



**INSTITUTE OF  
NUCLEAR TECHNOLOGY  
AND  
RADIATION PROTECTION**

**PUBLICATIONS  
2001-2003**

## 1. Research Reactor Laboratory (RRL)

### 1. PEER-REVIEWED JOURNALS

1. Housiadas, C., Antonopoulos-Domis, M., "Estimation of the moderator temperature coefficient of reactivity via noise analysis using closed-loop transfer functions", *Ann. Nucl. Energy*, 28, 983-991 (2001).
2. P. Misaelides, A.Godelitsas, S.Harissopoulos, J.Anoussis, «Interaction of granitic biotite with selected lanthanides and actinides», *J. of Radioanalytical and Nuclear Chemistry*, Vol 247, No 2 (2001) 325-328.
3. Mourtzanos, K., Housiadas, C., Antonopoulos-Domis, M., "Calculation of the moderator temperature coefficient of reactivity for water moderated reactors", *Ann. Nucl. Energy*, 28, 1773-1782, (2001).
4. Housiadas, C., Antonopoulos-Domis, M., "Estimation of the moderator temperature coefficient of reactivity via noise analysis using closed-loop transfer functions", *Ann. Nucl. Energy*, 28, 983-991 (2001).
5. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, Y. Drossinos, C. Housiadas, J. Smolik, I. Colbeck, K. Eleftheriadis, V. Gekas, F. Stordal, "Modelling of combined aerosol and photooxidant processes in the Mediterranean area", *J. Aerosol Sci.*, 32, S725-S726, (2001).
6. Housiadas, C., Mueller, K., Carlsson, J., Drossinos, Y., "Two-dimensional effects in thermophoretic particle deposition: the Phebus-FP steam generator", *J. Aerosol Sci.*, 32, S1029-S1030, (2001).
7. M. Lazaridis, I. Colbeck, Y. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadas, G. Kallos, N. Mihalopoulos, P. Mikuska, J. Smolik, S. Solberg, A. Spiridaki, E. Stefanou, F. Stordal, T. Svendby, Z. Vecera, V. Zdimal, "Subgrid scale investigations of factors determining the occurrence of ozone and fine particles", *J. Aerosol Sci.*, 32, S119-S120, (2001).
8. M. Lazaridis, D.N. Asimakopoulos, M. Branis, K. Chelms, I. Colbeck, Y. Drossinos, C. Dye, K. Eleftheriadis, H. Flocas, W. Hollander, C. Housiadas, J. Hovonka, N. Kalogerakis, J. Smolik, F. Stordal, T. Svendby, V. Zdimal, "Characterisation of urban air quality indoor/outdoor particulate matter chemical characteristics and source-to-inhaled dose relationships", *J. Aerosol Sci.*, 32, S1075-S1076, (2001).
9. Kamenopoulou V, Carinou E. and Stamatelatos I.E., "Personnel neutron Dosimetry at a Research Reactor Facility", *Radiation Protection Dosimetry*, 96, 197-200, (2001).
10. Athanassouli, Th. Ganetsos, F. Klose and S. Messoloras, "Morphology and oxidation kinetics of SiO<sub>2</sub> layers on silicon", *Semicond. Sci. Technol.*, 16, (2001) 1-12.
11. Mita, C., Catsaros N. and Gounaris N., "Runoff cascades, channel network and computation hierarchy determination on a structured semi-irregular triangular grid", *J. of Hydrology*, Vol. 244, Nos 3-4, pp 105-118, (2001).
12. P. Misaelidis, T. Katranas, A. Godelitsas, H. Klewe-Nebenius and I. Anoussis, "The Chemical Behaviour of the Natural Microporous Manganese-Oxide Todorokite in Actinides (Th, U, Pa) Aqueous Solutions", *Separation Science and Technology*, 37 (5), 1-3, (2001).
13. Damilakis J., Tzedakis A., Sideri L., Perisinakis K., Stamatelatos I.E., Gourtsoyiannis N., *Evaluation of conceptus doses for abdominal radiographic examinations calculated using a Monte Carlo technique*, *Medical Physics*, 29, 2641-2648 (2002).
14. K. Mergia, L.T. Baczewski, S. Messoloras, S. Hamada, T. Shinjo, H. Gamari-Seale, J. Hauschild, *Polarized neutron reflectivity study of a Gd/Cr multilayer*, *J. Appl. Phys. A* 74, S1520 (2002).
15. K. Mergia, A. Salevris, S. Messoloras, *Calibration of neutron linear position sensitive detector*, *J. Appl. Phys. A* 74, S145 (2002).
16. Housiadas, C., Papanicolaou, E., Drossinos, Y., *Combined heat and mass transfer in laminar-flow diffusion nucleation chambers*, *J. Aerosol Sci.*, 33, 797-816, (2002).
17. Housiadas, C., *Lumped parameters analysis of coupled kinetics and thermal-hydraulics for small reactors*, *Ann. Nucl. Energy*, 29, 1315-1325 (2002).

18. Varvayanni, M., Davakis, E., Catsaros, N., *Air and vegetated ground interactions in air quality diagnosis for emergency Response*, J. of Atmospheric and Solar-Terrestrial Physics, 64, No 4, 427-442 (2002).
19. Misaelides, P., Katranas, T., Godelitsas, A., Klewe-Nekenius, H., Anoussis, J., *Interaction of Todorokite with Thorium, Protactinium and Uranium Aqueous Solutions*, Sep. Sci. Technol. 37, (2002) 1109.
20. Jones, A.V., Dickinson, S., Brayer, C., Herranz, L., Housiadas, C., De Rosa, F., Hennes, G., Langhans, J., Hanniet, N., Wichers, V., Guntay, S., Paci, S., Martin-Fuertes, F., *Validating of severe accident codes against Phebus FP for plant applications*, Nucl. Eng. Des., 221, 225-240, 2003.
21. Mitsakou, C., Housiadas, C., Eleftheriadis K., Lazaridis, M., *Modelling of the dispersion of Depleted Uranium aerosol*, Health Physics, 84, 538-544, 2003.
22. Prelack K, Sheridan R, Yu YM, Stamatelatos IE, Dwyer J, Dallal GE, Lydon M, Petras L, Kehayias JJ (2003) *Sodium bromide by instrumental neutron activation analysis quantifies change in extra-cellular water space with wound closure in severely burned children* SURGERY 133 (4): 396-403
23. K. Mergia and S. Messoloras, *Optimisation of a Focusing Monochromator*, Rev. Scient. Instrum. **74**, 931 (2003)
24. Housiadas, C., Drossinos, Y., Lazaridis, M., "Effect of small-scale turbulent fluctuations on rates of particle formation", **J. Aerosol Sci.**, 35, 545-559, 2004.
25. Aneziris, O.N., Housiadas, C., Stakakis, M., Papazoglou, I.A., "Probabilistic safety analysis of a Greek research reactor", **Ann. Nucl. Energy**, 31, 481-516 (2004).
26. Stamatelatos I.E., Mergia K., Lefkopoulos G. and Forrest R. Impurities and evaluation of induced activity of SiCf/SiC composites. *Nuclear Instruments and Methods B*, 213 511-514 (2004).
27. Tzika F. and Stamatelatos I.E. Thermal neutron self-shielding correction factors for large sample instrumental neutron activation analysis using the MCNP code. *Nuclear Instruments and Methods B*, 213 177-181 (2004).
28. Stamatelatos I.E., Kasviki K., Green S., Gainey M., Kalef-Ezra J. and Beddoe A. Prompt-gamma neutron activation analysis facility for in vivo body composition studies in small animals. *Analytical and Bioanalytical Chemistry*, 379 192-197 (2004).
29. Tzika F., Stamatelatos I.E., Kalef-Ezra J. and Bode P. 2004. Large sample neutron activation analysis: Correction for neutron and gamma attenuation. *Nukleonika*, 49, 115-121 (2004).
30. A. -A. F. Tavassoli, A. Alamo, L. Bedel, L. Forest, J. -M. Gentzbittel, J. -W. Rensman, E. Diegele, R. Lindau, M. Schirra, R. Schmitt, H.C. Schneider, C. Petersen, A.-M. Lancha, P. Fernandez, G. Filacchioni, M.F. Maday, K. Mergia, N. Boukos, Baluc, P. Spatig, E. Alves, E. Lucon, "*Materials design data for reduced activation martensitic steel type EUROFER*", Journal of Nuclear Materials, 329-333, 257-262, (2004)
31. P. Pankowski, L. T. Baczewski, T. Story, A. Wawro, K. Mergia, S. Messoloras, "*Magnetic properties of ultra-thin epitaxial V/Gd bilayers*", Physica Status Solidi, 1, 405-408 (2004)
32. K. Mergia, A. Salevris, S. Messoloras, "*The new neutron powder diffractometer at Demokritos research reactor*", Physica B. 350, 162-165, (2004)

• **Papers accepted for publication in Refereed Scientific Journals**

1. M. Lazaridis, A. Spiridaki, S. Solberg, G. Kallos, T. Svendby, F. Flatøy, I. Drossinos, C. Housiadas, J. Smolik, I. Colbeck, M. Varinou, F. Gofa, K. Eleftheriadis, V. Zdimal and P.G. Georgopoulos, *Modeling of combined aerosol and photooxidant dynamics in the Mediterranean area*, Water Air Soil Poll.
2. Lontos C.A., Postidi M.S., Stakakis E. *Carbon-related complexes in neutron-irradiated silicon*, Physica B,

3. C. Mitsakou, C. Helmis, C. Housiadas, “*Eulerian modelling of lung deposition with sectional representation of aerosol dynamics*”, J. Aerosol Sci.
4. Housiadas, C., Drossinos, Y., Lazaridis, M., *Effect of small-scale turbulent fluctuations on rates of particle formation*, J. Aerosol Sci.
5. M. Varvayanni, N. Catsaros, M. Antonopoulos-Domis, *Derived Release Limits For the Greek Research Reactor Site Based on a Diagnostic Atmospheric Modelling System for Irregular Terrain*, Health Physics
6. P. Pankowski, L. T. Baczewski, T. Story A., Wawro, K. Mergia, S. Messoloras and F. Ott “*Induced magnetic moment of V atoms in ultra-thin epitaxial V/Gd bilayers*”, Phys. Rev. B

### **PEER-REVIEWED CONFERENCE PROCEEDINGS**

1. Popov A., N. Catsaros, V. Maderich and S. Yushenko, (2001), *Reconstruction of land-to-sea radionuclide flux by POSEIDON/RODOS model chain: the Thermaikos gulf case*, ECORAD2001, Aix-en-Provence, France, 3-7 September.
2. Kehayias J. J., Sheahan C., Weitekus A., O’Neill M. and Stamatelatos I.E., (2001), *Field Methods for body composition: Validation for rapid extra-cellular water space assessment against instrumental neutron activation*, The FASEB Journal, 15, A252. Proceedings Experimental Biology 2001, Orlando, Florida, USA, March 31- April 4, 2001.
3. Stamatelatos I.E., Tzika F., Fakinou E. and Green S., (2001), *Large sample neutron activation analysis facilities design using the MCNP code*, 7<sup>th</sup> MCNEG Monte Carlo User Group Meeting, Royal Marsden Hospital Conference Center, London, U.K., April 9-10<sup>th</sup> 2001.
4. Carinou E., Stamatelatos I.E., Kamenopoulou V., Georgolopoulou P., Sandilos P., (2001), *Evaluation of the photo-neutron dose equivalent distribution to patients treated by high-energy medical electron accelerators*, Physica Medica, XVII (3), 200. Proceedings European Conference of Medical Physics and Clinical Engineering, Belfast U.K., Sept. 12-15, 2001.
5. Tzima E., Kalef-Ezra J., Stamatelatos I.E., Yasumura S., Glaros D., (2001), *Design and efficiency calibration of a multi-detector WBC based on Monte Carlo calculations*, Physica Medica, XVII (3), 200. Proceedings European Conference of Medical Physics and Clinical Engineering, Belfast U.K., Sept. 12-15, 2001.
6. Jones, A.V., Dickinson, S., Brayer, C., Herranz, L., Housiadas, C., De Rosa, F., Henneges, G., Langhans, J., Hanniet, N., Wichers, V., Guntay, S., Paci, S., Martin-Fuertes, F., (2001) Validating of severe accident codes against Phebus FP for plant applications”, Proceedings of **FISA-2001**, Luxembourg, November 12-14,.
7. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, Y. Drossinos, C. Housiadas, J. Smolik, I. Colbeck, K. Eleftheriadis, V. Gekas, F. Stordal, (2001), *Modelling of combined aerosol and photo-oxidant processes in the Mediterranean area*, Proceedings of the European Aerosol Conference, Leipzig, Germany, September 3-7.
8. M. Lazaridis, I. Colbeck, Y. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadas, G. Kallos, N. Mihalopoulos, P. Mikuska, J. Smolik, S. Solberg, A. Spiridaki, E. Stefanou, F. Stordal, T. Svendby, Z. Vecera, V. Zdimal, (2001), *Subgrid scale investigations of factors determining the occurrence of ozone and fine particles*, Proceedings of the European Aerosol Conference, Leipzig, Germany, September 3-7.
9. I. Colbeck, C. Bryant, Y. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadas, G. Kallos, M. Lazaridis, N. Mihalopoulos, P. Mikuska, S. Nyeki, J. Smolik, Z. Vecera, V. Zdimal, (2001), *Preliminary results from subgrid scale investigations of factors determining the occurrence of ozone and fine particles*, Proceedings of the 12<sup>th</sup> Annual Conference of the British Aerosol Society, University of Bath, June 18-19.
10. M. Lazaridis, D.N. Asimakopoulos, M. Branis, K. Chelms, I. Colbeck, Y. Drossinos, C. Dye, K. Eleftheriadis, H. Flocas, W. Hollander, C. Housiadas, J. Hovonka, N. Kalogerakis, J. Smolik, F. Stordal, T. Svendby, V. Zdimal, (2001), *Characterisation of urban air quality indoor/outdoor*

particulate matter chemical characteristics and source-to-inhaled dose relationships, Proceedings of the European Aerosol Conference, Leipzig, Germany, September 3-7.

