *Theoretical and Applied Climatology*, Volume 82, Numbers 3-4, pp. 177 – 182, 2005.
9. Winiwarter W., C. Dore, G. Hayman, D. Vlachogiannis, N. Gounaris, J. G. Bartzis, S. Ekstrand, M. Tamponi and G. Meffeis, Methods for comparing gridded inventories of atmospheric emissions – applications for Milan Province, Italy and the Greater Athens Area, Greece, *The Science of the Total Environment*, 303, pp 231-243, 2003.
10. P. Thunis, S. Galmarini, A. Martilli, A. Clappier, S. Andronopoulos, J. Bartzis, D. Vlachogiannis, K. de Ridder, N. Moussiopoulos, P. Sahm, R. Almbauer, P. Sturm, D. Oetli, S. Dierer, H. Schluenzen, MESOCOM: An inter-comparison exercise of mesoscale flow models applied to an ideal case simulation, *Atmospheric Environment*, 37, 363-382, 2003.
11. Vlachogiannis D., Rafailidis S., Bartzis J. G., Andronopoulos S. and Venetsanos A. G., Modelling of Flow and Pollution in a Two-Dimensional Urban Street Canyon, *Water, Air and Soil Pollution-Focus*, 405-417, Vol 2, Issue 5-6, 2002.
12. Venetsanos A.G., D. Vlachogiannis, A. Papadopoulos, S. Andronopoulos, J.G. Bartzis, Studies of pollutant dispersion from moving vehicles, *Water, Air and Soil Pollution-Focus*, 325- 337, Vol 2, Issue 5-6, 2002.
13. Vlachogiannis D., Andronopoulos S., Pasamichali A., Gounaris N., Bartzis J. G., A three-dimensional study of the impact of AVOC and BVOC emissions on ozone in an urban area of the Eastern Spain, *Environmental Monitoring and Assessment*, vol. 65, pp 41-48, 2000.
14. Davakis E., S. Andronopoulos, D. Vlachogiannis, A. Venetsanos, J. G. Bartzis and S.G. Nychas, Validation of the Demokritos Dispersion Modelling system on the Indianapolis experiment, *Int. Journal Environment and Pollution*, vol. 16, Nos 1-6, pp 88-100, 2001.

#### **Publications in Conference Proceedings (referred)**

1. A. Sfetsos, D. Vlachogiannis and N. Gounaris, Model calculated changes in the air quality of populated regions in Greece due to shipping emissions, ITM - NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, Torino, Italy, 27 Sept-1 October, 2010.
2. D. Vlachogiannis, a. Sfetsos and N. Gounaris, The impact of land-use modification scenarios on the air-quality of an urban region during ozone episodes using the MM5-CMAQ modelling system, accepted to be presented in the 13<sup>TH</sup> International Conference

- on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, June 1-4, 2010.
3. Efthimios Tagaris, Athanasios Sfetsos, Diamando Vlachogiannis, Spyros Andronopoulos, Rafaella-Eleni P. Sotiropoulou, Nikos Gounaris, Sensitivity of ozone and particulate matter concentrations in Greater Athens Area, Greece, accepted to be presented in the 13<sup>TH</sup> International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, June 1-4, 2010.
  4. Athanasios Sfetsos, Diamando Vlachogiannis and Nikolaos Gounaris, A comprehensive sensitivity study on the ozone concentrations in an urban area using the Adjoint CMAQ chemical transport model, accepted to be presented in the 10th International Conference on Meteorology, Climatology and Atmospheric Physics, Patras, Greece, May 25-28, 2010.
  5. Saraga E. Dikaia, Sfetsos Athanasios, Andronopoulos Spyros, Chronis Alexandros, Maggos Thomas, Vlachogiannis Diamando and Bartzis G. John, An investigation of the parameters influencing the determination of the number of particulate matter sources and their contribution to the air quality of an indoor residential environment. 4th International Symposium on Information Technologies in Environmental Engineering (ITEE 2009), Thessaloniki, Greece, May 28-29, 2009.
  6. A. Sfetsos and D. Vlachogiannis, An investigation of the effectiveness of advanced modeling tools on the forecasting of daily PM10 values in the Greater Athens Area. 4th International Symposium on Information Technologies in Environmental Engineering (ITEE 2009), Thessaloniki, Greece, May 28-29, 2009.
  7. A. Sfetsos , A. Syrakos, M. Politis , G. Efthimiou, N. Gounaris, D. Vlachogiannis, N. Koziakis, J.G. Bartzis, The development of a decision support system for the operation of the PPC thermal power plants in Western Macedonia, 4th International Symposium on Information Technologies in Environmental Engineering (ITEE 2009), Thessaloniki, Greece, May 28-29, 2009.
  8. A. Sfetsos , D. Vlachogiannis, P. Perez, The neglected dynamics in statistical forecasting of PM10 and PM2.5 data, 7th International Conference on Air Quality - Science and Application (Air Quality 2009), Istanbul, 24-27 March 2009.
  9. S. Andronopoulos, A. Sfetsos, D. Vlachogiannis, A. Yiotis, N. Gounaris, Application of adjoint CMAQ chemical transport model in the Athens Greater Area: sensitivities study On ozone concentrations. 12<sup>th</sup> International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cavtat, Croatia, October 6th-9th, 2008.
  10. Economidis, Charalambos <sup>a\*</sup>, Keramidas, Dimitiros <sup>a</sup>, Demertzi, Aggeliki <sup>a</sup>, Stropoulos, Nikos <sup>b</sup>, Sfetsos, Athanasios <sup>c</sup>, Vlachogiannis, Diamando <sup>c</sup>, The compilation of a Greek Environmental Input Output matrix for 2005, and its application as a methodological framework for assessing emission reduction options, International Input-Output Meeting on Managing the Environment, Seville, July 9-11, 2008.
  11. Sfetsos A. and Vlachogiannis D, A data mining approach to discover weather patterns contributing to PM10 exceedances, International Congress on Environmental Modelling and Software, iEMS2008, - Barcelona, Catalonia, July 6-10, 2008.
  12. Vlachogiannis D. <sup>(a)</sup>, Sfetsos A. <sup>(a)</sup>, Gounaris N. <sup>(a)</sup>, Yiotis A. <sup>(a)</sup>, Andronopoulos S. <sup>(a)</sup>, Stubos A.K. <sup>(a)</sup>, The Demokritos air quality web based system for the Greater Athens Area, International Congress on Environmental Modelling and Software, iEMS2008, - Barcelona, Catalonia, July 6-10, 2008.
  13. Sfetsos A., Vlachogiannis D., Andronopoulos S., Gounaris N and Yiotis A., Development Of An Operational Air Quality Forecasting System For The Greater Athens Area, 9th

