

CURRICULUM VITAE

1. General information

Surname: Andronopoulos
Name: Spyridon
Date and place of birth: December 28th, 1965, Athens
Nationality: Greek
Gender: Male
Marital status: Married, two children
Home address: Edison 9 (B8), 15351 Pallini, Greece
Work address: National Centre for Scientific Research “Demokritos”
Institute of Nuclear Technology and Radiation Protection /
Environmental Research Laboratory
GR-153 10 Aghia Paraskevi
Current position: Senior Researcher
Phone: (+30) 2106503426
Fax: (+30) 2106525004
e-mail: sandron@ipta.demokritos.gr

2. Education

- Ph.D. in Physics from the University of Athens, Greece (1994); title of dissertation: Atmospheric Dispersion of Denser-than-air Gases. The major part of the dissertation has been carried out at the EC Joint Research Centre, Safety Technology Institute, Process Engineering Division, Ispra, Italy
- Complete series of post-graduate courses (MSc level) as grant-holder in the Institute of Nuclear Technology and Radiation Protection, NCSR “Demokritos” (1988-1989), including Fluid Mechanics, Numerical Analysis, Radiation Physics and Radiation Protection, Nuclear Reactor Physics, Computer Programming and Risk Analysis
- Diploma in Physics, University of Athens, Greece, (1987)

3. Work Experience

- Senior Researcher (Grade ‘B’) in NCSR “Demokritos” (2010-today)
- Researcher (Grade ‘C’) in NCSR “Demokritos” (2006–2010)
- Junior Researcher (Grade ‘D’) in NCSR “Demokritos” (2003–2006)
- Post-Doctoral Fellow in NCSR “Demokritos” (1999–2003)
- Collaborating research scientist in NCSR “Demokritos” (1993–1998)
- PhD Grant-holder in NCSR “Demokritos” (1988-1989) and in the European Commission Joint Research Centre, Ispra, Italy (1989–1993)

4. Current R&D Activities

- Environmental Computational Fluid Dynamics: simulation of atmospheric flow and dispersion / transformation of pollutants (photochemical, radioactive and toxic) over terrain of high complexity and from short to long ranges
- Meteorological data processing and assimilation
- Data assimilation methodologies for Lagrangian atmospheric dispersion models
- CFD methodologies for pollutant concentration fluctuations
- Application of CFD methodologies for issues of security and emergency management
- Urban air pollution: ozone and particulate matter
- Indoor air pollution: particulate matter sources identification and characterization
- Vapour cloud (dense gas) dispersion modelling
- Decision Support Systems for nuclear and other emergencies

5. Participation in research projects:

- European research projects
 - FP7 Collaborative Project “STAR-TRANS” (Strategic Risk Assessment and Contingency Planning in Interconnected Transport Networks), 2009-2011 (responsible scientist for NCSR Demokritos)
 - FP6 STREP TESTNET (Towards European Sectorial Testing Networks for Environmental Technologies), 2005-2008, Contract Number 018311 GOCE (responsible scientist for NCSR Demokritos)
 - FP6 IP EURANOS (European Approach to Nuclear and Radiological Emergency Management and Rehabilitation Strategies), 2004-2009, Contract No. FI6R-CT-2004-508843, (responsible scientist for NCSR Demokritos)
 - FP6 Euratom Grant for Cooperation with Third Countries: RODOS/METADM (RODOS System meteorological and atmospheric dispersion module functionality enhancement by introduction of numerically efficient algorithms, 9/2005-3/2006, Contract No. 516492 FI6R (responsible scientist for NCSR Demokritos).
 - FP5 BOND Biogenic Aerosols and Air Quality in the Mediterranean Area (EC EVK2-CT-2001-00107)
 - FP5 RODOS Migration (Migration of RODOS to practical applicability, 2000-2003, EC FIKR-CT-2000-00077)
 - FP5 ENSEMBLE (Methods to reconcile disparate national forecasts of medium and long range dispersion, 2000-2004, EC FIKR-CT-2000-00038)
 - FP5 DSSNET (Improvement, extension and integration of operational decision support systems for nuclear emergency management, EC FIR1-CT-2000-40076, 2000-2004)
 - RODOS (Real-time, On-line Decision Support System for nuclear emergency management, 1996-1999, EC FI4P-CT95-0007)
 - “RODOS User Group” EC Concerted action ERB FI4P-CT98-0075, 1998-2000
 - MESOCOM (Mesoscale model intercomparison , <http://rem.jrc.cec.eu.int/mesocom/>, 1999-2000)
 - BEMA (Biogenic Emissions in Mediterranean Area-BEMA project- Phase II EC ENV4-CT95-0014, 1996-1999), “Modelling activities related to BEMA” EC 14212-1998-08 F1ED ISP GR
 - EMU (“Uncertainty in modelling of major industrial hazards” EC EV5V-CT94-0531, 1994-1996)
 - “FLADIS field test analysis” EC EV5V-CT94-0424, 1990-1992
- National research projects
 - Hellenic General Secretariat of Research & Technology (GSRT) “Development of an operational mapping system for the fine aerosol mass concentration and the estimated population exposure in Attica, Greece”, (2006-2008)
 - Hellenic General Secretariat of Research & Technology (GSRT) “System for environmental management and decision support for the operation of Power Plants in the area of Western Macedonia, Greece” (2006-2008)
 - “Air quality study for Athens 2004” (1996-1997), Funded by the Greek Olympic Bid Committee
 - Human network for the dissemination of Scientific and Technological Knowledge, “Modern techniques of measurement, control, observation, management and re-assurance of air quality”, Funded by the General Secretariat for Research and Technology, 2000-2001
 - Study of the air pollutants dispersion from the thermal electrical power of the Public Power Corporation in the island of Limnos, Greece, funded by the Greek Public Power Corporation (2000)
 - Environmental impact assessment of the accident at the thermal electrical power of the Public Power Corporation at Aghios Dimitrios, Kozani, Greece, (2003), contract with the Aristotle University of Thessaloniki, Greece and funded by the Greek Public Power Corporation