11. M. Lazaridis, I. Colbeck, I. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadas, G. Kallos, N. Mihalopoulos, P. Mikuska, C. Mitsakou, J. Smolik, S. Solberg, A. Spiridaki, E. Stefanou, F. Stordal, T. Svendby, Z. Vecera, V. Zdimal, (2001), *Subgrid scale investigations of factors determining the occurrence of ozone and fine particles*, Proceedings of the 8<sup>th</sup> European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants, Torino, Italy, September 17-20.
12. K. Mergia, L.T. Baczewski, S. Messoloras, S. Hamada, T. Shinjo, H. Gamari-Seale, J. Hauschild, (2001), *Polarized neutron reflectivity study of a Gd/Cr multilayer*, International Conference on Neutron Scattering, Munich.
13. K. Mergia, A. Salevris, S. Messoloras, (2001), *Calibration of neutron linear position sensitive detector*", International Conference on Neutron Scattering, Munich.
14. Mergia K., Messoloras S., Salevris A. and Stamatelatos I.E., (2001), *NEDI: The new neutron diffractometer at the GRR-1 research reactor at N.C.S.R. "Demokritos"*, Proceedings of the XVII Greek Conference in Solid State Physics, Ξάνθη, 20 Οκτ.
15. Tzima E., Kalef-Ezra J., Stamatelatos I.E., Glaros D. (2001) *Monte Carlo simulation of a Whole Body Counter* 1st Pan-Hellenic Conference on Environmental Radioactivity, NCSR "Demokritos", Athens, Nov. 23-24,
16. Margaritis I., Mpasiakos I., Kordas G., Mitrikas G., Stamatelatos I.E. (2001) *Contribution of EPR spectroscopy and Neutron Activation Analysis in the environmental palaiodosimetry and dating of geological materials*. 1st Pan-Hellenic Conference of Environmental Radioactivity, NCSR "Demokritos", Athens, Nov. 23-24, 2001
17. K. Mergia, L.T. Baczewski, S. Messoloras, S. Hamada, E. Gamari-Seale, and J. Hauschild, (2001), "Polarised neutron reflectivity study of Gd/Cr multilayers", Proceedings of the XVII Greek Solid State Physics Conference, Ksanthi.
18. C. Mitsakou, K Eleftheriadis, C. Housiadas and M. Lazaridis (2001), *Calculation of dispersion and deposition of depleted Uranium particles*", 1st Panhellenic Conference "Environmental Radioactivity", NCSR "Demokritos", Athens, November 23-24
19. A. Popov, V. Maderich, S. Yushenko and M. Varvayanni, (2001), *Watershed-to-coastal waters radionuclide flux simulation using the RETRACE-THREEX model chain; the Axios-Thermaikos case*, ", 1st Panhellenic Conference "Environmental Radioactivity", NCSR "Demokritos", Athens, November 23-24
20. K. Mergia, S. Messoloras, A. Salevris and I.E. Stamatelatos, (2001), "The new neutron powder diffractometer at the Greek research reactor GRR-1 at N.C.S.R. "Demokritos"", Proceedings of the XVII Greek Solid State Physics Conference, Ksanthi.
21. V. Skarlou, I. Matsas, I. Anoussis, C. Haidouti and G. Arapis, (2001), *Cs-134 Uptake for Crops Ground on Representative and Volcanic Greek Soils*, XXXI Annual Meeting of European Society for New Methods in Agricultural Research, MAICH Chania Crete 8-12 Sept.
22. Tzika F., Stamatelatos I.E., *Thermal neutron flux self-shielding corrections factors for large sample instrumental neutron activation analysis using the MCNP code*, IRRMA-V, 5<sup>th</sup> International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications, Bologna, Italy, 9-14 June 2002.
23. Stamatelatos I.E., Mergia K., Salevris A., Messoloras S., *MCNP modelling of the shielding requirements of neutron scattering instruments*, IRRMA-V, 5<sup>th</sup> International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications, Bologna, Italy, 9-14 June 2002.
24. Stamatelatos I.E., Mergia K., Lefkopoulos G., Forrest R., *Impurities and evaluation of induced activity of SiCf/SiC composites*, IRRMA-V, 5<sup>th</sup> International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications, Bologna, Italy, 9-14 June 2002.

25. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, F. Ffatøy, I. Drossinos, C. Housiadass, J. Smolik, I. Colbeck, K. Eleftheriadis, V. Zdimal, *Modelling of combined aerosol and photooxidant processes in the Mediterranean area*, **6<sup>th</sup> International Aerosol Conference** Taipei, Taiwan, September 8-13, 2002
26. M. Lazaridis, D. N. Asimakopoulos, M. Branis, I. Colbeck, I. Drossinos, C. Dye, K. Eleftheriadis, H. Flocas, C. Helmis, W. Hollander, C. Housiadass, J. Hovorka, N. Kalogerakis, J. Smolik, T. Svendby and V. Zdimal, *Characterisation of urban air quality and indoor/outdoor particulate matter chemical characteristics*, **6<sup>th</sup> International Aerosol Conference** Taipei, Taiwan, September 8-13, 2002
27. M. Lazaridis, A. Spiridaki, S. Solberg, T. Svendby, T. Svenby, G. Kallos, F. Flatoy, C. Housiadass, J. Smolik, I. Colbeck, K. Eleftheriadis, *Modeling of aerosol processes in the Mediterranean area*, **NATO Conference on Regional Atmospheric Modelling**, **Kluwer Academic Press** (2002)
28. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, I. Drossinos, C. Housiadass, J. Smolik, I. Colbeck, K. Eleftheriadis, V. Gekas, *Modeling of combined aerosol and photooxidant dynamics in the Mediterranean area*, Proceedings of the International Conference “**Protection and Restoration of the Environment VI**”, Vol. II, pp. 1051-1056, (2002).
29. M. Lazaridis, I. Colbeck, I. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadass, G. Kallos, N. Mihalopoulos, P. Mikuska, C. Mitsakou, J. Smolik, S. Solberg, A. Spiridaki, T. Svendby, H. Vardouki, Z. Vecera, V. Zdimal, *Characterization of physical and chemical factors determining the occurrence of ozone and fine particles*, **10<sup>th</sup> Symposium of the IAMAS Commission on Atmospheric Chemistry and Global Pollution (CACGP), 7<sup>th</sup> Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC)**, pp. 98, (2002).
30. Dova M., Misaelides P., Papadakis J., Godelitsas A., Anousis J., *Interaction of Natural Zeolites with Pa in Aqueous Solutions: An Exploratory Study*, Proc. **6<sup>th</sup> International Conference in the Occurrence, Properties and Utilization of Natural Zeolites**, P. Misaelides Ed., Thessaloniki, June 2002, pp. 85-87.
31. Skarlou V., Massas I., Anousis I., Haidouti C., Arapis G., *Soil classification based on <sup>134</sup>Cs transfer factor determination from soil to reference plants: A preliminary investigation*. Proceedings of the 9<sup>th</sup> Panhellenic Soil Conference, Athens Sep. 2002, 405-414
32. Housiadass, C., Lazaridis, M, Drossinos, Y, *Inhalation dosimetry modelling and dose assessment*, International Conference on EURO V and Future Worldwide Emission Requirements for Passenger Cars and Light Duty Vehicles, Museum of Science and Technology, Milan, Italy, December 10-11, (2003).
33. Muller, K., Dickinson, S., de Pascale, C., Girault, N., Herranz, L., de Rosa, F., Henneges, G., Langhans, J., Housiadass, C., Wichers, V., Birchley, J., Paci, S., Martin-Fuertes, F., Sartmadjiev, A., Turcu, I., Ivanov, I., Horvath, G., *Validation of severe accident codes against Phebus FP for plant application (Pheben2)*, Proceedings of FISA-2003, Luxembourg, November 10-13, (2003).
34. Housiadass, C., Drossinos, Y., *Analysis of Thermophoresis in Phebus Tests*, 5<sup>th</sup> Technical Seminar on the Phebus FP Programme, Centre de Congrès, Aix-en-Provence, France, June 24-26, (2003).
35. Housiadass, C., Drossinos, Y., *Thermophoretic deposition of low-inertia particles*, J. Aerosol Sci., 34, Suppl. 1, 113-114, 2004. European Aerosol Conference, Madrid, Spain, August 31 - September 5, (2003).
36. G. Coulson, A. Bartonova, T. Bholer, D.M. Broday, I. Colbeck, I. Fløisand, J. Fudala, W. Hollander, C. Housiadass, M. Lazaridis, J. Smolik, *Health Risks From Pollutants in Domestic Environments: The Urban Exposure Project*, J. Aerosol Sci., Suppl. 1, 377-378, 2004. European Aerosol Conference, Madrid, Spain, August 31 - September 5, (2003).

37. Mitsakou, C., Housiadas, C., *Modelling of aerosol dynamics in the human respiratory tract*, J. Aerosol Sci., Suppl 1, 399-400, 2004. European Aerosol Conference, Madrid, Spain, August 31 - September 5, (2003).
38. Housiadas, C., Drossinos, Y., Lazaridis, M., *Effect of turbulent fluctuations on binary nucleation*, J. Aerosol Sci., Suppl. 2, 1395-1396, 2004. European Aerosol Conference, Madrid, Spain, August 31 - September 5, (2003).
39. M. Lazaridis, A. Spiridaki, S. Solberg, T. Svendby, T. Svenby, G. Kallos, F. Flatoy, C. Housiadas, J. Smolik, I. Colbeck, K. Eleftheriadis, "Modeling of aerosol processes in the Mediterranean area". In: Air Pollution Processes in Regional Scale (edt. D. Melas), **NATO Science Series IV: Earth and Environmental Sciences**, Vol. 30, pp. 203-210, (2003), **Kluwer Academic Publishers**.
40. C. Bryant, I. Colbeck, J. Smolik, K. Eleftheriadis, M. Branis, C. Housiadas, C. Helmis, W. Hollander, M. Petrakis, "Urban indoor-outdoor aerosol measurements at selected residential sites within Europe", Proceedings of the **14<sup>th</sup> Annual Conference of the British Aerosol Society**, University of Reading, April 2-3 (2003).
41. K. Mergia, A. Salevris, S. Messoloras, *The new neutron powder diffractometer at Demokritos research reactor*, European Conference on Neutron Scattering, Montpellier, 2003
42. F. Tzika, I. E. Stamatelatos, J. Kalef-Ezra, P. Bode (2003) Large Sample NAA Facility at GRR-1 Research Reactor: Design and Applications. *Proceedings International Conference on Isotopic and Nuclear Analytical Techniques for Health and Environment*, IAEA-CN-103, Vienna, Austria, 10-13 June 2003
43. J.J Kehayias, I.E. Stamatelatos, C. Sheahan, M. O'Neill (2003) *A field method for assessing body composition by portable XRF Bromine analysis: Validation against instrumental neutron activation. Proceedings International Conference on Isotopic and Nuclear Analytical Techniques for Health and Environment*, IAEA-CN-103, Vienna, Austria, 10-13 June 2003
44. I.E. Stamatelatos, K. Kasviki, S. Green, M. Gainey, J. Kalef-Ezra, A. Beddoe (2003) *Prompt-gamma neutron activation analysis facility for in vivo body composition studies in small animals. Proceedings International Conference on Isotopic and Nuclear Analytical Techniques for Health and Environment*, IAEA-CN-103, Vienna, Austria, 10-13 June 2003
45. C.A.Lontos, G.D.Antonaras, C. Pandis, M. Potsidi, E. Stakakis A. Misiuk, V.V.Emtsev *Study of thermal donors effect on the overall behavior of imperfections in neutron-irradiated silicon*. XIX Panellinic Solid State Physics Conference, Thessaloniki, Sep. 21-24 2003.
46. K. Eleftheriadis, S. Vratolis, C. Mitsakou, I. Colbeck, C. Housiadas, M. Lazaridis, "Impact of indoor household activities on the size distribution of fine aerosol number concentration and case specific calculated inhaled dose", **European Aerosol Conference**, Budabest, Hungary, 6 – 10 September 5, 2004.
47. D. Mitrakos, C. Mitsakou, C. Housiadas, "Simulation of laminar flow reactor with an 1-D sectional aerosol model", **European Aerosol Conference**, Budabest, Hungary, 6 – 10 September 5, 2004
48. C. Mitsakou, C. Helmis, C. Housiadas, "Extrathoracic and thoracic deposition of inhaled hygroscopic particles", **European Aerosol Conference**, Budabest, Hungary, 6 – 10 September 5, 2004.
49. V. Aleksandropoulou, C. Mitsakou, C. Housiadas, M. Lazaridis, "Dose assessment based on realistic exposure scenarios in Oslo", **European Aerosol Conference**, Budabest, Hungary, 6 – 10 September 5, 2004.
50. Tzika F., Stamatelatos I.E., Kalef-Ezra J. Large sample neutron activation analysis: Influence of sample inhomogeneities. Proceedings 11th International Conference on Modern Trends in Activation Analysis, University of Surrey, Guildford, UK, 20-25 June 2004
51. Kasviki K., Stamatelatos I.E., Kalef-Ezra J. Prompt gamma neutron activation analysis for small animal in vivo body composition studies. Effects of animal body size and inhomogeneities.

### **3. TECHNICAL REPORTS**

1. Stamatelatos I.E., Mergia K., Lefkopoulos G. and Forrest R., (2001), *Impurities and evaluation of induced activity of SiC/SiC composites*, EFF-DOC-808
2. Housiadas, C. (2001), *Lumped parameters analysis of coupled kinetics and thermal-hydraulics for small reactors*, NCSR "Demokritos", DEMO Report 5/01.
3. K. Mergia, A. Salevris and S. Messoloras, (2001), *Calibration of a Neutron Linear Position Sensitive Detector*, NCSR "Demokritos", Demo Report 2001/3
4. Varvagianni M., *Three dimensional computation of neutron flux in the Greek Research Reactor*, Demo Report 2003/2
5. Varvagianni M., *The transport-diffusion neutronics code system of the Greek Research Reactor – Description & Criticality Calculations* Demo Report 2003/1
6. Varvagianni M., *Individual Effective Doses and Derived Release limits for the Greek Research Reactor Site*, P-INT-RP/04/1
7. Varvagianni M., *The Fuel Burnup Determination Methodology and Indicative Depletion Calculations in the Greek Research Reactor*, P-INT-RP/04/2
8. Tzika F., Chanousis A., Kovatsos C. and Stamatelatos I.E. *Quality tests of GRR-1 radiation protection area monitors*. INT-RP/2003/2.
9. Chanousis A. *Radiochemical study of GRR-1 core water*. INT-RP/2003/3.
10. Tzika F., Chanousis A., Kovatsos C. and Stamatelatos I.E., *GRR1- tunnel monitor operational tests*. INT-RP/2004/2.
11. Stamatelatos I.E. and Tzika F., *Research reactor radiation protection regulations*. INT-RP/2004/3 (in Greek).

### **4. SCIENTIFIC WORKSHOPS**

1. Stamatelatos I.E., *Calibration of neutron detection monitors*, Workshop on Dosimetry Standards and Calibration of Ionizing Radiation Detectors. Organizer Greek Atomic Energy Commission, NCSR "Demokritos", October 20<sup>th</sup>, 2003.

### **5. EDUCATIONAL ACTIVITIES**

1. Stamatelatos I.E., IAEA Regional Post-Graduate Educational Course on Radiation Protection and Safety of Radiation Sources, Greek Atomic Energy Commission, Athens, Greece.
2. Stamatelatos I.E., Inter-University Post-graduate course on Medical Radiation Physics.

### **6. CHAPTERS IN BOOKS**

1. Drossinos, Y. and Housiadas, C., Aerosol Flows, In: *The Multiphase Flow Handbook* (ed. C. Crowe), Chapter 6, CRC Press (forthcoming).