- International Conference on Meteorology, Climatology and Atmospheric Physics, Thessaloniki, 28 - 31 May 2008.
14. D. Vlachogiannis, A. Sfetsos, N. Gounaris, J.G. Bartzis, Compilation of air emission inventories for Western Macedonia of Greece, 6th International Conference on Urban Air Quality, UAQ 2007, Cyprus, 27-29 March 2007.
  15. Diamando Vlachogiannis<sup>1</sup> and Athanasios Sfetsos<sup>1</sup>, “A data mining tool for the analysis of epidemiological data”, ENVIROInfo, 6-8 September, 2006, Graz, Austria.
  16. Athanassios Sfetsos, Diamando Vlachogiannis, Athanassios K. Stubos, “An Investigation of the Forecasting Predictability of Hourly Ozone time series”, 20 Years of Nonlinear Dynamics in Geosciences, Endorsed by the American Meteorological Society & European Geosciences Union (EGU), June 11 - 16, 2006, Rhodes, Greece.
  17. Diamando Vlachogiannis<sup>1</sup> and Athanasios Sfetsos<sup>2</sup>, “A comparison of time series forecasting approaches for hourly PM10 values”, Fourteenth International Conference on Modelling, Monitoring and Management of Air Pollution, AIR POLLUTION 2006, 22 - 24 May 2006  
The New Forest, UK.
  18. Diamando Vlachogiannis, Rafaella-Eleni P. Sotiropoulou, Athanasios Sfetsos, Wenyi Zhong, Joanna D. Haigh, Dag- Oistein Erisken, Sven Hartvig, Christos Chatzichristos, Efthimios Tagaris, Christodoulos Pilinis, Reidun Kleven, Athanasios Stubos, Jiri Muller, Assessment of the Impact of SF6 and PFCs Reservoir Tracers on Global Warming, the AEOLOS study, Fourth International Symposium on Non-CO2 Greenhouse Gases (NCGG-4) Science, Control, Policy and Implementation, Utrecht, The Netherlands, 4-6 July 2005.
  19. A. Sfetsos, C. Mita, N. Gounaris and D. Vlachogiannis, Identifying representative days in synoptic climatology studies, AIR POLLUTION 2004, Rodos, June 2004, Greece.
  20. Rafaella – Eleni P. Sotiropoulou, Efthimios Tagaris, Christodoulos Pilinis, Diamando Vlachogiannis, Athanasios Sfetsos, Nikos Gounaris, Athanasios Stubos, Reidun Kleven and Christos Chatzichristos, Estimation Of The Effects Of SF6 And PFCs Reservoir Tracers on Atmospheric Quality in the North Sea using data from the AEOLOS study, 413th World Clean Air and Environmental Protection, London, UK, August 22-27, 2004.
  21. A methodology for the identification of weather types to assist air quality modelling from reservoir tracers emissions, A. Sfetsos, D. Vlachogiannis, N. Gounaris, A. Stubos, R.E.P. Sotiropoulou, E. Tagaris, C. Pilinis, C. Chatzichristos, R. Kleven, ENVIROINFO 2004, Geneva, 21-23 October, 2004.
  22. Neofytou P., A. G. Venetsanos, D. Vlachogiannis, J. G. Bartzis, and A. Scaperdas, (2003), CFD simulations of the wind environment around an airport terminal building, 4th International Conference on Urban Air-Quality, March, Prague.
  23. Venetsanos A. G., Bartzis J. G., Andronopoulos S. and Vlachogiannis D., (2001), Vehicle effects on street canyon air pollution pattern, Air Pollution IX, Wessex Institute Of Technology Press, editors: G. Latini & C. A. Brebbia pp. 193-202.
  24. Vlachogiannis D., N. Gounaris, J.G. Bartzis, S. Andronopoulos, A.G. Venetsanos (2001) Development and evaluation of air emissions inventories for the Greater Athens Area. Proc. of the 3rd International Conference on Urban Air Quality, 19–23 March 2001, Loutraki.
  25. Vlachogiannis D., S. Rafailidis, J.G. Bartzis, S. Andronopoulos, A.G. Venetsanos (2001) Modelling of flow and pollution dispersion in different urban street canyon geometries.