6. Additional Information

- Reviewer at the following international scientific journals: *Atmospheric Environment*, *Journal of the Air and Waste Management Association*, *Journal of Applied Meteorology*, *Journal of Hazardous Materials*, *Journal of Loss Prevention in the Process Industries*, *Chemical Engineering Communications*, *Numerical Heat Transfer*, *Water, Air, & Soil Pollution: Focus*, *International Journal of Environmental and Waste Management*.
- Seminars
 1. Computer-Based Training Course on DECISION SUPPORT FOR OFF-SITE EMERGENCY MANAGEMENT IN THE EARLY PHASE OF A NUCLEAR ACCIDENT. 3–7 November 1997, Forschungszentrum Karlsruhe, Γερμανία. Organised by the European Commission, European Radiation Protection Education and Training (ERPET).
 2. Training Course on OFF-SITE EMERGENCY PLANNING AND RESPONSE TO NUCLEAR ACCIDENTS. 22–26 Ιουνίου 1998, Studiecentrum voor Kernenergie SCK•CEN, Mol, Βέλγιο. Organised by the European Commission, European Radiation Protection Education and Training (ERPET).
 3. Training Course for Operators of the RODOS System. 11–16 Δεκεμβρίου 2000, Forschungszentrum Karlsruhe, Γερμανία. Organised by the European Commission, European Radiation Protection Education and Training (ERPET).
- Languages: english (perfect), french (very good), italian (good)

7. Publications

Journals	: 35
Contribution in book	: 2
Conference proceedings	: 53
Reports	: 25

Total	: 115
-------	-------

8. List of Publications

Peer-Reviewed Journals

1. S. Andronopoulos, J.G. Bartzis, J. Wurtz, D. Asimakopoulos (1993) ‘Simulation of the Thorney Island Dense Gas Trial No.8, using the code ADREA-HF’. *Process Safety Progress* **12**, No.1, 61–66.
2. S. Andronopoulos, J.G. Bartzis, J. Wurtz, D. Asimakopoulos (1994) ‘Modelling the effects of obstacles on the dispersion of denser-than-air gases’. *Journal of Hazardous Materials* **37**, 327–352.
3. S. Andronopoulos, J.G. Bartzis, J. Statharas (1993) ‘Three-dimensional modelling of dense gas dispersion’. ERCOFTAC Bulletin, March 1993.
4. J. Wurtz, J. Bartzis, A. Venetsanos, S. Andronopoulos, J. Statharas, R. Nijssing (1996) ‘A dense vapour dispersion code package for applications in the chemical and process industry’. *Journal of Hazardous Materials* **46**, 273–284.
5. S. Andronopoulos, J.G. Bartzis, P. Kalabokas, A. Passamichali (1997) ‘Computational simulation of a photochemical air-pollution episode in Athens’. *Fresenius Environmental Bulletin* **7**, No. 3a/4a, 299–306.
6. S. Andronopoulos, A. Passamichali, N. Gounaris and J.G. Bartzis (2000) ‘Evolution and transport of pollutants over a Mediterranean coastal area and Biogenic VOC emissions influence on ozone levels’. *Journal of Applied Meteorology* **39**, No.4, 526–545.