## 2. Health Physics and Environmental Hygiene Laboratory (HPEH)

### 1. PEER-REVIEWED JOURNALS

1. Bauchinger, M., Braselmann, H., Savage, J.R.K., Natarajan, A.T., Terzoudi, G.I., Pantelias, G.E., Darroudi, F., Figgitt, M., Griffin, C.S., Knehr, S., Okladnikova, N.D., Santos, S., and Snigiryova, G. (2001). A collaborative exercise on the use of FISH chromosome painting for retrospective biodosimetry of Mayak nuclear-industrial personnel. *International Journal of Radiation Biology*, 77, 259-67.
2. Sambani C., D.T.P. Trafalis, Ch. Mitsoulis-Mentzikoff, E. Poulakidas, V. Makropoulos, G.E. Pantelias and C. Mecucci (2001). Clonal chromosome rearrangements in hairy cell leukemia: Personal experience and review of literature. *Cancer Genetics and Cytogenetics*, 129, 139-145.
3. La Starza R., C. Sambani, B. Crescenzi, C. Matteucci, M.F. Martelli and C. Mecucci (2001). AML1/MTG16 fusion gene from a t(16;21)(q24;q22) translocation in treatment-induced leukemia after breast cancer. *Haematologica*, 86, 212-213.
4. Matsouka P., C. Sambani, N. Giannakoulas, A. Symeonidis and N. Zoumbos (2001). Polyploidy in acute promyelocytic leukemia without the 15;17 translocation. *Haematologica*, 86,1312-1313.
5. Mignon-Ravix C., F. Mugneret, C. Stavropoulou, D. Depetris, P.K. Van Kien and M.G. Mattei (2001). Maternally inherited duplication of the possible imprinted 14q31 region. *Journal of Medical Genetics*, 38, 343-347.
6. Efstathiou S., P. Roussou and C. Sambani (2001). Therapy-related acute leukaemia with monosomy 7, der(6p), occurring after remission of high grade non-Hodgkin lymphoma: case report and review of the literature. *Haema*, 4, 239-242.
7. A.Savidou, N. Zouridakis, Measurement of Radon Concentration in Northern Greece Ground Water. *Fresenius Envir. Bull* 10 411-413, 2001
8. A.Savidou, G. Sideris and N. Zouridakis, Radon Concentration in Public Water Supplies in Migdonia Basin, Central Macedonia, Northern Greece. *Health Physics* 80, 170-174, 2001
9. Sambani C, La Starza R, Stavropoulou C, Manola KN, Harhalakis N, Mecucci C (2002). A novel dicentric (1;10) in a patient with myelodysplastic syndrome. *Cancer Genetics and Cytogenetics*, 133, 87-89.
10. Diakoumakos CD, Douvas A, Raptis I, Kakabakos S, Dimotikalli D, Terzoudi G, Argitis P (2002). Dilute aqueous base developable resists for environmentally friendly and biocompatible processes. *Microelectronic Engineering*, 61: 819-827.
11. Glezos N, Misiakos K, Kakabakos S, Petrou P, Terzoudi G. (2002). Electron beam patterning of biomolecule. *Biosensors & Bioelectronics*, 17 (4): 279-282.
12. N. Zouridakis, K. M. Ochsenkuhn, A.Savidou., Determination of Uranium and Radon in Potable Water Samples. *Journal of Enviromental Radioactivity* 61, 225-232 (2002)
13. A.Savidou, G. Sideris and N. Zouridakis, K. M. Ochsenkuhn and P. Sotiropoulos. Uranium in Public Water Supplies in Migdonia Basin, Central Macedonia, Northern Greece. *Journal of Balkan Geophysical Society* 5, No 4, 131-134 (2002)
14. Terzoudi G.I., S.I. Malik, K. Margaritis, K. Manola, W. Makropoulos and G.E. Pantelias (2003). A new cytogenetic approach for the evaluation of mutagenic potential of chemicals that induce cell cycle arrest in the G2 phase. *Mutagenesis*, 18, 539-543.
15. Manola K.N., G.I. Terzoudi, C.E. Dardoufas, S.I. Malik and G.E. Pantelias (2003). Radioprotective effect of amifostine on cells from cancer prone patients and healthy individuals studied by the G2 and PCC assays. *International Journal of Radiation Biology*, 79(10), 831-838.
16. Papadakis V., J.P. Panagiotou, S. Polychronopoulou-Androulakaki, V. Mikraki, A. Parcharidou, C. Tsitsikas, E. Vrachnou, G. Paterakis, A. Mavrou, C. Sambani, M. Soutis and S. Haidas (2003). Results of childhood acute lymphoblastic leukaemia treatment in Greek patients using a BFM-based protocol. *Haema*, 6, 208-216.
17. Malik S.I., G.I. Terzoudi, and G.E. Pantelias (2004). SCE analysis in G2 lymphocyte prematurely condensed chromosomes after exposure to atrazine: The non-dose-dependent increase in homologous recombinational events does not support its genotoxic mode of action. *Cytogenetic and Genome Research* 104, 315-319.
18. Kaloutsis V., C. Hadjileontis, C. Tsatalas, C. Sambani, I. Kostopoulos, C. Papadimitriou (2004). Occurrence of a variant Philadelphia translocation, t(10;22), in de novo acute megakaryoblastic leukemia. *Cancer Genetics and Cytogenetics*, 152, 52-55.

19. Sambani C., La Starza R., Roumier C., Crescenzi B., Stavropoulou C., Katsarou O., Karafoulidou A., Dhalle J.H., Lai J.L., Preudhomme C., Martelli M.F., Mecucci C. (2004). Partial duplication of the MLL oncogene in patients with aggressive acute myeloid leukemia. *Haematologica*, 89, 403-407.

#### **PEER-REVIEWED CONFERENCE PROCEEDINGS**

1. G.I Terzoudi, K. Manola, V. Makropoulos and G.E. Pantelias (2001). Chromosomal damage after G2 irradiation of peripheral blood lymphocytes as a clinical predictive assay for genetic susceptibility to radiation sensitivity. *ESTRO Workshop on Biology in Radiation Oncology*, 10-12 June 2001, Denmark.
2. Σταυροπούλου Χ., Κ. Σαμπάνη, Ε. Ρηγανά, Γ. Παντελιάς και Β. Μακρόπουλος (2001). Γονιδιακός πολυμορφισμός της τρανσφεράσης της γλουταθειόνης T1 (GSTT1) και της οξειδοοξειδοκτάσης NAD(P)H-κινόνης (NQO1) σε ασθενείς με μυελοδυσπλαστικό σύνδρομο. 27ο Πανελλήνιο Ιατρικό Συνέδριο, 8-12 Μαΐου, Αθήνα.
3. Fragou A., Ch. Alamara, G. Georgiou, C. Sambani and P. Roussou (2001). Cytogenetic analysis in patients with primary myelodysplastic syndrome and the relationship with the prognosis of the disease. 6th International Symposium on Myelodysplastic Syndromes, June 14-17, 2001, Stockholm – Sweden, *Leukemia Research*, Vol.
4. La Starza R, A. Aventin, B. Crescenzi, F. Lauria, C. Sambani, M.F. Martelli and C. Mecucci (2001). Characterization of centric and pericentric rearrangements in myelodysplastic syndromes. 6th International Symposium on Myelodysplastic Syndromes, June 14-17, 2001, Stockholm – Sweden, *Leukemia Research*, Vol.
5. Stavropoulou Ch., R. La Starza, C. Sambani, K.N. Manola, D. Rontogianni, N. Harhalakis and C. Mecucci (2001). A novel dicentric (1;10) in a patient with myelodysplastic syndrome. 3rd European Cytogenetic Conference, July 7-10, 2001, Paris – France, *Annales de Génétique*, Vol 44.
6. Sambani C., R. La Starza, O. Katsarou, K.N. Manola, Ch. Stavropoulou, A. Karafoulidou and C. Mecucci (2001). Acute biphenotypic leukemia with double MLL/CBP fusion gene from a t(11;16)(q23;p13) involving one chromosome 11 and both 16 homologs. 3rd European Cytogenetic Conference, July 7-10, 2001, Paris – France, *Annales de Génétique*, Vol 44.
7. Σαμπάνη Κ., Χ. Σταυροπούλου, Τμήμα Μυελικής Ανεπάρκειας & Μυελοδυσπλαστικών Συνδρόμων της ΕΑΕ, Ε. Ρηγανά, Γ. Παντελιάς και Β. Μακρόπουλος (2001). Πολυμορφισμός του γονιδίου της τρανσφεράσης της γλουταθειόνης T1 (GSTT1) σε ασθενείς με μυελοδυσπλαστικό σύνδρομο: Συσχετισμός με τα κυτταρογενετικά δεδομένα. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, *Haema*, Vol. 4.
8. Πολυχρονοπούλου Σ., Γ. Πατεράκης, Ι.Π. Παναγιώτου, Β. Παπαδάκης, Α. Παρχαρίδου, Ε. Ψιάχου-Leonard, Β. Ρούλη, Σ.Ι. Παπαδημητρίου, Χ. Μπελέση, Δ. Σκούμη, Κ. Τσιτσικας, Κ. Σαμπάνη, Ν. Λαουτάρης, Α. Τασιοπούλου, Α. Σταυροπούλου-Γκιόκα, και Σ. Χαϊδάς (2001). Ανοσοφαινοτυπική παρακολούθηση μυελικών λεμφοκυτταρικών υποπληθυσμών σε Β-κυτταρικής προέλευσης οξεία λεμφοβλαστική λευχαιμία κατά τις φάσεις της θεραπείας με το πρωτόκολλο ALL-BFM '95. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, *Haema*, Vol. 4.
9. Παπαδημητρίου Σ.Ι., Σ. Πολυχρονοπούλου, Ι. Γληγόρη, Γ. Πατεράκης, Ι.Π. Παναγιώτου, Κ. Σαμπάνη, Α. Σταυροπούλου-Γκιόκα, Σ. Χαϊδάς και Α. Τασιοπούλου (2001). Σχεδιασμός και εφαρμογή ενός συστήματος χρωμοσωματικού ελέγχου της παιδικής Β Οξείας Λεμφοβλαστικής Λευχαιμίας (B-ALL) με φθορίζοντα in situ υβριδισμό (FISH). 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, *Haema*, Vol. 4.
10. Συμεωνίδης Α., Κ. Σαμπάνη, Θ. Γαλανόπουλος, Ν. Βύνιου, Ε. Τέρπος, Α. Φράγκου, Α. Αθανασιάδου, Κ. Γσαταλας, Α. Παρχαρίδου, Α. Κουράκλη, Θ. Μαρινάκης, Ν. Γιαννακούλας, Ε. Θανοπούλου, Μ. Πολίτη, Π. Ρούσσου, Ν. Λαουτάρης, Α. Λαζαρίδου, Σ. Πολυχρονοπούλου, Μ. Πρωτόπαππα, Α. Φασσας, Ν. Αναγνωστόπουλος και Ν. Ζούμπος (2001). Αμιγής τρισωμία 8 επί αιματολογικών κακοηθειών: Αναγνώριση των κοινών κλινικών και αιματολογικών γνωρισμάτων επί 80 ασθενών. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, *Haema*, Vol. 4.
11. Μαρινάκη Π., Κ. Σαμπάνη, Σ. Βασιλικιώτη, Α. Κιούμη, Κ. Μανωλά, Χ. Σταυροπούλου, και Ι. Κορατζής (2001). Ασθενής με χρόνια μυελογενή λευχαιμία και χρωμόσωμα Philadelphia (Ph) ως προϊόν μοναδικής σύνθετης μετατόπισης. Μελέτη με ζωνοποίηση G και FISH. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, *Haema*, Vol. 4.