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<sup>2</sup> Environmental Research Lab., INT-RP, NCSR Demokritos, Aghia Paraskevi, 153 10, Greece



- Proc. of the 3rd International Conference on Urban Air Quality, 19–23 March 2001, Loutraki.
26. Venetsanos A.G., D. Vlachogiannis, A. Papadopoulos, S. Andronopoulos, J.G. Bartzis (2001) Studies of pollutant dispersion from moving vehicles. Proc. of the 3rd International Conference on Urban Air Quality, 19–23 March 2001, Loutraki.
  27. Andronopoulos S., N. Gounaris, A. Passamichali, D. Vlachogiannis, A. Venetsanos, J.G. Bartzis (2001), Methodology for generation of Biogenic VOC emissions database for use by air quality models. Proc. of the 3rd International Conference on Urban Air Quality, 19–23 March 2001, Loutraki.
  28. Vlachogiannis D., S. Rafailidis and J. G. Bartzis, Sensitivity of Urban Canyon Pollution to Street Emissions Release, TIES/SPRUCE 2000 International Conference, Current Environmental Issues: Quantitative Methods, University of Sheffield, UK September 4-8, 2000.
  29. Andronopoulos S., J. G. Bartzis, K. Konte, C. Mita, A. Venetsanos, D. Vlachogiannis, Atmospheric Dispersion Modelling in the RODOS Decision Support System, 5th International Conference on Protection and Restoration of the Environment, Thassos-Greece, July 2-6, 2000.
  30. Davakis E., S. Andronopoulos, D. Vlachogiannis, A. Venetsanos, J. G. Bartzis and S.G. Nychas, Validation of the Demokritos Dispersion Modelling system on the Indianapolis experiment, Proceed. of the 6th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory purposes, Rouen 11-14 October, 1999.
  31. Vlachogiannis D., Andronopoulos S., Pasamichali A., Gounaris N., Bartzis J. G., The contribution of BVOC on the formed ozone levels in an urban Mediterranean coastal area, Proceed. of the Intern Confer. Air Quality in Europe-Challenges for the 2000s, edited by V. Cocheo, E. De Saeger and D. Kotzias, May 1999.
  32. Vlachogiannis D, Andronopoulos S., Pasamichali A., Gounaris N., Bartzis J. G., A three-dimensional study of the impact of AVOC and BVOC emissions on ozone in an urban area of the Eastern Spain, Proc. Of 2nd International Conference in Urban Air Quality, 3-5 March, 1999.
  33. Vlachogiannis D., Haigh J.D., The Impact of Solar Proton Events on Lower Stratospheric Ozone, pp 275-278 of Atmospheric Ozone, Proc. QOS Acquila 1996 ed R D Bojkov and G Visconti.
  34. Vlachogiannis D., Haigh J.D., Solar Proton Events and Ozone Depletion, Proc. Conf “UK Universities Global Atmospheric Modelling Programme”, Oxford, July 1996.
  35. Mason I.M., Harris A.R., Moody J.N., Birkett C.M., Cudlip W., Vlachogiannis D., Monitoring wetland hydrology by remote sensing: A case of study of the Sudd using infrared imagery and radar altimetry, Proc. of the Central Symposium of the International Space Year, Munich, ESA SP-341, pp 79-84, 1992.

#### **Archival Refereed Publications**

1. J. G. Bartzis, D. Vlachogiannis and A. Sfetsos, (2004), Best Practice Advice for Environmental Flows, The QNET-CFD Newsletter, Vol. 2, No. 4, 34-39.
2. N. Koutsourakis, D. Vlachogiannis, A. Sfetsos and J. G. Bartzis (2003), CFD in Atmospheric Dispersion problems – State of the Art, The QNET-CFD Newsletter, Vol. 2, No. 1, 10-13.
3. D. Vlachogiannis, A. Sfetsos and J. G. Bartzis (2003), Urban Scale problems, The QNET-CFD Newsletter, Vol. 2, No. 1, 18-21.

4. Andronopoulos S., Sfetsos A., Vlachogiannis D. Yiotis A., Gounaris N., (2009), Application of adjoint CMAQ chemical transport model in the Athens greater area: Sensitivities study on ozone concentrations, *Hrvatski Meteoroloski Casopis*, Volume 43 PART 1, 2008, Pages 249-253.

### Collective Publications

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