7. D. Vlachogiannis, S. Andronopoulos, A. Passamichali, N. Gounaris and J.G. Bartzis (2000) ‘A three-dimensional model study of the impact of AVOC and BVOC emissions on ozone in an urban area of the Eastern Spain’. *Environmental Monitoring and Assessment* **65**, 41–48.
8. E. Davakis, S. Andronopoulos, D. Vlachogiannis, A. Venetsanos, J.G. Bartzis and S.G. Nychas (2001) ‘Validation of the Demokritos dispersion modelling system based on the Indianapolis experiment’. *International Journal of Environment and Pollution*, **16**, Nos. 1-6, 88–100.
9. S. Andronopoulos, D. Grigoriadis, A. Robins, A. Venetsanos, S. Rafailidis and J.G. Bartzis (2001) ‘Three-dimensional modelling of concentration fluctuations in complicated geometry’. *Environmental Fluid Mechanics*, **1**, No. 4, 415–440.
10. D. Vlachogiannis, S. Rafailidis, J.G. Bartzis, S. Andronopoulos and A.G. Venetsanos (2002) ‘Modelling of flow and pollution dispersion in a two dimensional urban street canyon’. *Water, Air and Soil Pollution: Focus* **2**, 405–417.
11. A.G. Venetsanos, D. Vlachogiannis, A. Papadopoulos, S. Andronopoulos, J.G. Bartzis (2002) ‘Studies of pollutant dispersion from moving vehicles’. *Water, Air and Soil Pollution: Focus* **2**, 325–337.
12. 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. Oettl, S. Dierer, K.H. Schlunzen (2003) ‘An inter-comparison exercise of mesoscale flow models applied to an ideal case simulation’. *Atmospheric Environment* **37**, 363–382.
13. E. Davakis, S.G. Nychas, S. Andronopoulos, J.G. Bartzis (2003) “Validation study of the dispersion Lagrangian particle model DIPCOT over complex topographies using different concentration calculation methods”, *International Journal of Environment and Pollution*, **20**, Nos. 1–6, 33–46.
14. I. Kovalets, S. Andronopoulos, J.G. Bartzis, N. Gounaris, A. Kushchan (2004) “Introduction of data assimilation procedures in the meteorological pre-processor of atmospheric dispersion models used in emergency response systems”. *Atmospheric Environment*, **38**, 457–467.
15. R.E.P. Sotiropoulou, E. Tagaris, C. Pilinis, S. Andronopoulos, A. Sfetsos, J.G. Bartzis (2004) “The BOND project: biogenic aerosols and air quality in Athens and Marseille greater areas”, *Journal of Geophysical Research*, **109**, D05205, doi:10.1029/2003JD003955
16. A.G. Venetsanos, J.G. Bartzis, S. Andronopoulos (2004) “One-equation turbulence modelling for atmospheric and engineering applications”, *Boundary Layer Meteorology*, **113**, 321–346.
17. S. Galmarini, R. Bianconi, W. Klug, T. Mikkelsen, R. Addis, S. Andronopoulos, et. al. (2004) “Can the confidence in long-range atmospheric transport models be increased? The pan-European experience of ENSEMBLE”, *Radiation Protection Dosimetry*, **109**, Nos 1-2, pp. 19–24.
18. S. Galmarini, R. Bianconi, W. Klug, T. Mikkelsen, R. Addis, S. Andronopoulos, et al. (2004) “Ensemble dispersion forecasting—Part I: concept, approach and indicators”. *Atmospheric Environment*, **38**, 4607–4617.
19. S. Galmarini, R. Addis, S. Andronopoulos, P. Astrup et al. (2004) “Ensemble dispersion forecasting—Part II: application and evaluation”. *Atmospheric Environment*, **38**, 4619–4632.
20. E. Davakis, S. Andronopoulos, G.A. Sideridis, E.G. Kastrinakis, S.G. Nychas and J.G. Bartzis (2005) “Evaluation of the Lagrangian particle dispersion model DIPCOT against data from wind tunnel simulations of quasi two-dimensional turbulent flow”. *International Journal of Environment and Pollution*, **24**, No. 1 – 4, pp. 114 – 126.
21. S. Andronopoulos, E. Davakis, N. Gounaris, J.G. Bartzis and S.G. Nychas (2005) “Dispersion modelling of radioactive pollutants: Application of the Demokritos Transport Code System for Complex Terrain (DETRACT) to the Hanford Purex Scenario”. *International Journal of Environment and Pollution*, **25**, No. 1 – 4, pp.33 – 47.

22. I. Kovalets, S. Andronopoulos and J.G. Bartzis (2005) “About the need to develop the data assimilation procedures for the meteorological pre-processors of the emergency response systems”. *Atmospheric Environment*, **39/18**, pp. 3369-3372.
23. T. Petäjä, V.-M. Kerminen, M. Dal Maso, H. Junninen, I. K. Koponen, T. Hussein, P. P. Aalto, S. Andronopoulos, D. Robin, K. Hämeri, J. G. Bartzis, M. Kulmala (2007) “Sub-micron atmospheric aerosols in the surroundings of Marseille and Athens: physical characterization and new particle formation”. *Atmospheric Chemistry and Physics*, **7 (10)**, 2705-2720
24. I. Mavroidis, S. Andronopoulos, J.G. Bartzis and R.F. Griffiths (2007) “Atmospheric dispersion in the presence of a 3-dimensional cubical obstacle: modelling of mean concentration and concentration fluctuations”. *Atmospheric Environment*, **41**, 2740-2756.
25. Davakis E., Andronopoulos S., Kovalets I., Gounaris N., Bartzis J.G., Nychas S.G. (2007) “Data assimilation in meteorological preprocessors: effects on atmospheric dispersion simulations”. *Atmospheric Environment*, **41**, 2917-2932.
26. I.V. Kovalets, S. Andronopoulos, A.G. Venetsanos, J.G. Bartzis (2007) “Optimisation of the numerical algorithms of the ADREA-I mesoscale prognostic meteorological model for real-time applications”. *Environmental Modelling and Software*, **23**, 96-108.
27. J.G. Bartzis, A. Sfetsos, S. Andronopoulos (2008) “On the individual exposure from airborne hazardous releases. The effect of atmospheric turbulence”. *Journal of Hazardous Materials*, **150**, 76-82.
28. Tsiouri V., I. Kovalets, S. Andronopoulos, J.G. Bartzis (2008) “Development and first tests of a data assimilation algorithm in a Lagrangian puff atmospheric dispersion model”, accepted for publication in *International Journal of Environment and Pollution*
29. I.V. Kovalets, V. Tsiouri, S. Andronopoulos, J.G. Bartzis (2008) “Improvement of source and wind field input of atmospheric dispersion model by assimilation of concentration measurements: method and applications in idealized settings”, *Applied Mathematical Modelling*, **33**, 3511-3521.
30. S. Andronopoulos, A. Sfetsos, D. Vlachogiannis, A. Yiotis and N. Gounaris (2009) “Application of adjoint CMAQ chemical transport model in the Athens greater area: sensitivities study on ozone concentrations”, submitted to *International Journal of Environment and Pollution*
31. S. Andronopoulos, I. Mavroidis, A.G. Venetsanos, J.G. Bartzis (2009) “Modelling of atmospheric flow and dispersion in the wake of a cylindrical obstacle”, submitted to *International Journal of Environment and Pollution*
32. Saraga D., Sfetsos A., Andronopoulos S., Bartzis J., Maggos T., Vasilakos C. (2009) “Particle size distributions in an office environment: An experimental approach and a source apportionment analysis through positive matrix factorization”, submitted to *Environmental Modelling and Assessment*
33. Dikaia E Saraga; Thomas Maggos; Evangelos I Tolis; Athanasios Sfetsos; Spyros Andronopoulos; John G Bartzis; Christos Vasilakos (2010) “PAHs sources contribution to the air quality of an office environment: experimental results and receptor model (PMF) application”, *Air Quality, Atmosphere and Health* **3**, 225-234, DOI 10.1007/s11869-010-0074-7
34. S. Andronopoulos, E. Davakis, J.G. Bartzis and I. Kovalets (2010) “RODOS meteorological pre-processor and atmospheric dispersion model DIPCOT: a model suite for radionuclides dispersion in complex terrain”, *Radioprotection*, **45**, No. 5 Supplément 2010, p. S77-S84, DOI: 10.1051/radiopro/2010017
35. S. Andronopoulos and J.G. Bartzis (2010) “Gamma radiation dose calculation method for Lagrangian-puff atmospheric dispersion models used in real-time emergency response systems”, *Journal of Radiological Protection* **30**, 747-759, doi:10.1088/0952-4746/30/4/008