12. Πολυχρονοπούλου Σ., Ι.Π. Παναγιώτου, Γ. Πατεράκης, Σ.Ι. Παπαδημητρίου, Χ. Μπελέση, Β. Ρούλη, Δ. Σκούμη, Ι. Γληγόρη, Β. Παπαδάκης, Α. Παρχαρίδου, Ε. Ψιάχου-Leonard, Κ. Τσιτσικας, Κ. Σαμπάνη, Ν. Λαουτάρης, Α. Τασιοπούλου, Α. Σταυροπούλου-Γκιόκα, και Σ. Χαϊδός (2001). Ανοσοφαινοτυπικά, κυτταρογενετικά και μοριακά χαρακτηριστικά στην Β-κυτταρικής προέλευσης οξεία λεμφοβλαστική λευχαιμία (β-ΟΛΛ) στα παιδιά. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, Haema, Vol. 4.
13. Πολυχρονοπούλου Σ., Ι.Π. Παναγιώτου, Γ. Πατεράκης, Β. Ρούλη, Κ. Τσιτσικας, Β. Παπαδάκης, Α. Παρχαρίδου, Ε. Ψιάχου-Leonard, Δ. Σκούμη, Χ. Μπελέση, Α. Μαύρου, Κ. Σαμπάνη, Δ. Αναγνώστου, Σ.Ι. Παπαδημητρίου, Ν. Λαουτάρης, Α. Σταυροπούλου-Γκιόκα και Σ. Χαϊδός (2001). Κλινικοεργαστηριακά χαρακτηριστικά μυελοδυσπλαστικών συνδρόμων (ΜΔΣ) του τύπου RAEB/RAEBt και οξείας μυελογενούς λευχαιμίας (ΟΜΛ) στην παιδική ηλικία. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, Haema, Vol. 4.
14. Μαρινάκης Θ., Ε. Μιχάλη, Β. Γρηγοράκη, Α. Γαλανόπουλος, Γ. Γκορτζολίδης, Α. Ζώμας, Γ. Πατεράκης, Κ. Σαμπάνη, Δ. Απεσσου, Κ. Φραγκια, Α. Σκανδάλη και Ν.Ι. Αναγνωστόπουλος (2001). Αξιολόγηση του συνδυασμού μιτοξανθρόνης-ετοποσίδης στην αντιμετώπιση της οξείας μυελογενούς λευχαιμίας (ΟΜΛ) σε ενήλικους >60 χρόνων. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, Haema, Vol. 4.
15. Σαμπάνη Κ., Χ. Σταυροπούλου, Ο. Κατσαρου, Α. Κουραμπα, Π. Κωτση, Ε. Ρηγανά, R. La Starza, Α. Καραφουλίδου και C. Mecucci (2001). Οξεία τριφαινοτυπική λευχαιμία με t(11;16)(q23;p13) και εμπλοκή ενός χρωμοσώματος 11 και των δύο ομολόγων 16: Παρουσία διπλού υβριδικού γονιδίου MLL/CBP. 12ο Πανελλήνιο Αιματολογικό Συνέδριο, Αθήνα, Haema, Vol. 4.
16. Τερζούδη Γ., Κ. Μανωλά, Κ. Σαμπάνη και Γ. Παντελιάς (2001). Ερευνητικές δραστηριότητες του Εργαστηρίου Υγειοφυσικής & Περιβαλλοντικής Υγιεινής του ΠΠΤ-Α: Βιοδοσιμετρία και εξατομίκευση επικινδυνότητας υπερέκθεσης σε ιοντίζουσες ακτινοβολίες με κυτταρογενετικές μεθόδους. 1ο Πανελλήνιο Συνέδριο Ραδιενέργειας Περιβάλλοντος, Αθήνα.
17. Marinakis Th, A Zomas, E Michalis, G Gortzolidis, A Galanopoulos, V Grigoraki, G Paterakis, A Skandalis, C Politis, C Sambani and NI Anagnostopoulos (2002). Treatment of adult Acute Lymphoblastic Leukemia patients (ALL) with the hyper-CVAD regimen: preliminary results. 7th Congress of the European Haematology Association, June 6-9, Florence – Italy.
18. Trafalis DTP, C Sambani, Ch Vlahodimitropoulou, V Politis, E Poulakidas and GE Pantelias (2002). Is the incidence of the long arm heterochromatin polymorphisms on chromosomes 1, 9 and 16 associated with the development of blood neoplasms? A grand scale study in Greek population. 7th Congress of the European Haematology Association, June 6-9, Florence – Italy.
19. Μαρινάκης Θ, Α Γαλανόπουλος, Ε Μιχάλη, Α Ζώμας, Γ Γκορτζολίδης, Β Γρηγοράκη, Α Λειβαδά, Γ Πατεράκης, Ε Γρίβα, Ε Γκουμάκου, Σ Παπαδημητρίου, Μ Γεωργιακάκη, Κ Σαμπάνη, Α Σκανδάλη, ΝΙ Αναγνωστόπουλος (2002). Αντιμετώπιση της οξείας μυελογενούς λευχαιμίας (ΟΜΛ) ασθενών ηλικίας >60 ετών με την εφαρμογή πρωτοκόλλου MAC (συνδυασμού μιτοξανθρόνης-αρασυστίνης). Haema, Vol. 5. 13ο Πανελλήνιο Αιματολογικό Συνέδριο, 24-27 Οκτωβρίου, Πάτρα.
20. Πολυχρονοπούλου Σ., Α. Μάκης, Ι.Π. Παναγιώτου, Β. Παπαδάκης, Α. Παρχαρίδου, Κ. Τσίτσικας, Σ. Παπαδημητρίου, Κ. Στεφανάκη, Α. Μαύρου, Κ. Σαμπάνη, Δ. Αναγνώστου, και Σ. Χαϊδός (2002). Απλαστική αναιμία στην παιδική ηλικία: Διαγνωστική προσέγγιση, θεραπεία και έκβαση. Haema, Vol. 5. 13ο Πανελλήνιο Αιματολογικό Συνέδριο, 24-27 Οκτωβρίου, Πάτρα.
21. Σαμπάνη Κ, R La Starza, Ε Ρηγανά, Μ Παγώνη, Μ Καλομοιράκη, Α Αγαθοκλέους, Κ Μανωλά, C. Mecucci (2002). Η μη ισόρροπη μετατόπιση 1;9 είναι ειδική αλλοίωση στα μυελοϋπερπλαστικά νοσήματα και εμπλέκει την ετεροχρωματίνη satellite II. Haema, Vol. 5. 13ο Πανελλήνιο Αιματολογικό Συνέδριο, 24-27 Οκτωβρίου, Πάτρα.
22. Ρηγανά Ε, Κ Σαμπάνη, R La Starza, Κ Μανωλά, Π Διαμαντοπούλου, Γ Παντελιάς και C Mecucci (2002). Κρυφία τρισωμία 21 από δικεντρικό χρωμόσωμα (18;21) σε περίπτωση οξείας μυελογενούς λευχαιμίας. Haema, Vol. 5. 13ο Πανελλήνιο Αιματολογικό Συνέδριο, 24-27 Οκτωβρίου 2002, Πάτρα.
23. Σαμπάνη Κ, R La Starza, Ε Ρηγανά, Κ Μανωλά, Δ Μπουχούτσου, Γ Παντελιάς, C Mecucci (2002). Νέα σύνθετη αναδιάταξη του γονιδίου MLL στην οξεία μυελογενή λευχαιμία. Haema, Vol. 5. 13ο Πανελλήνιο Αιματολογικό Συνέδριο, 24-27 Οκτωβρίου, Πάτρα.

24. Malik S.I., G.I. Terzoudi, K. Margaritis, G.E. Pantelias, C.E. Vorgias, and W. Makropoulos (2003). Genotoxicity of Atrazine as determined using the analysis of sister chromatid exchanges directly in the G2-phase of peripheral blood lymphocytes. *8<sup>th</sup> International Symposium of the ISSA Research Section "Tools for the application of European Directives on health at the workplace. The example of chemical risk"* Athens, Greece, 19-21 May 2003.
25. Terzoudi G.I., S.I. Malik, K. Manola, G.E. Pantelias, W. Makropoulos (2003). A new cytogenetic method for the evaluation of mutagenic potential of chemicals that induce cell-cycle arrest in G2-phase. *8<sup>th</sup> International Symposium of the ISSA Research Section "Tools for the application of European Directives on health at the workplace. The example of chemical risk"* Athens, Greece, 19-21 May 2003.
26. La Starza R., C. Sambani, S. Ciolli, A. Aventin, M. Lafage-Pochitaloff, N. Testoni, D. Beacci, M.F. Martelli and C. Mecucci (2003). Duplication at chromosome 6p21: A new molecular abnormality in secondary myelodysplastic syndromes/acute myeloid leukemia. *7th International Symposium on Myelodysplastic Syndromes*, May 15-18, 2003, Paris - France. *Leuk. Res* Vol. 27.

### 3. Environmental Radioactivity Laboratory (ERL)

#### 1. PEER-REVIEWED JOURNALS

##### 2001

1. Kritidis P. and Florou H., 2001. Radiological impact of the Chernobyl accident in Greece – A ten year retrospective synopsis. *Health Physics* 80(5): 440-446 (EN).
2. Smolik, J., Zdimal, V., Wagner, Z., Eleftheriadis, K., Lazaridis, M. and Colbeck, I. (2001), "Submicrometer particle number size distributions of atmospheric aerosol in the Mediterranean area" *J. Aerosol Sci.*, Vol 32, pp. S145-S146
3. Smolik, J., Zdimal, Eleftheriadis, K., Havranek, V., Lazaridis, M., Colbeck, I. and Schwarz, J. (2001). "Mass and elemental size distributions of atmospheric aerosol in the Mediterranean area" *J. Aerosol Sci.*, Vol 32, pp. S147-S148
4. Eleftheriadis and Kritidis, P.(2001), Attachment coefficient of  $^{211}\text{Pb}$  on polydisperse aerosol, *J. Aerosol Science* 32, S583-S584.
5. Eleftheriadis K. and Colbeck I. (2001) "Coarse atmospheric aerosol : Size distributions of trace elements" *Atmos. Environment* Vol 35, pp 5321-5330
6. M. Lazaridis, D. N. Asimakopoulos, M. Branis, I. Colbeck, I. Drossinos, C. Dye, K. Eleftheriadis, H. Flocas, C. Helmis, W. Hollander, C. Housiadas, J. Hovonka, N. Kalogerakis, J. Smolik, F. Stordal, T. Svendby and V. Zdimal, 'Characterisation of urban air quality indoor/outdoor particulate matter chemical characteristics and source-to-inhaled dose relationships (Urban-Aerosol)' *J. Aerosol Sci.*, 32 (2001) pp.S1075-S1076.
7. M. Lazaridis, I. Colbeck, I. Drossinos, K. Eleftheriadis, V. Havranek, C. Housiadas, G. Kallos, N. Mihalopoulos, P. Mikuska, J. Smolik, S. Solberg, A. Spiridaki, E. Stefanou, F. Stordal, T. Svendby, Z. Vecera and V. Zdimal, 2001 'Subgrid scale investigations of factors determining the occurrence of ozone and fine particles (SUB-AERO)' *J. Aerosol Sci.*, 32 (2001) pp.S119-S120.
8. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, I. Drossinos, C. Housiadas, J. Smolik, I. Colbeck, K. Eleftheriadis, V. Gekas and F. Stordal, 2001 'Modelling of combined aerosol and photooxidant processes in the Mediterranean Area' *J. Aerosol Sci.*, 32 (2001) pp.S725-S726.
9. Colbeck, I. C. Bryant, S. Nyeki, K. Eleftheriadis, J. Smolik, V. Zdimal, M. Lazaridis and N. Mihalopoulos, 'Optical properties of atmospheric aerosol at Finokalia (Greece)' *J. Aerosol Sci.*, 32 (2001) pp.S445-S446.

##### 2002

10. H. Papaefthimiou, A. Mavroudis and P. Kritidis (2002), "Indoor radon levels and influencing factors in houses of Patras, Greece". *Journal of Environmental Radioactivity* (accepted 12.8.2002)
11. Theocharopoulos S. P., Florou H., Walling D. E., Kalantzakos H., Christou M., Tountas P., Nikolaou T., 2002. Soil erosion and deposition rates in a cultivated catchment area in Central Greece, estimated using the  $^{137}\text{Cs}$  technique. *Soil and Tillage Research* 1758 (2002): 1-10 (EN).
12. J. Smolík, V. Ždímal, J. Schwarz, M. Lazaridis, V. Havránek, K. Eleftheriadis, I. Colbeck, C. Bryant, N. Mihalopoulos (2002) "Size resolved mass concentration and elemental composition of atmospheric aerosols over the Eastern Mediterranean area", *J. Atmos. Chem and Physics* (in review)
13. Nyeki, S., K. Eleftheriadis, U. Baltensperger, I. Colbeck, M. Fiebig, A. Fix, C. Kiemle, M. Lazaridis and A. Petzold, (2002), "Airborne Lidar and in-situ Aerosol Observations of an Elevated Layer, Leeward of the European Alps and Apennines, *Geophys. Res. Lett.*, 29 (17): art. no. 1852
14. Bardouki. H., Laikakou H., Economou C., Sciare J., Smolik J., Zdimal V., Eleftheriadis K., Lazaridis M., Mihalopoulos N., (2002) "Chemical composition of size resolved atmospheric aerosols in the eastern Mediterranean during summer and winter", *Atmos. Environment*, 37 (2), pp195-208
15. Mitsakou, C., Eleftheriadis K., Housiadas, C. and Lazaridis M. (2002) "Modeling of the dispersion of Depleted Uranium aerosol" *Health Physics*. (accepted)

##### 2003

16. Florou H., Kritidis P., Vosniakos F., Triantafyllis J., Delfanti R., Papucci C., Cigna A., Polikarpov G. G., Egorov V. N., Bologna A. S., Patrasku V., 2003. Dispersion of caesium-137 in the Eastern Mediterranean and the Black Sea - the time evolution in relation to the sources and pathways. *Fresenius Environmental Bulletin*, Vol. 12, No 1 (2003): 3-9 (EN).
17. Tsytsugina V., Florou H., Polikarpov G. G., Chaloulou Ch., Gorbenko V., 2003. Cytogenetic studies of marine organisms in areas of elevated natural radionuclide contents. *Dopovidi Akademii Nank Ukrainy* V No 1, January 2004.

18. J. Smolík, V. Ždímal, J. Schwarz, M. Lazaridis, V. Havránek, K. Eleftheriadis, I. Colbeck, C. Bryant, N. Mihalopoulos (2003) “Size resolved mass concentration and elemental composition of atmospheric aerosols over the Eastern Mediterranean area”, *J. Atmos. Chem and Physics* , 3, pp 2207-2216
19. Mitsakou, C., Eleftheriadis K., Housiadas, C. and Lazaridis M. (2003) “Modeling of the dispersion of Depleted Uranium aerosol” *Health Physics*.84 (4), pp 538-544
20. Nyeki, S., K. Eleftheriadis, U. Baltensperger, I. Colbeck, M. Fiebig, A. Fix, C. Kiemle, M. Lazaridis and A. Petzold, (2002), “Airborne Lidar and in-situ Aerosol Observations of an Elevated Layer, Leeward of the European Alps and Apennines, *Geophys. Res. Lett.*, 29 (17): art. no. 1852
21. Bardouki. H., Laikakou H., Economou C., Sciare J., Smolik J., Zdimal V., Elefteriadis K., Lazaridis M., Mihalopoulos N., (2003) “Chemical composition of size resolved atmospheric aerosols in the eastern Mediterranean during summer and winter”, *Atmos. Environ.* 37 (2): 195-208.

## **2004**

22. Florou H., Tsytsugina V., Polikarpov G. G., Trabidou G, Gorbenko V. V., Chaloulou Ch., 2004. Field observations of the effects of protracted low levels of ionizing radiation on natural aquatic population by using a cytogenetic tool. *Journal of Environmental Radioactivity* Vol 75/3 pp: 267-283 (EN).

### **• Papers accepted for publication in Refereed Scientific Journals**

1. Trabidou G., Florou H., Kritidis P., Chaloulou Ch., Lykomitrou Ch., 2003. Distribution coefficients and concentration factors of <sup>226</sup>Ra and <sup>228</sup>Th in Greek marine environment. *Radioactivity in the Environment*, Elsevier’s Book Series (In press - Accepted on 8 September 2003 - To be published on 1 October 2004 - EN).
2. Catsiki V.A. and Florou H., 2004. Study on the behaviour of heavy metals and <sup>137</sup>Cs in an estuarine ecosystem using *Mytilus galloprovincialis* as a bioindicator species: The case of Thermaikos gulf Greece. *Journal of Environmental Radioactivity* (In press – Accepted on 20 July 2004 - JER-SCS-04-029 - EN).
3. Florou H., Kehagia K., Savidou T., Trabidou G., 2004. *Natural Radionuclides in Metallic and Thermometallic Springs in the Ikaria Island - Eastern Aegean Sea – Greece*. *Radioactivity in the Environment*, Elsevier’s Book Series (In press - Accepted on 20 July 2004- EN).
4. Florou H., Kehagia K., Chaloulou Ch., Koukoulidou V., Lykomitrou Ch., 2004. *Determination of radionuclides in Mytilus galloprovincialis by alpha and gamma-spectroscopy* .*Mediterranean Marine Science* (In press - Accepted on 8 August 2004-EN).
5. Nyeki, S., G. Coulson, I. Colbeck, K. Eleftheriadis, U. Baltensperger, H. J. Beine (2004) “Overview of Aerosol Microphysics during Arctic Sunrise: Measurements during the NICE Renoxification Study”, *Tellus B* (in press)
6. Eleftheriadis, K., S. Nyeki , C. Psomiadou and I. Colbeck, (2004) “Background aerosol properties in the European Arctic” *Water Air and Soil Poll. Focus* (in press)

## **2. PEER-REVIEWED CONFERENCE PROCEEDINGS**

### **2001**

1. Tsytsugina V, Polikarpov G. G., Florou H., Trabidou G., 2001. *Cytogenetic effects in natural populations of marine and freshwater organisms after the CHNPP accident (1986 – 20001)*. Proc.: International Conference “Fifteen Years after the Chernobyl Accident: Lessons Learned”. Governments of Ukraine, Russian Fed. Belarus and EC, IAEA, UN, Council of Europe, NAS-Ukraine, IUR, ECTS, IPNS-France, NSI-Germany. Kiev 17-20 April 2001 (EN).
2. Catsiki V.,A., Florou H., Stroglyoudi E., Chaloulou Ch., 2001. The use of *Mytilus galloprovincialis* as a bioindicator for the detection of heavy metals and <sup>137</sup>Cs in an estuarine ecosystem (Thermaikos Gulg, N. Aegean Sea). Proc.: North Aegean System Functioning and Inter-Regional Pollution Meeting. National Centre for Marine Research, Kavala 28-30/5/2001 (EN).
3. Florou H., Kritidis P., Polikarpov G., G., Egorov V., Delfanti R., Papucci C., 2001. Dispersion of Caesium-137 in the Eastern Mediterranean and the Black Sea: The time evolution in relation to the sources and pathways. Proc.: North Aegean System Functioning and Inter-Regional Pollution Meeting. National Centre for Marine Research, Kavala 28-30/5/2001 (EN).

4. Florou H., Tsytsugina V., Polikarpov G. G., Trabidou G., 2001. Cytogenetic effects on natural aquatic populations caused by ionizing radiation and conventional pollutants. Int. Congress on the radioecology – ecotoxicology of continental and estuarine environments. ECORAD 2001. Aix-en-Provence – France 3 – 7 September 2001.
5. Florou H., 2001. Effects of DU ( $^{238}\text{U}$ ) in the marine ecosystem. 6th Panhellenic Symposium “Environment and Health. Proc.: Ministry of Health and Care. General Hospital “Elena Venizelou”. Athens 17-19 May, 2001 (GR).

## **2002**

6. Florou H., Chaloulou Ch., Lykomitrou Ch. and M. Ladopoulou, 2002. Environmental monitoring in Greece: present knowledge and planned study. CIESM WORKSHOP SERIES – 15. Mediterranean Mussel Watch. Designing a regional program for detecting radionuclides and trace-contaminants. Marseille (France) 18 – 20 April 2002 pp: 63-66 (EN).
7. Trabidou G., Florou H., Chaloulou Ch and Kritidis P., 2002. Concentrations, distribution and transfer factors of some radionuclides in Greek marine environment. in: Laughlin, Simopoulos, Steinhausler (eds) Proc: 7th Int. Symposium NRE-VII, NTUA, Rhodes (Greece) 20 –24 May 2002 (EN).
8. Florou H., 2002. The use of bioindicators in environmental quality assessment. Proc.: Stakeholders’ Conference on Approaches to the Management of Environmental radioactivity. European Commission, Luxembourg 2 –3 – December 2002.
9. A.A. Karanasiou, K. Eleftheriadis, P.A. Siskos, (2002) “Size Distribution of Heavy Metals in Atmospheric Aerosol in Athens, Greece”, Environmental Science and Pollution Research, Special Issue 3, 148-149, 2002
10. S. Nyeki, G. Coulson, I. Colbeck, K. Eleftheriadis, U. Baltensperger and H. Beine, (2002)“Role of aerosols in surface arctic NOx production: overview of measurements during the “NICE” campaign”, 6th Intern. Aerosol Conf. Taipei, Taiwan.
11. J. Smolík, V. Ždímal, K. Eleftheriadis, V. Havránek, N. Mihalopoulos, J.Schwarz, I. Colbeck and M. Lazaridis, (2002) “Size resolved chemical composition of atmospheric aerosols collected in winter over the eastern Mediterranean area”, 6th Intern. Aerosol Conf. Taipei, Taiwan
12. Guy Coulson, Stephan Nyeki, Kostas Eleftheriadis, Harald Beine, Ian Colbeck, Antonella Ianniello and Roberto Sparapani, (2002) Role of aerosols in surface arctic NOx production: preliminary findings of the “NICE” campaign, 6th Intern. Aerosol Conf. Taipei, Taiwan
13. M. Lazaridis, D.N. Asimakopoulos, M. Branis, I. Colbeck, I. Drossinos, C.Dye, K. Eleftheriadis, H. Flocas, C. Helmis, W. Hollander, Housiadas, J.Hovorka, N. Kalogerakis, J. Smolik, T. Svendby and V. Zdimal (2002)“Characterization of urban air quality and indoor/outdoor particulate matter chemical characteristics”, 6th Intern. Aerosol Conf. Taipei, Taiwan
14. M. Lazaridis, G. Kallos, A. Spiridaki, S. Solberg, T. Svendby, F. Flatøy, I. Drossinos, C. Housiadas, J. Smolik, I. Colbeck, K. Eleftheriadis and V.Zdimal (2002)“ Modeling of combined aerosol and photooxidant processes in the Mediterranean area”, 6th Intern. Aerosol Conf. Taipei, Taiwan

## **2003**

15. Coulson, G., Nyeki, S., Eleftheriadis, K., Beine, H., Colbeck, I., Ianniello, A., Sparapani, R, (2003), Aerosol measurements at Ny-Ålesund 1998 to 2001, Proceedings of the European Aerosol Conference, Madrid 31st Aug.-5th Sept.,J. Aerosol Sci., Pages S17-S18.
16. Halios, C. H., Helmis, C. G., Flocas, H. A., Assimakopoulos, V. D., Eleftheriadis, K., (2003), A statistical analysis of aerosol precursors and black carbon in indoor and outdoor environments at a typical residential apartment. Proceedings of the European Aerosol Conference, Madrid 31st Aug.-5th Sept.,J. Aerosol Sci., Pages S385-S386.
17. Eleftheriadis, K., Halios, C. H., Petrakis, M, (2003) Evaluation of indoor/outdoor aerosol and trace gas concentrations measured in the urban environment Proceedings of the European Aerosol Conference, Madrid 31st Aug.-5th Sept.,J. Aerosol Sci., Pages S1361-S1362.
18. Florou H., 2003. Proc.: Radioecological Research in NCSR «Demokritos», Greece. Coordination Meeting on Radioecology. Proc.: European Commission. Brussels, 10-11 April 2003 (EN).

## **2004**

19. Florou H., Catsiki V. A., Papaefthymiou H., Lykomitrou Ch., 2004. Concentration factors of radionuclides and trace metals in mytilus galloprovincialis in an estuarine ecosystem - North Aegean Sea – Greece. Proc: The scientific basis for environment protection against radioactivity – ECORAD 2004. Int. Congress. Aix-en-Provence (France), 6 – 10 September, 2004 (EN).

20. Florou H., Kehagia C., Savidou A., Trabidou G., 2004. Natural Radionuclides in Metallic and Thermometallic Springs in the Ikaria Island - Eastern Aegean Sea – Greece. Proc.: -IAEA – TECDOC. International Conference on Isotopes in Environmental Studies – Aquatic Forum 2004, IAEA, Monaco 25– 29 October 2004 (EN).
21. Coulson G., Nyeki, S., Eleftheriadis, K., Colbeck I., (2004) “Aerosol optical properties at Ny-Ålesund during the NICE campaign” Abstracts of EAC, Budapest 2004, 383-384
22. C. H. Halios, C. G. Helmis, V. D. Assimakopoulos, O. Hermansen, K. Eleftheriadis, H. A. Flocas, (2004) Indoor black carbon and aerosol precursors in three typical Residential apartments in Athens, Greece, Abstracts of EAC, Budapest 2004, 745-746
23. K. Eleftheriadis, S. Vratolis, C. Mitsakou, I. Colbeck, C. Housiadas, M. Lazaridis Impact of indoor household activities on the size distribution of fine Aerosol number concentration and case specific calculated inhaled Dose, Abstracts of EAC, Budapest 2004, 849-850

## **GREEK CONFERENCES**

### **2001**

1. Florou H., 2001. *The use of radionuclides in marine environmental research: <sup>137</sup>Cs as tracer of seawater mass transportation, 2001*. Proc.: 1<sup>st</sup> National Conference on Environmental Radioactivity. NCSR“Demokritos”/INT-RP/ERL, Athens (Greece) 23-24 November, 2001 (GR).
2. Catsiki B.-A. and Florou H., 2001. *Study on comparative bioaccumulation of metals and natural radionuclides in estuaries of an island of volcanic origin (Milos. 2001)*. Proc.: 1<sup>st</sup> National Conference on Environmental Radioactivity. NCSR“Demokritos”/INT-RP/ERL, Athens (Greece) 23-24 November, 2001 (GR).
3. Kritidis P., Florou H., Eleftheriadis C., Chaloulou Ch., 2001. *Research and routine monitoring activities of Environmental Radioactivity Laboratory, 2001*. Proc.: 1<sup>st</sup> National Conference on Environmental Radioactivity. NCSR“Demokritos”/INT-RP/ERL, Athens (Greece) 23-24 November, 2001 (GR).
4. Mantzourani A., Florou H., Kapsanaki-Gotsi E., Gonou-Zagou Z., 2001. *Macromycetes as bio-indicators of radioactive contaminations of soil*. Proc.: 1<sup>st</sup> National Conference on Environmental Radioactivity. NCSR“Demokritos”/INT-RP/ERL, Athens (Greece) 23-24 November, 2001 (GR).
5. Trabidou G., Florou H., Chaloulou Ch., 2001. *Distribution and transfer of radionuclides in marine environment: transfer factors of natural radionuclides in the Greek marine area, 2001*. 1<sup>st</sup> National Conference on Environmental Radioactivity. NCSR“Demokritos”/INT-RP/ERL, Athens (Greece) 23-24 November 2001 (GR).
6. “Προσδιορισμός της συγκέντρωσης <sup>210</sup>Po σε δείγματα καπνού”, Σαββίδου Α., Κεχαγιά Κ., και Ελευθεριάδης Κ. I Πανελλήνιο Συνέδριο Ραδιενέργειας Περιβάλλοντος, Αθήνα, ΕΚΕΦΕ «Δ», 23-24.11.2001
7. “Όλική α- και β- ακτινοβολία σε δείγματα FALLOUT από την Πάτρα και τη Μεγαλόπολη κατά το διάστημα 2/97 – 7/97”, Παπαευθυμίου Ε. και Κρητίδης Π. I Πανελλήνιο Συνέδριο Ραδιενέργειας Περιβάλλοντος, Αθήνα, ΕΚΕΦΕ «Δ», 23-24.11.2001
8. “Η σημασία των χονδρόκοκκων σωματιδίων στον προσδιορισμό της ενεργότητας του ατμοσφαιρικού αερολύματος”, Ελευθεριάδης Κ. I Πανελλήνιο Συνέδριο Ραδιενέργειας Περιβάλλοντος, Αθήνα, ΕΚΕΦΕ «Δ», 23-24.11.2001

### **2002**

9. Florou H., Tsytsugina V., Trabidou G. and Polikarpov G., G., 2002. Cytogenetic effects on natural aquatic populations caused by ionizing radiation and conventional pollutants. Proc.: Int. Conference : Protection and Restoration of the Environment. Stevens Institute of Technology USA and University of Thessaly Greece, Skiathos 1 – 5 July, 2002, Vol. II pp:779-782 (EN).
10. Eleftheriadis K., Nyeki S., Psomiadou C. and Colbeck I, (2002), Background aerosol properties in the European arctic, Proceedings of the International Conference "Protection and Restoration of the Environment VI", Skiathos, July 1-5, 2002, Pages 999-1004
11. Lazaridis M., Kallos G., Spiridaki A., Solberg S., Svendby T., Drossinos I., Housiadas C., Smolik J., Colbeck I., Eleftheriadis K. and Gekas V, (2002) Modelling of combined aerosol and photooxidant dynamics in the mediterranean area, Proceedings of the International Conference "Protection and Restoration of the Environment VI" Skiathos, July 1-5, 2002, Pages 1051-1056



12. Florou H., Kritidis P., Chaloulou Ch., 2002. Radiological assessment of Thermaikos gulf: impact sources and bioindicator watch. Proc.: 1st Environmental Conference of Macedonia. Union of Greek Chemists, Thessaloniki (Greece), 1-4 March, 2002 (GR).

### **2003**

13. Florou H., Kehagia C., Chaloulou Ch., Koukouliou V., 2003. Determination of radionuclides in *Mytilus galloprovincialis* by alpha- and gamma spectroscopy. Proc.: 7th Panhellenic Conference on Oceanography and Fisheries. Union of Employees of the NCMR. Peninsula of Creta (Greece), 6-9 May, 2003 (GR).

### **2004**

14. Kioupi V., Florou H., Gonou-Zagou Z. and E. Kapsanaki-Gotsi, 2004. Bioaccumulation of <sup>137</sup>Cs in fruitbodies of Basidiomycetes in Greece. Proc.: 26th Scientific Conference, Hellenic Society for Biological Sciences, Kapodistrian University of Athens and University of Thessaly, Volos 27-30 May 2004 (GR)

## **3. SCIENTIFIC STUDIES**

### **2001**

1. Lazaridis, M., Gehrig, R., Tørseth, K., Yttri, K.E., Semb, A., Larssen S., Stordal, F., Schaug J., Hov, Ø., Hjellbrekke, A.G., Hansen J.E., Dye, C., Huglin C., Hofer, P., Smolik, J., Zdimal, V., Eleftheriadis, K., Colbeck, I., Nyeki, S., Mihalopoulos N. and Havranek V., (2001) “Measurements of Particulate matter in EMEP”, EMEP/CCC-Report5/2001, publ. by NILU, Norway, August 2001.
2. Antonopoulos-Domis M., 2001. *Research on the contribution of natural and artificial radionuclides in the radiological impact on the populations of the Islands of the Eastern Aegean Sea and -on the dispersion of long-lived radionuclides in the local marine environment*. Progress Report, Aristoteles University of Thessaloniki, March 2001 (GR).

### **2003**

3. Antonopoulos-Domis M., 2003. Research on the contribution of natural and artificial radionuclides in the radiological impact on the populations of the Islands of the Eastern Aegean Sea and -on the dispersion of long-lived radionuclides in the local marine environment. Final Report, Aristoteles University of Thessaloniki, December 2003, 15p.
4. Florou H., 2003. <sup>137</sup>Cs in the Eastern Mediterranean – the time evolution in relation to the source and marine pathways. Final Report, R. C. No 11086/Regular Budget, IAEA, Vienna December 2003, 14p.
5. Florou H., 2003. <sup>137</sup>Cs in the Eastern Mediterranean – the time evolution in relation to the source and marine pathways. Final Report, R. C. No 11086/Regular Budget, IAEA, Vienna December 2003, 14p

## **4. SCIENTIFIC- TECHNICAL STUDIES**

### **2001**

1. Florou H., Chaloulou Ch., Lykomitrou Ch., Ladopoulou M., 2001. *Radioactivity Monitoring of Bivalves – Mollusks in the aquaculture zones in Thermaikos Gulf*. Final Report under the Contract with the Prefecture of Thessaloniki, Dpt of Veterinary. NCSR“Demokritos”, Athens 12/2001 25p.