1. S. Andronopoulos, J.G. Bartzis, M. Varvayanni and N. Catsaros (1998) 'ADREA-I predictions on NO_x concentrations over the Greater Athens Area'. In '*Urban Air Pollution, Athens 2004 Air Quality*'. Edited by N. Moussiopoulos and S. Papagrighoriou. Electronic Book from FiatLux Publications & EnviroComp Institute.
2. S. Andronopoulos, J.G. Bartzis, A. Passamichali (1998) 'ADREA/UAM photochemical modelling over the Greater Athens Area'. In '*Urban Air Pollution, Athens 2004 Air Quality*'. Edited by N. Moussiopoulos and S. Papagrighoriou. Electronic Book from FiatLux Publications & EnviroComp Institute.

Conference proceedings

1. S. Andronopoulos, J.G. Bartzis, J. Wurtz, D. Asimakopoulos (1992) 'Simulation of the Thorney Island Dense Gas Trial No.8, using the code ADREA-HF'. 8th Loss Prevention Symposium, 1992 AIChE Spring National Meeting, April 1992, New Orleans, U.S.A
2. Wuertz, J., Bartzis, J., Venetsanos, A., Andronopoulos, S., Statharas, J., Nijsing, R. (1994) 'A dense vapour dispersion code package for applications in the chemical and process industry'. ICHMT International Symposium on "Heat and Mass Transfer in Chemical Process Industry Accidents", 15–16/9/1994, Rome, Italy.
3. S. Andronopoulos, J.C. Statharas, P. Deligiannis and J.G. Bartzis (1996) 'Evaluation of the predictions of the ADREA-HF code for dense gas dispersion with real scale ammonia release experiments'. In '*Air Pollution IV: Monitoring, Simulation and Control*', Proceedings of the 4th International Conference 'Air Pollution 96', 28–30/8/1996, Toulouse, France.
4. J.G. Bartzis, S. Andronopoulos, M. Varvayanni, A. Pasamichali (1996) 'Photochemical modelling exercise over Greater Athens Area'. 7th European Symposium on 'Physico-Chemical Behaviour of Atmospheric Pollutants: The Oxidizing Capacity of the Troposphere', Venice, 2–4/10/1996.
5. S. Andronopoulos, J.G. Bartzis, M. Varvayanni and N. Catsaros (1997) 'ADREA-I predictions on NO_x concentrations over the Greater Athens Area'. International Scientific Workshop 'Athens 2004 Air Quality Study', 18-19 February 1997, Athens.
6. S. Andronopoulos, J.G. Bartzis, A. Passamichali (1997) 'ADREA/UAM photochemical modelling over the Greater Athens Area'. International Scientific Workshop 'Athens 2004 Air Quality Study', 18-19 February 1997, Athens.
7. J.G. Bartzis, A.G. Venetsanos, M. Varvayanni, S. Andronopoulos, S. Davakis, J. Statharas, N. Catsaros, P. Deligiannis (1997) 'Wind flow and dispersion modelling over terrain of high complexity'. In '*Air Pollution V: Modelling, Monitoring and Management*', Proceedings of the 5th International Conference on 'Air Pollution Modelling, Monitoring and Management'. September 1997, Bologna, Italy. Computational Mechanics Publications.
8. S. Andronopoulos, J.G. Bartzis, P. Kalabokas, A. Passamichali (1997) 'Computational simulation of a photochemical air-pollution episode in Athens'. 9th International Symposium on 'Environmental Pollution and its Impact on Life in the Mediterranean Region', 4–9/10/1997, S. Agnello di Sorrento, Italy.
9. A.G. Venetsanos, Andronopoulos S., Statharas J., Bartzis J.G. (1998) 'Local scale dispersion model evaluation exercise'. In '*Air Pollution VI*', Proceedings of the 6th International Conference 'Air Pollution 98', Genoa, Italy, 28-30/9/1998.
10. D. Vlachogiannis, S. Andronopoulos, A. Passamichali, N. Gounaris and J.G. Bartzis (1999) 'A three-dimensional model study of the impact of AVOC and BVOC emissions on ozone in an urban area of the Eastern Spain'. 2nd International Conference on Urban Air Quality, 3-5 March 1999, Computer Science School, Madrid, Spain.
11. E. Davakis, S. Andronopoulos, D. Vlachogiannis, A. Venetsanos, J.G. Bartzis and S.G. Nychas (1999) 'Validation of the Demokritos dispersion modelling system based on the Indianapolis experiment'. 6th