## 4. Environmental Research Laboratory (EREL)

### 1. PEER-REVIEWED JOURNALS

#### 2004

1. Galmarini S, Bianconi R, Klug W, Mikkelsen T, Addis R, Andronopoulos S, Astrup P, Baklanov A, Bartniki J, Bartzis JG, Bellasio R, Bompay F, Buckley R, Bouzom M, Champion H, D'Amours R, Davakis E, Eleveld H, Geertsema GT, Glaab H, Kollax M, Ilvonen M, Manning A, Pechinger U, Persson C, Polreich E, Potemski S, Prodanova M, Saltbones J, Slaper H, Sofiev MA, Syrakov D, Sorensen JH, Van der Auwera L, Valkama I, Zelazny R, Can the confidence in long range atmospheric transport models be increased? The Pan-European experience of ENSEMBLE, RADIATION PROTECTION DOSIMETRY, 109 (1-2): 19-24 Sp. Iss. SI 2004 (Impact factor 0.617)
2. Sotiropoulou REP, Tagaris E, Pilinis C, Andronopoulos S, Sfetsos A, Bartzis JG. The BOND project: Biogenic aerosols and air quality in Athens and Marseille greater areas, J GEOPHYS RES-ATMOS 109 (D5): art. no. D05205 MAR 13 2004 (Impact factor 2.992)
3. Kovalets I, Andronopoulos S, Bartzis JG, Gounaris N, Kushchan A, Introduction of data assimilation procedures in the meteorological pre-processor of atmospheric dispersion models used in emergency response systems, ATMOSPHERIC ENVIRONMENT, 38 (3): 457-467 JAN 2004 (Impact factor 2.338)
4. 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 (Impact factor 2.338)
5. S. Galmarini, R. Addis, S. Andronopoulos, P. Astrup et al. (2004) "Ensemble dispersion forecasting—Part II: application and evaluation". ATMOSPHERIC ENVIRONMENT, 38, 4619–4632 (Impact factor 2.338)
6. Sfetsos A, Siriopoulos C, [Combinatorial time series forecasting based on clustering algorithms and neural networks](#), NEURAL COMPUT APPL 13 (1): 56-64 APR 2004 (Impact factor 0.449)
7. Sfetsos A, Siriopoulos C, [Time series forecasting with a hybrid clustering scheme and pattern recognition](#), IEEE T SYST MAN CY A 34 (3): 399-405 MAY 2004 (Impact factor 0.578)
8. Sfetsos A, Magro MC, [Short term load forecasting with a hybrid clustering algorithm and pattern recognition](#), ENG INTELL SYST ELEC 12 (1): 13-19 MAR 2004 (Impact factor 0.093)
9. Grigoriadis DGE, Bartzis JG, Goulas A, Efficient treatment of complex geometries for large eddy simulations of turbulent flows, COMPUT FLUIDS 33 (2): 201-222 FEB 2004 (Impact factor 1.479)
10. F.A. Coutelieiris, V. N. Burganos, and A. C. Payatakes, A Model of Adsorption-Reaction-Desorption in a Swarm of Spheroidal Particles, AICHE J., 50, 779-785 (2004), (Impact factor 1.667)
11. Charalambopoulou G.Ch., Steriotis Th. A, Hauss Th., Stubos A.K, Kanellopoulos N.K., Structural alterations of fully hydrated human stratum corneum, PHYSICA B: Condensed Matter, 350 (1-3), E603-606, 2004 (Impact factor 0.908).
12. Galani, A.N.; Kainourgiakis, M.E.; Kikkinides, E.S.; Steriotis, Th.A.; Stubos, A.K. & Papaioannou, A.: Diffusion in reconstructed porous domains filled by two fluid phases. COLLOID SURFACE A, 241 (1-3), 273-279 2004 (Impact factor: 1.440)
13. Steriotis, Th.A.; Kikkinides, E.S.; Kainourgiakis, M.E.; Stubos, A.K. & Ramsay, J.D.F.: Monitoring Adsorption by Small Angle Neutron Scattering in Tandem with Digital Reconstruction-Simulation Techniques. COLLOID SURFACE A, Physicochemical and Engineering Aspects, 241 (1-3), 231-237 2004. (Impact factor: 1.440)
14. Pantatosaki, E.; Steriotis, Th.A.; Stubos, A.K.; Papaioannou, A. & Papadopoulos, G.K.: GCMC micropore size distributions from CO<sub>2</sub> sorption at ambient temperatures: Cylindrical versus slit-like geometries. COLLOID SURFACE A, 241(1-3), 127-135, 2004 (Impact factor: 1.440)

#### 2003

15. Yiotis AG, Boudouvis AG, Stubos AK, Tsimpanogiannis IN, Yortsos YC, Effect of liquid films on the isothermal drying of porous media, PHYS REV E 68 (3): art. no. 037303 Part 2 SEP 2003 (Impact factor 2.397)
16. Coutelieiris FA, Kainourgiakis ME, Stubos AK Low Peclet mass transport in assemblages of spherical particles for two different adsorption mechanisms J COLLOID INTERF SCI 264 (1): 20-29 AUG 1 2003 (Impact factor 1.466)

17. Huseby O, Haugan A, Sagen J, Muller J, Bennett B, Larter S, Kikkinides ES, Stubos AK, Yousefian F, Thovert JF, Adler PM Transport of organic components from immobile and bypassed oil in porous media *AICHE J* 49 (5): 1085-1094 MAY 2003 (Impact factor 1.626)
18. Kainourgiakis ME, Kikkinides ES, Charalambopoulou GC, Stubos AK. Simulated annealing as a method for the determination of the spatial distribution of a condensable adsorbate in mesoporous materials *LANGMUIR* 19 (8): 3333-3337 APR 15 2003 (Impact factor 3.248)
19. Kikkinides ES, Kainourgiakis ME, Stubos AK Origin of hysteresis of gas adsorption in disordered porous media: Lattice gas model versus percolation theory *LANGMUIR* 19 (8): 3338-3344 APR 15 2003 (Impact factor 3.248)
20. Grigoriadis DGE, Bartzis JG, Goulas A LES of the flow past a rectangular cylinder using the immersed boundary concept *INT J NUMER METH FL* 41 (6): 615-632 FEB 28 2003 (Impact factor 0.723)
21. Venetsanos AG, Huld T, Adams P, Bartzis JG Source, dispersion and combustion modelling of an accidental release of hydrogen in an urban environment *J HAZARD MATER* 105 (1-3): 1-25 DEC 12 2003 (Impact factor 0.823)
22. Venetsanos AG, Bartzis JG, Wurtz J, Papailiou DD DISPLAY-2: a two-dimensional shallow layer model for dense gas dispersion including complex features *J HAZARD MATER* 99 (2): 111-144 APR 25 2003 (Impact factor 0.823)
23. Pieper J, Charalambopoulou G, Steriotis T, Vasenkov S, Desmedt A, Lechner RE Water diffusion in fully hydrated porcine stratum corneum *CHEM PHYS* 292 (2-3): 465-476 AUG 1 2003 (Impact factor 2.203)
24. Sfetsos A Short-term load forecasting with a hybrid clustering algorithm *IEE P-GENER TRANSM D* 150 (3): 257-262 MAY 2003 (Impact factor 0.282)
25. Neofytou P, Drikakis D Effects of blood models on flows through a stenosis *INT J NUMER METH FL* 43 (6-7): 597-635 OCT 30 2003 (Impact factor 0.723)
26. Neofytou P, Drikakis D Non-Newtonian flow instability in a channel with a sudden expansion *J NON-NEWTON FLUID* 111 (2-3): 127-150 APR 11 2003 (Impact factor 1.765)
27. Winiwarter W, Dore C, Hayman G, Vlachogiannis D, Gounaris N, Bartzis J, Ekstrand S, Tamponi M, Maffei G Methods for comparing gridded inventories of atmospheric emissions-application for Milan province, Italy and the Greater Athens Area, Greece *SCI TOTAL ENVIRON* 303 (3): 231-243 MAR 1 2003 (Impact factor 1.537)
28. Thunis P, Galmarini S, Martilli A, Clappier A, Andronopoulos S, Bartzis J, Vlachogiannis D, De Ridder K, Moussiopoulos N, Sahm P, Almbauer R, Sturm P, Oettl D, Dierer S, Schlunzen KH An inter-comparison exercise of mesoscale flow models applied to an ideal case simulation *ATMOS ENVIRON* 37 (3): 363-382 JAN 2003 (Impact factor 2.352)
29. Davakis E, Nychas SG, Andronopoulos S, Bartzis JG., Validation study of the dispersion Lagrangian particle model DIPCOT over complex topographies using different concentration calculation methods, *INT J ENVIRON POLLUT* 20 (1-6): 33-46 2003 (Impact factor 0.116)

## **2002**

30. Charalambopoulou GC, Steriotis TA, Hauss T, Stefanopoulos KL, Stubos AK, A neutron-diffraction study of the effect of hydration on stratum corneum structure, *APPL PHYS A-MATER* 74: S1245-S1247 Part 2 Suppl. S DEC 2002 (Impact factor 2.231)
31. Kainourgiakis ME, Kikkinides ES, Charalambopoulou GC, Stubos AK, Simulation of adsorption in 3-D reconstructed mesoporous materials by a simulated annealing algorithm, *STUD SURF SCI CATAL* 144: 147-154 2002 (Impact factor 3.468)
32. Steriotis TA, Papadopoulos GK, Stubos AK, Kanellopoulos N., A Monte Carlo study on the structure of carbon dioxide adsorbed in microporous carbons, *STUD SURF SCI CATAL* 144: 545-552 2002 (Impact factor 3.468)
33. Coutelieris FA, Kainourgiakis ME, Stubos AK, The effect of Peclet on the Sherwood number in high porosity granular media, *STUD SURF SCI CATAL* 144: 753-760 2002 (Impact factor 3.468)
34. Kainourgiakis ME, Kikkinides ES, Stubos AK, Diffusion and flow in porous domains constructed using process-based and stochastic techniques, *J POROUS MAT* 9 (2): 141-154 AUG 2002 (Impact factor 0.7)

35. Kainourgiakis ME, Steriotis TA, Kikkinides ES, Romanos G, Stubos AK, Adsorption and Diffusion in Nanoporous Materials from Stochastic and Process-Based Reconstruction Techniques, COLLOID SURFACE A 206 (1-3): 321-334 Sp. Iss. SI JUL 9 2002 (Impact factor 1.350)
36. Coutelieris FA, The effect of geometry and axial orientation of spheroidal particles on the adsorption rate in a granular porous medium, STUD SURF SCI CATAL 144: 745-751 2002 (Impact factor 3.468)
37. Vassilakos C, Papadopoulos A, Lahaniati M, Maggos T, Bartzis J, Papagianakopoulos P, Measurements of Sulfur Pollutants and VOC Concentrations in the atmosphere of a Suburban Area in Greece, FRESN ENVIRON BULL 11 (8): 516-521 Sp. Iss. SI AUG 2002(Impact factor 0.309)
38. T. Theophanides, Ch. Vassilakos, J. Anastasopoulou, T. Maggos, J. Hatzianestis, and J. Bartzis, Chemical Characterization and Concentration Levels of Volatile Organic Compounds (VOCs) in Nea Karvali Area, Kavala, Greece, ENVIRON SCI POLLUT R, Special Issue 3,pp.45-46 (2002) (Impact Factor 1.238)
39. Andronopoulos S, Grigoriadis D., Robins A., Venetsanos A., Rafailidis S. & Bartzis J.G. (2001) Three-dimensional modelling of concentration fluctuations in complicated geometry, Environmental Fluid Mechanics, 1, No 4, 415-440, 2002 (Impact Factor ...)
40. Vlachogiannis D., Rafailidis S., Bartzis J. G., Andronopoulos S. and Venetsanos A. G., (2001), Modelling of flow and pollution dispersion in a two-dimensional urban street canyon, WATER AIR SOIL POLL – Focus 2, 2002, 405-417. (Impact factor 0.526)
41. Robins A, Savory E, Scaperdas A, Grigoriadis D, Spatial variability and source-receptor relations at a street intersection, WATER AIR SOIL POLL – Focus 2, 2002, 381-393. (Impact factor 0.526)
42. Venetsanos A.G., D. Vlachogiannis, A. Papadopoulos, S. Andronopoulos, J.G. Bartzis (2001) Studies of pollutant dispersion from moving vehicles, WATER AIR SOIL POLL – Focus 2, 325-337, 2002. (Impact factor 0.526)
43. Sfetsos, A novel approach for the forecasting of mean hourly wind speed time series, RENEW ENERG, October, Vol 27, N2, pp. 163-174, 2002 (Impact factor 0.306)

## **2001**

44. Yiotis, A.G.; Stubos, A.K.; Boudouvis A. & Yortsos Y.C.: A 2-D Pore Network Model of the Drying of Single-Component Liquids in Porous Media. Advances in Water Resources, 24(3-4), pp 437-458, 2001. (Impact factor 1.024)
45. Charalambopoulou, G.Ch.; Kikkinides, E.S.; Papadokostaki, K.G.; Stubos, A.K. & Papaioannou A.: Numerical and Experimental Investigation of the Diffusional Release of a Dispersed Solute From Polymeric Multilaminate Matrices. Journal of Controlled Release, 70(3), pp 309-319, 2001. (Impact factor 2.151)
46. Yortsos Y.C. & Stubos, A.K.: Phase change in porous media. Current Opinion in Colloid & Interface Science, 6(3), pp 208-216, 2001. (Impact factor 2.5)
47. Charalambopoulou, G.Ch.; Papadokostaki, K.G.; Kikkinides, E.S. and Stubos, A.K.: Experimental and theoretical study of solute release from polymeric multilaminate matrices. Journal of Controlled Release, 72(1-3), pp 303-305, 2001. (Impact factor 2.151)
48. Charalambopoulou, G.Ch.; Steriotis, Th.A.; Stefanopoulos, K.L.; Stubos, A.K.; Kanellopoulos, N.K.; Mitropoulos, A.Ch. and Hauss, T.: Membrane neutron diffraction: a promising technique for stratum corneum structural studies. Journal of Controlled Release, 72(1-3), pp 307-309, 2001. (Impact factor 2.151)
49. Samios, S.; Papadopoulos, G.; Steriotis, Th.A. & Stubos, A.K.: Simulation study of sorption of CO<sub>2</sub> and N<sub>2</sub> with application to the characterization of carbon adsorbents. Molecular Simulation, 27, pp 441-456, 2001. (Impact factor 0.646)
50. 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. J. Environment and Pollution, vol. 16, Nos 1-6, 2001 (Impact factor 0.176)
51. Kalabokas PD, Hatzianestis J, Bartzis JG, Papagiannakopoulos P, Atmospheric concentrations of saturated and aromatic hydrocarbons around a Creek oil refinery, Atmospheric Environment 35 (14): 2545-2555 2001. (Impact factor 1.942)
52. Lahaniati M., T. Maggos, J. Hatzianestis, A. Papadopoulos, Á. Bartzi, and J. Bartzis (2001) Concentration levels of Volatile Organic Compounds in the Athens Greater Area, Fresenius Environmental Bulletin 10 (7): 609-614 JUL 2001 (Impact factor 0.277)

53. Pavageau M, Rafailidis S, Schatzmann M, A comprehensive experimental databank for the verification of urban car emission dispersion models, *International Journal of Environment and Pollution* 15 (4): 417-425 2001. (Impact factor 0.176)
54. Papadopoulos GK, Influence of orientational ordering transition on diffusion of carbon dioxide in carbon nanopores, *Journal of Chemical Physics* 114 (18): 8139-8144 MAY 8 2001 (Impact factor 3.301)
55. Carissimo B, Jagger SF, Daish NC, Halford A, Selmer-Olsen S, Riikonen K, Perroux JM, Wurtz J, Bartzis JG, Duijm NJ, Ham K, Schatzmann M, Hall R, The SMEDIS database and validation exercise, *International Journal Of Environment And Pollution*, 16 (1-6): 614-629 Sp. Iss. SI 2001 (Impact factor 0.176)

### **Papers accepted for publication in Refereed Scientific Journals**

1. Yiotis, A.G.; Boudouvis A.; Stubos, A.K.; Tsimpanogiannis, I.N. & Yortsos Y.C.: The Effect of Liquid Films on the Drying of Porous Media. *AICHE J*, in press 2004 (Impact factor 1.667)
2. Venetsanos A.G., Bartzis J.G, Andronopoulos S., One-equation turbulence modelling for atmospheric and engineering applications, *BOUND-LAY METEOROL*, in press 2004 (Impact factor 1.293 )
3. Koutsourakis, N., Bartzis, J. G., Venetsanos, A., Rafailidis, S., Computation of pollutant dispersion during an airplane take-off, *ENVIRON MODELL SOFTW*, accepted 2004 (Impact factor 0.78).

## **2. PEER-REVIEWED CONFERENCE PROCEEDINGS**

### **2004**

1. F.A. Coutelieris, M.E. Kainourgiakis and A.K. Stubos, “Numerical Simulation of Low Peclet Mass Transport in Assemblages of Spherical Particles for a Realistic Adsorption - Reaction – Desorption Mechanism“, accepted for oral presentation in International Conference on Applications of Porous Media ICAPM-2004, Évora, Portugal (2004)
2. M. Konstantakou, F. Coutelieris & A.K. Stubos, “Experimental and Theoretical Study of Hydrogen Sorption in Solid Media”, accepted for oral presentation in World Hydrogen Energy Conference WHEC-15, Yokohama, Japan (2004)
3. F. Coutelieris, M. Konstantakou & A.K. Stubos, “Mass Transport in PEMFC stacks”, accepted for oral presentation in World Hydrogen Energy Conference WHEC-15, Yokohama, Japan (2004)
4. 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”, 9<sup>th</sup> International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 1-4/6/2004, Garmisch-Partenkirchen, Germany.
5. 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”, 9<sup>th</sup> International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 1-4/6/2004, Garmisch-Partenkirchen, Germany.
6. G.Ch. Charalambopoulou, Th.A. Steriotis, A.K. Stubos, N.K. Kanellopoulos, “Investigating the effect of excess hydration on human stratum corneum morphology”, 9<sup>th</sup> International Perspectives in Percutaneous Penetration Conference, La Grande Motte - France, April 13-17, 2004
7. J. Psychogios, M.E. Kainourgiakis, G.Ch. Charalambopoulou, Th.A. Steriotis, A.K. Stubos, “Prediction of porcine stratum corneum transport properties from USANS data and numerical simulations”, 9<sup>th</sup> International Perspectives in Percutaneous Penetration Conference, La Grande Motte -France, April 13-17, 2004
8. M.E. Kainourgiakis, E.S. Kikkinides, A.Galani, G.Ch. Charalambopoulou, A.K. Stubos, “Digitally reconstructed porous media: Transport and Sorption properties”, International Conference on Porous Media and Applications (ICAPM 2004), Evora –Portugal, 24-27 May 2004.
9. M.E. Kainourgiakis, Th.A. Steriotis, E.S. Kikkinides, A.K. Stubos, “Effects of surface roughness on transport properties of porous media”, 5th International Symposium Surface Heterogeneity Effects in Adsorption and Catalysis (ISSHAC 5), Gdansk – Poland, August 30-September 4, 2004.

10. Th. Steriotis, G.Ch. Charalambopoulou, J. Pieper, R. Lechner, A. Stubos, "Hydration of stratum corneum – A QENS-NMR study to unravel the dynamics of different water phases", 7th International Conference on Quasielastic Neutron Scattering, Arcachon-France, September 1-4, 2004.
11. M.E. Kainourgiakis, Th.A. Steriotis, G.Ch Charalambopoulou, E.S. Kikkinides, A.K. Stubos, "Combination of small angle neutron scattering data and mesoscopic simulation techniques as a tool for the structural characterization and prediction of properties of biphasic media", Neutrons and Numerical Methods II, Grenoble France, September 14-18, 2004.
12. Koutsourakis, N., Neofytou, P., Venetsanos, A., Bartzis, J. G., Parametric study of the dispersion aspects in a street canyon area, 9th conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 1-4/6/2004, Garmisch-Partenkirchen, Germany
13. A.G. Venetsanos, G.M. Horsch, G.C. Christodoulou, (2004) 'Assessment of Turbulence Modelling of Density Currents Developing Three Dimensionally on a Slope', Proceedings of the International Conference 'Protection and Restoration of the Environment VII', Mykonos, Greece, 28 June-01 July.
14. Reinhold Wurster, L-B-Systemtechnik GmbH, Horst Mettlach, Adam Opel AG; Laurent Allidieres, Air Liquide; Peter Bout and Peter Newbould, Air Products Plc.; Peter Michel, BMW Group; Michael Jones and Steve Cook, BP Intl.; Serge Chaudourne, CEA; Josef Zieger, DaimlerChrysler AG; Alexander G. Venetsanos, NCSR Demokritos; Gerd Petra Haugom, Det Norske Veritas; Daniele Baraldi and Heinz Wilkening, EC-JRC; Udo Klein, Ford Werke AG; Alexei Kotchourko and Sergey Dorofeev; FZ Karlsruhe GmbH; Hugo Vandenborre and Christian Machens, Vandenborre Technologies NV; Fernando Isorna, INTA; Friedel Michel, Messer Griesheim GmbH; Henrik Andersen, Norsk Hydro AS; James Barron and Roger Cracknell, Shell Global Solutions; Paul Adams, Volvo Technology Corp.; Per Sigurd Heggem, Raufoss Alternative Fuel Systems AS; Jaco Reijerkerk, Linde AG, 'European Integrated Hydrogen Project – Phase 2 – Results', Proceedings 15th World Hydrogen Energy Conference (WHEC-15), Yokohama, Japan, June-July, 2004.

## **2003**

15. Koutsourakis, N., Bartzis, J. G., Venetsanos, A., Rafailidis, S., "Computation of pollutant dispersion during an airplane take-off", Proc. of the Fourth International Conference on Urban Air, Quality-Measurement Modelling and Management, Sokhi and Brechler (Eds), Prague, Czech Republic, March 2003.
16. Sotiropoulou R.E.P , 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.
17. Andronopoulos S, A. Sfetsos, J.G. Bartzis, N. Gounaris (2003) "Application of the model ADREA-I to the ESCOMPTE pre-campaign case", 8th Conference on Environmental Science and Technology, 8-10 Sept. 2003, Lemnos, Greece
18. Sotiropoulou R.E.P, 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, Limnos Island, Greece, September 2003.
19. Kovalets I., 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.
20. Vassilakos Ch., Th. Maggos, J. Michopoulos, K. Karvounakis, D. Saraga, J. Bartzis: "Gravimetric Measurements of PM10 and PM2.5 Particulate Matter in the Ambient Air from a Suburban Monitoring Site in Athens" 12th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Antalya, Turkey, October 4-8, (2003).
21. Vassilakos Ch., J. Michopoulos, Th. Maggos, D. Saraga, J. Bartzis: "Influence of Meteorological Conditions and other air pollutants on PM2.5 Concentrations in the Ambient Air of a Suburban area in Athens" 12th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Antalya, Turkey, October 4-8, (2003).
22. Maggos Th., D. Kotzias, J.G. Bartzis, P.Leva, Ch. Vassilakos "Photo-Induced Degradation of NOx on Photocatalytic Surfaces Containing Titanium Dioxide" 12th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Antalya, Turkey, October 4-8, (2003).

23. Vassilakos Ch., Th. Maggos<sup>1</sup> and J. Bartzis<sup>2</sup>: “Accreditation on Laboratory Measurements of Volatile Organic Compounds (VOCs) According to EN 45001” International conference on QA/QC in the Field of Emission and Air Quality Measurements. Prague, CZ, May 2003.
24. P. Neofytou, A.G. Venetsanos, S. Rafailidis, J.G. Bartzis, “Numerical investigation of the pollution dispersion in an urban street canyon”, Fourth International Conference on Urban Air Quality, - Measurement, Modelling and Management, 25-28 March 2003, Charles University Prague, Czech Republic.
25. P. Neofytou, A.G. Venetsanos, D. Vlachogiannis, J.G. Bartzis, A. Scaperdas, “CFD simulations of the wind environment around an airport terminal building”, Fourth International Conference on Urban Air Quality, - Measurement, Modelling and Management, 25-28 March 2003, Charles University Prague, Czech Republic.
26. Kainourgiakis, M.E.; Kikkinides, E.S.; Steriotis, Th.A. & Stubos, A.K.: Transport properties of reconstructed Vycor and Alumina Membranes. Materials Research Society 2002 Fall Meeting, Boston, USA, 2-6 December 2002. Also in Mater. Res. Soc. Symp. P 752, 155-160, 2003.
27. Yiotis, A.G.; Boudouvis, A.G.; Stubos, A.K.; Tsimpanogiannis, I.N. & Yortsos, Y.C.: Modeling Viscous Flow Through Liquid Films In Isothermal Drying of Porous Media. AIChE 2003 Annual Meeting, San Francisco, California, USA, 16-21 November 2003.
28. Yiotis, A.G.; Stubos, A.K.; Tsimpanogiannis, I.N. & Yortsos Y.C.: Pore Network Modelling of Isothermal Drying in Porous Media. ESF Exploratory Workshop on Recent Advances in Multiphase Flow and Transport in Porous Media, Delft, the Netherlands, June 23-25, 2003.
29. Kainourgiakis, M.E.; Kikkinides, E.S.; Charalambopoulou, G.Ch.; Steriotis, Th.A. & Stubos, A.K.: Nanoporous Media: Reconstruction and Prediction of Transport and Sorption Properties. ESF Exploratory Workshop on Recent Advances in Multiphase Flow and Transport in Porous Media, Delft, the Netherlands, June 23-25, 2003.
30. Charalambopoulou, G.Ch.; Steriotis, Th.A. & Stubos, A.K.: Water diffusion studies on porcine stratum corneum. Gordon’s Research Conference on Barrier Function of Mammalian Skin, Roger Williams University, Bristol-Rhode Island, USA, August 3-8, 2003.
31. Charalambopoulou, G.Ch.; Steriotis, Th.A.; Hauss, Th.; Stubos, A.K. & Kanellopoulos, N.K.: Structural alterations of fully hydrated human stratum corneum. 3rd European Conference on Neutron Scattering, Montpellier, France, September 3-6, 2003.

## **2002**

32. T. Theophanides, Ch. Vassilakos, J. Anastasopoulou, T. Maggos, J. Hatzianestis, and J. Bartzis: Chemical Characterization and Concentration Levels of Volatile Organic Compounds (VOCs) in Nea Karvali Area, Kavala, Greece, 8th FECS Conference on Chemistry and the Environment: Chemistry for a Sustaining World. Athens, Greece, August 31 - September 4, (2002).
33. 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.
34. M.E. Kainourgiakis, E.S. Kikkinides, G.Ch. Charalambopoulou, A.K. Stubos, Simulation of Adsorption in 3-D Reconstructed Mesoporous Materials by a Simulated Annealing Algorithm, 6th International Symposium on the Characterization of Porous Solids, COPS-VI, Alicante-Spain, 8-11 May 2002.
35. M.E. Kainourgiakis, E.S. Kikkinides, G.Ch. Charalambopoulou, A.K. Stubos, Detailed Simulation of the Pore Structure of Mesoporous Materials and Prediction of their Equilibrium and Transport Properties, 5th Materials Discussions – Porous Materials, Royal Society of Chemistry, Madrid-Spain, 22-25 September 2002.
36. M.E. Kainourgiakis, E.S. Kikkinides, Th. A. Steriotis, A.K. Stubos, Transport properties of reconstructed Vycor and Alumina Membranes, Materials Research Society 2002 Fall Meeting, Boston –USA, 2-6 December 2002
37. Steriotis Th. A., G.K. Papadopoulos, A. K. Stubos, N. Kanellopoulos, A Monte Carlo Study on the Structure of Carbon Dioxide Adsorbed in Microporous Carbons, Characterization of Porous Solids-VI, 8-11 May 2002, Alicante, Spain.
38. F.K. Katsaros, Th.A. Steriotis, A.K. Stubos, N.K. Kanellopoulos and S. Tennison, Preparation and Characterisation of Selective Microporous Carbon Membranes, Suppl. Book of Abstracts, p94,

ICOM 2002, The International Congress on Membranes and Membrane Processes, 7-12 July 2002, Toulouse, France.