International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes. October 11-14, 1999, CORIA, Rouen, France.

12. S. Andronopoulos, J.G. Bartzis, K. Konte, C. Mita, A. Venetsanos, D. Vlachogiannis (2000) 'Atmospheric dispersion modelling in the RODOS Decision Support System'. 5th International Conference on 'Protection and Restoration of the Environment', 2-6/7/2000, Thassos Island, Greece.
13. S. Andronopoulos, 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'. 3rd International Conference on Urban Air Quality, 19-23/3/2001, Loutraki, Greece.
14. D. Vlachogiannis, S. Rafailidis, J.G. Bartzis, S. Andronopoulos, A.G. Venetsanos (2001) 'Modelling of flow and pollution dispersion in different urban street canyon geometries'. 3rd International Conference on Urban Air Quality, 19-23/3/2001, Loutraki, Greece.
15. D. Vlachogiannis, N. Gounaris, J.G. Bartzis, S. Andronopoulos, A.G. Venetsanos (2001) 'Development and evaluation of air emissions inventories for the Greater Athens Area'. 3rd International Conference on Urban Air Quality, 19-23/3/2001, Loutraki, Greece.
16. A.G. Venetsanos, D. Vlachogiannis, A. Papadopoulos, S. Andronopoulos, J.G. Bartzis (2001) 'Studies of pollutant dispersion from moving vehicles'. 3rd International Conference on Urban Air Quality, 19-23/3/2001, Loutraki, Greece.
17. S. Andronopoulos, D. Grigoriadis, A. Robins, A. Venetsanos, S. Rafailidis and J.G. Bartzis (2000) 'Modelling of concentration fluctuations'. 7th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Belgirate, Italy, 28-31 May, 2001.
18. A.G. Venetsanos, J.G. Bartzis, S. Andronopoulos, D. Vlachogiannis (2001) 'Vehicle effects on street canyon air pollution pattern'. Air Pollution 9, pp. 193-202, 9th International Conference on Air Pollution, 12-14 September 2001, Ancona, Italy.
19. E. Davakis, S. Andronopoulos, J.G. Bartzis and S. Nychas (2002) 'Validation of the Lagrangian particle model DIPCOT for meso-scale and long-range atmospheric dispersion over complex terrain'. 8th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Sofia, Bulgaria, 14-17 October 2002.
20. R. E. P. Sotiropoulou, E. Tagaris, C. Pilinis, S. Andronopoulos, N. Gounaris, A. Sfetsos, J G Bartzis (2003) 'Application of the UAM-AERO model in the Greater Athens Area'. International Conference on Urban Air Quality, Prague, Czech Republic, March 2003.
21. S. Andronopoulos, A. Sfetsos, J.G. Bartzis, N. Gounaris (2003) "Application of the model ADREA-I to the ESCOMPTE pre-campaign case", 8th International Conference on Environmental Science and Technology, 8-10 Sept. 2003, Lemnos, Greece
22. R.E.P. Sotiropoulou, E. Tagaris, C. Pilinis, S. Andronopoulos, N. Gounaris, A. Sfetsos, J.G. Bartzis (2003) "Estimation of particulate matter concentrations in the Greater Athens Area by means of the UAM-AERO model" 8th International Conference on Environmental Science and Technology, 8-10 Sept. 2003, Lemnos, Greece
23. I. Kovalets, S.Andronopoulos, J.G. Bartzis (2003) "Use of data assimilation procedures in the meteorological pre-processors of decision-support systems to improve the meteorological input of atmospheric dispersion models". International Symposium on Off-site Nuclear Emergency Management – Capabilities and Challenges, Salzburg, Austria, 29/9 – 3/10/2003.
24. S. Andronopoulos, E. Davakis, N. Gounaris, J.G. Bartzis and S. Nychas (2004) "Dispersion modelling of radioactive pollutants: application of the DETRACT code system at the Hanford scenario", 9th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 1-4/6/2004, Garmisch-Partenkirchen, Germany.
25. E. Davakis, S. Andronopoulos, G. A. Sideridis, E. G. Kastrinakis, J. G. Bartzis, S. G. Nychas (2004) "Heat transport simulations in a quasi two-dimensional wake interacting with a boundary layer using

the Lagrangian particle Dispersion Model DIPCOT”, 9th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 1-4/6/2004, Garmisch-Partenkirchen, Germany.

26. J. G. Bartzis, S. Andronopoulos, M. Kulmala, B. Larsen, M. Lazaridis, C. Lohse, P. Mirabel and C. Pilinis, “The BOND project: The Marseille and Athens experimental campaign. An overview”, *Journal of Aerosol Science* 35 (SUPPL. 2), pp. S1167-S1168, Proceedings of the European Aerosol Conference, Budapest, 9/2004
27. J. Michopoulos, A. Sfetsos, S. Andronopoulos, J.G. Bartzis, “Classification of meteorological conditions and atmospheric particulate matter concentrations in the area of Marseille France”, *Journal of Aerosol Science* 35 (SUPPL. 2), pp. S1021-S1022, Proceedings of the European Aerosol Conference, Budapest, 9/2004
28. Sotiropoulou R.E.P., E. Tagaris, C. Pilinis, S. Andronopoulos, A. Sfetsos and J.G. Bartzis, The BOND project: Contribution of biogenic emission to the aerosol budget in the Mediterranean area, European Aerosol Conference, Budapest, 9/2004
29. I. Mavroidis, S. Andronopoulos, J.G. Bartzis and R.F. Griffiths (2005) “Atmospheric dispersion in the presence of 3-dimensional obstacles: modelling of mean concentrations and concentration fluctuations”. 5th International Conference on Urban Air Quality, 29-31/3/2005, Valencia, Spain.
30. J. Michopoulos, S. Andronopoulos, A. Sfetsos, J.G. Bartzis, R.B. Larsen, T. Petäjä (2005) “Investigation of PM10 concentrations in two cities of the Mediterranean basin”. 5th International Conference on Urban Air Quality, 29-31/3/2005, Valencia, Spain.
31. J.G. Bartzis, S. Andronopoulos, M. Kulmala, B. Larsen, M. Lazaridis, C. Lohse, P. Mirabel, C. Pilinis (2005) “The BOND Project: an overview”. 5th International Conference on Urban Air Quality, 29-31/3/2005, Valencia, Spain.
32. J.G. Bartzis, A. Sfetsos, S. Andronopoulos, A. Venetsanos, K.D. Van den Hout (2005) “Assessing air quality CFD modelling in urban canopies”. 5th International Conference on Urban Air Quality, 29-31/3/2005, Valencia, Spain.
33. Davakis, E., S. Andronopoulos, I. Kovalets, N. Gounaris, J.G. Bartzis, S.G. Nychas, “Meteorological data assimilation effects on atmospheric dispersion model results”, 10th Int. Conference on Harmonisation within Atmospheric Dispersion Modelling, Sissi (Malia), Crete, Greece, 17-21/10/2005
34. Andronopoulos, S., D.G.E. Grigoriadis, I. Mavroidis, R.F. Griffiths, J.G. Bartzis “Inter-comparison and validation of RANS and LES computational approaches for atmospheric dispersion around a cubic obstacle”, 10th Int. Conference on Harmonisation within Atmospheric Dispersion Modelling, Sissi (Malia), Crete, Greece, 17-21/10/2005
35. Mavroidis, I., S. Andronopoulos, J.G. Bartzis, R.F. Griffiths “Atmospheric dispersion within obstacle arrays: modelling of mean concentration and concentration fluctuations”, 10th Int. Conference on Harmonisation within Atmospheric Dispersion Modelling, Sissi (Malia), Crete, Greece, 17-21/10/2005
36. J.G. Bartzis, A. Sfetsos, S. Andronopoulos, A. Venetsanos, K.D. Van den Hout “Development of a fast tool for air quality CFD modelling in urban canopies”, 10th Int. Conference on Harmonisation within Atmospheric Dispersion Modelling, Sissi (Malia), Crete, Greece, 17-21/10/2005
37. I. Mavroidis, S. Andronopoulos, J.G. Bartzis “Computational simulation of the residence of airborne pollutants in the wake of a 3-dimensional cube”, 6th International Conference on Urban Air Quality, 27-29/3/2007, Cyprus
38. J.G. Bartzis, S. Andronopoulos, M. Kulmala, B. Larsen, M. Lazaridis, C. Lohse, P. Mirable, C. Pilinis “Biogenic Aerosols and Air Quality in the Mediterranean Area. The BOND Project”, 6th International Conference on Urban Air Quality, 27-29/3/2007, Cyprus
39. V. Tsiouri, I. Kovalets, S. Andronopoulos, J.G. Bartzis “Development and first tests of a data assimilation algorithm in a Lagrangian puff atmospheric dispersion model”, 11th International

Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cambridge, UK, 2-5 July 2007

40. Davakis E., Andronopoulos S., Kastrinakis E.G., Nychas S.G., Bartzis J.G. “The Inertial Subrange Kolomogorov Constant Co in Stochastic Dispersion Models: Assessment Based on Wind Tunnel Experimental Data”, 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cambridge, UK, 2-5 July 2007
41. J.G. Bartzis, A. Sfetsos, G. Efthimiou, S. Andronopoulos, A. Venetsanos “Validation Exercise Utilizing ADREA and STAR-CD Codes in Urban Scale. The MUST Experiment”, 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cambridge, UK, 2-5 July 2007
42. J.G. Bartzis, A. Sfetsos, S. Andronopoulos “Predicting the individual exposure from airborne hazardous releases by RANS CFD models”, 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cambridge, UK, 2-5 July 2007
43. Vlachogiannis D., Sfetsos A., Andronopoulos S., Gounaris N., Yiotis A., Stubos A.K. “The “Demokritos” web-based air quality forecasting system for the Greater Athens Area”, Proceedings of the iEMSs Fourth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2008), International Environmental Modelling and Software Society, Barcelona, Catalonia, July 2008, <http://www.iemss.org/iemss2008/index.php?n=Main.Proceedings>
44. Saraga D., Sfetsos A., Andronopoulos S., Bartzis J., Maggos, Vasilakos C. “Particle size distributions in an office environment: An experimental approach and a source apportionment analysis through positive matrix factorization”, Proceedings of the iEMSs Fourth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2008), International Environmental Modelling and Software Society, Barcelona, Catalonia, July 2008, <http://www.iemss.org/iemss2008/index.php?n=Main.Proceedings>
45. S. Andronopoulos, I. Mavroidis, A. Venetsanos, J.G. Bartzis “Modelling of atmospheric flow and dispersion in the wake of a cylindrical obstacle”, 12th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cavtat, Croatia, 6-9/10/2008
46. 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”, 12th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cavtat, Croatia, 6-9/10/2008
47. G.C. Efthimiou, J.G. Bartzis, S. Andronopoulos and T. Sfetsos “Modelling the concentration fluctuation and individual exposure in complex urban environments”, 12th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Cavtat, Croatia, 6-9/10/2008
48. Bartzis, J.G., Michaelidou, S., Kotzias, D., Missia, D., Michael, C., Barrero-Moreno, J.M., Tolis, E., Sfetsos, A., Petaloti, C., Andronopoulos, S., McLaughlin, J., Carrer, P., Dimitroulopoulou, C., Ketrupp, A., Wolkoff, P., 2008. “The BUMA (prioritization of building materials as indoor pollution sources) project: an overview”. In: Proceedings of Indoor Air 2008 Conference, 17–22 August, Copenhagen
49. Eleftheriadis K., Vratolis S., Karanasiou A., Andronopoulos S., Sfetsos A., Gounaris N., Maggos T., Vasilakos C., Neofytou P., Housiadas C., Papayannis A., Tsaknakis G., Georgoussis G., Avdikos G., Chontidiadis K., Roukoutakis Y., Vernardos G., Sofianopoulos M., Alexandropoulou V, Lazaridis M., Kostenidou E. and S. N. Pandis, 2008. “Development of an operational mapping system for the fine aerosol mass concentration and the estimated population exposure in Attica, Greece”. European Aerosol Conference, 24-29 August, Thessaloniki, Greece
50. S. Andronopoulos, L.L. Dyer, E. Davakis and J.G. Bartzis “Evaluation of dispersion models DIPCOT and RIMPUFF used in decision support systems for nuclear and radiological emergency response”, 13th

International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, 1-4/6/2010

51. S. Andronopoulos, I. Mavroidis, A. Venetsanos, J.G. Bartzis “CFD simulations of dispersion around obstacles of different shapes”, 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, 1-4/6/2010
52. 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”, 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, 1-4/6/2010
53. Tsiouri V., Kovalets I.V., Andronopoulos S., Bartzis J.G. “Assimilation of gamma dose rate and concentration measurements in Lagrangian model DIPCOT”, 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Paris, France, 1-4/6/2010

Reports

1. S. Andronopoulos (1992) *A review of vapour cloud dispersion models*. Report EUR 14329 EN.
2. B. Carissimo, S. Andronopoulos, J. Bartzis, J. Wurtz (1992) *Intercomparison on heavy gas dispersion between the three-dimensional models MERCURE and ADREA. Part I: Instantaneous release without obstacle*. Report HE-33/92.15, Electricité de France.
3. B. Carissimo, S. Andronopoulos, J. Bartzis, J. Wurtz (1993) *Intercomparison on heavy gas dispersion between the three-dimensional models MERCURE and ADREA. Part II: Instantaneous release in the presence of a semicircular wall*. Report HE-33/93.005, Electricité de France.
4. S. Andronopoulos, J.G. Bartzis, B. Carissimo (1993) *Review of concentration fluctuation models*. ΕΚΕΦΕ «Δημόκριτος», DEMO Report 93/9.
5. Σ. Ανδρονόπουλος (1994) *Διασπορά στην ατμόσφαιρα αερίων πυκνότερων του αέρα που προέρχονται από εκλύσεις κοντά στο έδαφος*. Διδακτορική Διατριβή, Πανεπιστήμιο Αθηνών, Τμήμα Φυσικής.
6. Bartzis, J.G., Statharas, J.C., Andronopoulos, S., Catsaros, N., Wuertz, J. and Konte, K. (1994) *ADREA-HF: A three-dimensional finite-volume code for vapour cloud dispersion in complex terrain (The Cartesian version): CODE STRUCTURE AND USER'S MANUAL*. DEMO Report 94/14b.
7. J. Wurtz, J. Bartzis, A. Venetsanos, S. Andronopoulos, R. Nijsing (1995) *The FLADIS Project Final Report. The JRC Ispra Contribution*. Report EUR 16268 EN (1995).
8. Catsaros, N., S. Andronopoulos, J.G. Bartzis (1998) *The DELTA code: A computer code for simulating the air / ground interaction zone. Code structure and User's manual for the RODOS version*. Report RODOS(WG2)-TN(98)-07.
9. Andronopoulos, S., M. Varvayanni, J.G. Bartzis (1998) *FILMAKER: A computer model for pre-processing weather data. The RODOS version*. Report RODOS(WG2)-TN(98)-08.
10. Bartzis, J.G., M. Varvayanni, A. Venetsanos, N. Catsaros, C. Housiadas, G.M. Horsch, J. Statharas, G.T. Amanatidis, A. Megaritou, K. Konte, S. Andronopoulos and D. Vlachogiannis (1999) *ADREA-prog: A three-dimensional finite volumes, mesoscale meteorological prognostic model*. Report RODOS(WG2)-TN(99)-02.
11. Andronopoulos, S., D. Vlachogiannis, J. G. Bartzis, A. Megaritou, K. Konte, M. Varvayanni, N. Catsaros, A. Venetsanos, C. Housiadas, G. M. Horsch, J. Statharas, G. T. Amanatidis (1999) *User's manual for the RODOS version of the mesoscale meteorological prognostic model ADREA-prog*. Report RODOS(WG2)-TN(99)-06.
12. Bartzis, J.G., A. Venetsanos, N. Catsaros, S. Andronopoulos, D. Vlachogiannis (1999) *The numerical scheme of the ADREA codes*. Report RODOS(WG2)-TN(99)-09.

13. Vlachogiannis, D., S. Andronopoulos, J.G. Bartzis (1999) *ADREA-diagn: A three-dimensional, finite volumes, mesoscale meteorological diagnostic model*. Report RODOS(WG2)-TN(99)-03.
14. Andronopoulos, S, D. Vlachogiannis, J. G. Bartzis, A. Megaritou, K. Konte, M. Varvayanni, N. Catsaros, A. Venetsanos, C. Housiadas, G. M. Horsch, J. Statharas, G. T. Amanatidis (1999) *User's manual for the RODOS version of the mesoscale meteorological diagnostic model ADREA-diag*. Report RODOS(WG2)-TN(99)-07.
15. Davakis, E. J.G. Bartzis and S. Andronopoulos (1999) *DIPCOT: A lagrangian model for atmospheric dispersion over complex terrain*. Report RODOS(WG2)-TN(99)-01.
16. Andronopoulos, S., J.G. Bartzis, E. Davakis (1999) *User's manual for the RODOS version of the lagrangian dispersion model DIPCOT*. Report RODOS(WG2)-TN(99)-05
17. Bartzis, J.G., M. Varvayanni, A. Venetsanos, N. Catsaros, C. Housiadas, G.M. Horsch, J. Statharas, G.T. Amanatidis, A. Megaritou, K. Konte, S. Andronopoulos, D. Vlachogiannis (1999) *ADREA-disp: A Eulerian model for atmospheric dispersion over complex terrain*. Report RODOS(WG2)-TN(99)-04.
18. S. Andronopoulos, D. Vlachogiannis, J.G. Bartzis, A. Megaritou, K. Konte, M. Varvayanni, N. Catsaros, A. Venetsanos, C. Housiadas, G. M. Horsch, J. Statharas, G. T. Amanatidis (1999) *User's manual for the RODOS version of the Eulerian model for atmospheric dispersion over complex terrain ADREA-disp*. Report RODOS(WG2)-TN(99)-08.
19. Ι. Γ. Μπάρτζης, Σ. Ανδρονόπουλος, Ε. Δαβάκης (2000) *Μελέτη διασποράς και διάχυσης αερίων ρύπων από τον αυτόνομο σταθμό παραγωγής νήσου Λήμνου*. Τεχνική Έκθεση που υποβλήθηκε στη ΔΕΗ / Διεύθυνση Περιφέρειας Νήσων.
20. S. Andronopoulos, J.G. Bartzis, W. Raskob, J.P. Sauer, T. Schichtel (2004) “*Functional specification of the meteorological pre-processor of RODOS PV5.0*”, Report RODOS(RA2)-TN(04)-01.
21. S. Andronopoulos, J.G. Bartzis, (2004) “*Model description of the meteorological pre-processor of RODOS PV5.0*”, Report RODOS(RA2)-TN(04)-02.
22. S. Andronopoulos, J.G. Bartzis, (2004) “*Model description of the meteorological pre-processor of RODOS PV5.0*”, Report RODOS(RA2)-TN(04)-02.
23. S. Andronopoulos, E. Davakis, J.G. Bartzis (2009) “*RODOS-DIPCOT Model Description and Evaluation*”, Report RODOS(RA2)-TN(09)-01, http://www.rodos.fzk.de/Documents/Public/HandbookV6f/Volume3/RA2TN0901_DIPCOT.pdf
24. S. Andronopoulos, J.G. Bartzis (2009) “*Model description of the RODOS Meteorological Pre-Processor*”, Report RODOS(RA2)-TN(09)-02, http://www.rodos.fzk.de/Documents/Public/HandbookV6f/Volume3/RA2TN0902_MPP.pdf
25. S. Andronopoulos, J.G. Bartzis (2009) “*Report on performance tests of the mass-consistent wind-field model*”, Report EURANOS(CAT2)-TN(09)04

November 2010