39. F.K. Katsaros, Th.A. Steriotis, A.K. Stubos, N.K. Kanellopoulos, S. Tennison, Novel Microporous carbon membranes for gas separations and environmental applications, PP5.10, 8th Federation of the European Chemical Societies (FECS) Conference on Chemistry and the Environment, Athens, Greece, 31 August - 4 September 2002.
40. Th. A. Steriotis, G.K. Papadopoulos, A. K. Stubos, N. Kanellopoulos, Grand Canonical Monte Carlo Simulations as a Tool for the Characterization of Microporous Sorbents and the Study of Adsorption in Micropores. Book of Abstracts, Materials Discussions 5 - "Porous Materials and molecular Intercalation", Royal Society of Chemistry, Madrid, Spain, 22-25 September 2002.
41. Kalabokas PD, Bartzis JG, Papagiannakopoulos P, Atmospheric levels of nitrogen oxides at a Greek oil refinery compared with the urban measurements in Athens, 3rd International Conference on Urban Air Quality - Measurement, Modeling and Management, MAR 20-23, 2001 URBAN AIR QUALITY - RECENT ADVANCES, PROCEEDINGS, 703-716, 2002
42. D.G.E. Grigoriadis, J.G. Bartzis, A. Goulas, Efficient large eddy simulations of turbulent flows using the immersed boundary concept, 02-2 IUTAM Symposium on Unsteady Separated Flows Toulouse, France, 8 - 12 April 2002

## **2001**

43. Samios, S.; Stubos, A.K.; Papadopoulos, G.K.; Steriotis, Th.A. & Kanellopoulos, N.K.: Adsorption in Slit-Like Nanopores and the Resulting Pore Size Distribution Based on GCMC Simulations, Int. Workshop on Nanocapillarity, Princeton, NJ, June 25-27, 2001
44. Kainourgiakis, M.E.; Kikkinides, E.S.; Romanos, G.; Steriotis, Th.A. & Stubos, A.K.: Adsorption and Diffusion in Nanoporous Materials from Stochastic and Process-Based Reconstruction Techniques, Int. Workshop on Nanocapillarity, Princeton, NJ, June 25-27, 2001.
45. Charalambopoulou, G.Ch.; Steriotis, Th.A.; Hauss, Th.; Stefanopoulos, K.L. & Stubos, A.K.: A Neutron Diffraction Study of the Effect of Hydration on Stratum Corneum Structure. International Conference on Neutron Scattering 2001, Munich, 9-13 September 2001.
46. Charalambopoulou, G.Ch.; Steriotis, Th.A.; Stefanopoulos, K.L.; Kikkinides, E.S. & porcine stratum corneum. Stratum Corneum III, Basel-Switzerland, 12-14 September 2001.
47. Steriotis, Th. A.; Charalambopoulou, G.Ch.; Stubos, A.K. & Kanellopoulos, N.K.: Permeation and Sorption Studies of Water Transport in Stratum Corneum. Stratum Corneum III, Basel-Switzerland, 12-14 September 2001.
48. Yiotis, A.G.; Stubos, A.K.; Boudouvis A. & Yortsos, Y.C.: A Pore Network Model for Drying Processes in Porous Media. Proceedings of IMECE 2001, ASME Int. Mechanical Engineering Congress and Exposition, New York, NY, USA, November 11-16, 2001.
49. Galani, A.N.; Kainourgiakis, M.E.; Kikkinides, E.S.; Stubos, A.K.; Chatzichristos, C.; Muller, J. & Papaioannou, A.: Tracer dispersion in stochastically reconstructed porous media. Proceedings of IMECE 2001, ASME Int. Mechanical Engineering Congress and Exposition, New York, NY, USA, November 11-16, 2001.
50. G.Ch. Charalambopoulou, T.A. Steriotis, E.S. Kikkinides, A.K. Stubos, K. Stefanopoulos, N.K. Kanellopoulos, A.Th. Papaioannou, "Characterisation of Structural Properties of Stratum Corneum", 2nd Mediterranean Meeting-New Perspectives in Controlled Release, Athens, 27-30 April 2001.
51. G.Ch. Charalambopoulou, K.G. Papadokostaki, E.S. Kikkinides, A.K. Stubos, "Zero-order Release from Laminated Polymer Matrices: Experimental and Theoretical Study", 2nd Mediterranean Meeting-New Perspectives in Controlled Release, Athens, 27-30 April 2001
52. Venetsanos A. G., Bartzis J. G., Andronopoulos S. and Vlachogiannis D., (2001), Vehicle effects on street canyon air pollution pattern, Air Pollution IX (Proceedings of the 9th International Conference on Air Pollution), Wessex Institute Of Technology Press, editors: G. Latini & C. A. Brebbia pp. 193-202.
53. 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.
54. 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. Proc. of the 3rd International Conference on Urban Air Quality, 19-23 March 2001, Loutraki.



55. 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.
56. 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.
57. Ch. Vassilakos, A. Papadopoulos, M. Lahaniati, Th. Maggos, J. Bartzis and P. Papagianakopoulos: "Measurements of Sulfur Pollutants and VOC Concentrations in the Atmosphere of a Suburban Area in Greece" 11th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Limassol, Cyprus, October 6-10, (2001).
58. A. Papadopoulos, M. Lahaniati, Ch. Vassilakos, and J. Bartzis: " Volatile Organic Compounds Concentration Levels on a Day Without Traffic in the Centre of Athens" 11th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Limassol, Cyprus, October 6-10, (2001)
59. S. Andronopoulos, D. Grigoriadis, A. Robins, A. Venetsanos, S. Rafailidis and J.G. Bartzis 'Modelling of concentration fluctuations'. 7th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Belgirate, Italy, 28-31 May, 2001.

## **GREEK CONFERENCES**

### **2004**

1. A.G. Venetsanos, J.G. Bartzis, J. Statharas, (2004), Validation and Application of the Computational Package ADREA-HF for Safety Assessment of Hydrogen Applications', 1st National Hydrogen Technology Conference: Research, Development and Applications, Athens 30 Sept, 2 Oct (in greek).

### **2003**

2. Galani, A.N., Kainourgiakis, M.E., Stubos, A.K., Kikkinides, E.S. & Papaioannou, A Determination of diffusion coefficients in partially saturated porous materials based on stochastically reconstructed porous domains, 4th Panhellenic Conference on Chemical Engineering, Patra, May 29-31 2003 (in greek).
3. Psychogios, J., Kainourgiakis, M.E Charalambopoulou, G.Ch.; Steriotis, Th. & Stubos, A.K.: Study of structure and diffusion properties of the stratum corneum layer of the human skin, 4th Panhellenic Conference on Chemical Engineering, Patra, May 29-31, 2003 (in greek). .
4. Stamatakis, E.; Haugan, A.; Stubos, A.K.; Palyvos, I.; Dugstad, O.; Muller, J. & Bjornstad, T.: Theoretical and experimental study of scale formation in porous media, 4th Panhellenic Conference on Chemical Engineering, Patra, May 29-31 2003. (in greek).
5. Kainourgiakis, M.E, Kikkinides, E.S., Charalambopoulou, G.Ch.; & Stubos, A.K.: Determination of the spatial distribution of an adsorbate in mesoporous materials based on the simulated annealing method, 4th Panhellenic Conference on Chemical Engineering, Patra, May 29-31 2003 (in greek)
6. A.G. Venetsanos, J.G. Bartzis, (2003), 'Risk Assessment of Hydrogen Applications', Technical Chamber of Greece Conference on Risk Management: The application of Directives SEVESO I & II in our country, Athens 4-5 Nov (in greek).

### **2001**

7. Charalambopoulou, G.Ch, Kikkinides, E.S, Papadokostaki K.G., Stubos A.K., Papaioannou A, Theoretical and experimental study of the release of active agents from polymeric multilaminate matrices, 3rd Panhellenic Conference on Chemical Engineering, Athens, 31/5-2/6 2001 (in greek) .
8. Charalambopoulou, G.Ch., Steriotis Th.A., Stefanopoulos K.L., Stubos A.K., Kanellopoulos N.K. Determination of structural properties of the stratum corneum based on small angle neutron scattering techniques, 3rd Panhellenic Conference on Chemical Engineering, Athens, 31/5-2/6 2001 (in greek)
9. Kainourgiakis, M.E, Steriotis Th.A., Stubos A.K, Charalambopoulou, G.Ch.; Romanos G, Kanellopoulos N.K., Diffusion of tracers in reconstructed alumina membrane domains, 3rd Panhellenic Conference on Chemical Engineering, Athens, 31/5-2/6 2001 (in greek)

10. Yiotis A.G., Stubos A.K, Boudouvis A., Recovery of the fluid phase from pore networks through drying and diffusion, 3rd Panhellenic Conference on Chemical Engineering, Athens, 31/5-2/6 2001 (in greek)
11. Galani A.N., Lapatas A., Stubos A.K, Kainourgiakis, M.E, Kanellopoulos N.K., Papaioannou A., Determination of the transport properties of porous materials through stochastically reconstructed porous domains and pore network models, 3rd Panhellenic Conference on Chemical Engineering, Athens, 31/5-2/6 2001 (in greek)
12. Andronopoulos S, Bartzis JG, Davakis E, Gounaris N, Atmospheric dispersion models for Decision Support Systems for severe nuclear accidents, 1st Hellenic Conference on Environmental Radioactivity, Athens, NCSR "Demokritos", 23-24/11/2001 (in greek).

### **3. CHAPTERS IN BOOKS**

1. Yiotis, A.G.; Stubos, A.K.; Boudouvis, A.; Tsimpanogiannis, I.N. & Yortsos Y.C.: Pore Network Modelling of Isothermal Drying in Porous Media, in *Recent Advances in Multiphase Flow and Transport in Porous Media*, M. Hassanizadeh & D. Das (eds.), Kluwer Academic Publishers, to appear 2004.
2. Kainourgiakis, M.E.; Kikkinides, E.S.; Charalambopoulou, G.Ch.; Steriotis, Th.A. & Stubos, A.K.: Nanoporous Media: Reconstruction and Prediction of Transport and Sorption Properties, in *Recent Advances in Multiphase Flow and Transport in Porous Media*, M. Hassanizadeh & D. Das (eds.), Kluwer Academic Publishers, to appear 2004.
3. G.Ch. Charalambopoulou, Th.A. Steriotis, K.L. Stefanopoulos, E.S. Kikkinides, A.K. Stubos, "The combination of neutron scattering techniques for the study of hydration of porcine stratum corneum", in *The Essential Stratum Corneum*, R. Marks, J.L. Leveque, R. Voegeli (eds.), Martin Dunitz: London, 2002, p 97.
4. Th. A. Steriotis, G.Ch. Charalambopoulou, A.K. Stubos, N.K. Kanellopoulos, " Permeation and Sorption Studies of Water Transport in Stratum Corneum", in *The Essential Stratum Corneum*, R. Marks, J.L. Leveque, R. Voegeli (eds.), Martin Dunitz: London, 2002, p 161.

## 5. System Reliability and Industrial Safety Laboratory (SRIS)

### 1. PEER-REVIEWED JOURNALS

1. Tambouratzis T., (2001). A neural network approach to tiling problems, *International Journal of Intelligent Systems*, Vol. 16, No. 9, pp. 1037-1052.
2. Tambouratzis, T., (2001). Sting matching artificial neural networks, *International Journal of Neural Systems*, Vol. 11, No. 5, pp. 445-453.
3. Tambouratzis, T., (2001). Incremental bin packing, *Neural, Parallel and Scientific Computations*, Vol. 9, No. 2, pp. 175-186.
4. Tambouratzis T., (2001). An artificial neural network satisfiability tester, *International Journal of Intelligent Systems*, Vol. 16, No. 12, pp. 1357-1375.
5. Nivolianitou Z, Oberhagemann D, Lunn G, Markert F, Nessvi K, Rogers R, van, Wingerden K., (2001). SAFETYNET - a European network for process J Hazard Mater 87 (1-3), pp. 1-20.
6. G. Cojazzi, et al (2001). Benchmark Exercise on expert judgment techniques in PSA Level 2” *Nuclear Engineering and Design* Vol 209, pp. 211 -221.
7. Tambouratzis T., Antonopoulos-Domis M., (2002). Instability localization with artificial neural networks, *Annals of Nuclear Energy*, Vol. 29, No. 3, pp. 235-253.
8. Gazela, M., Tambouratzis T., (2002). Estimation of hourly average solar radiation on tilted surface using ANNs, *International Journal on Neural Systems*, Vol. 12, No. 1, pp. 1-14.
9. Tambouratzis T., Antonopoulos-Domis M., (2002). A non-stationary signal correlator for on-line transit time estimation, *Annals of Nuclear Energy*, Vol. 29, No. 11, pp. 1299-1313.
10. Tambouratzis, T., Gazela, M., (2002). The accurate estimation of meteorological profiles employing ANNs, *International Journal on Neural Systems*, Vol. 12, No. 3-4, pp. 319-337.
11. Tambouratzis, T., (2002). A parallel approach to the Eulerian cycle problem, *International Journal of Intelligent Systems*, Vol. 17, No. 12, pp. 1111-1119.
12. Kollas I.G., Mirasgedis S., (2002). Health and Environmental Impacts of the Hydroelectric Fuel Cycle, *Int. J. Risk Assessment and Management*, v.3(1), pp.23-40.
13. Papazoglou IA, Aneziris ON, Post JG, Ale B.j.M., (2002). Technical modeling in integrated risk assessment of chemical installations, *Journal of Loss Prevention in the Process Industries*, Vol 15 , pp. 545-554.
14. Nivolianitou, Z., Risk analysis and risk management: a European insight, *Law, Probability and Risk* (2002) 1, 161-174.
15. Tambouratzis, G., Tambouratzis, T., Tambouratzis, D., (2003). Clustering with artificial neural networks and traditional techniques, *International Journal of Intelligent Systems*, Vol. 18, No. 4, pp. 405-428.
16. Papazoglou IA, Aneziris ON (2003), Master Logic Diagram. Method for hazard and Initiating event identification in process plants, *Journal of hazardous materials*, A97, 11-30.
17. Papazoglou IA, Bellamy L. J., Hale A. R., Aneziris ON, Ale B. J. M., Post J. G. and Oh J. I. H. (2003), I-Risk: development of an integrated technical and management risk methodology for chemical installations, *Journal of Loss Prevention in the Process Industries*, Volume 16, Issue 6, 575-591.
18. Papazoglou IA, Aneziris ON (2004), Fast Markovian method for dynamic safety analysis of process plants, *Journal of Loss Prevention in the Process Industries*, 17, 1, 1-8.
19. Aneziris ON, Housiadas C., Stakakis M. and Papazoglou IA, (2004), Probabilistic safety analysis of a Greek Research Reactor, *Annals of Nuclear Energy*, 31, 5, 481-516.
20. Tambouratzis T., Xanthos, S., Antonopoulos-Domis M., (2004). On-line channel instability localisation with fuzzy rule-based systems, *Annals of Nuclear Energy*, Vol. 31, No. 7, pp. 773-788.
21. Tambouratzis T., Antonopoulos-Domis M., (2004). On-line signal trend identification, *Annals of Nuclear Energy*, Vol. 31, No. 14, pp. 1541-1553.

### 2. PEER-REVIEWED CONFERENCE PROCEEDINGS

1. Tambouratzis T., (2001). A GA-ANN for the Eulerian cycle problem, in *Proceedings of the “International Conference on Artificial Neural Networks and Genetic Algorithms 2001”*, Prague,

- Czech Republic, April 22<sup>nd</sup>-25<sup>th</sup>, 2001, pp. 371-374, V.Kurkova, N.C.Steele, R.Neruda, M.Karny (eds) "Artificial Neural Nets and Genetic Algorithms". Springer, Wien.
2. Gazela M., Tambouratzis T., (2001). Estimating hourly solar radiation on tilted surface via ANNs, in Proceedings of the "International Conference on Artificial Neural Networks and Genetic Algorithms 2001", Prague, Czech Republic, April 22<sup>nd</sup>-25<sup>th</sup>, 2001, pp. 457-460, V.Kurkova, N.C.Steele, R.Neruda, M.Karny (eds) "Artificial Neural Nets and Genetic Algorithms". Springer, Wien.
  3. O. Aneziris, I. A. Papazoglou. (2001), Fast Markovian Method for Dynamic Safety Analysis of Process Plants, in E. Zio, M. Demichela, N. Piccinini (editors) Towards a safer world, Vol 2, pp. 1411-1419.
  4. M. Christou, Z. Nivolianitou, K. Lauridsen, A. Amendola, F. Markert, P. Crossthwaite, D. Carter, D. Hourtolou, M. Molag, G. Spadoni, J. Tihonen, I. Kozine, O. Aneziris, S. Gadd, I.A. Papazoglou, Implications of the uncertainties present in risk assessment of chemical installations to risk-informed decision making: the case of land-use planning" (2001),in E. Zio, M. Demichela, N. Piccinini (editors) Towards a safer world, Vol 2, pp. 1747-1754
  5. I.A. Papazoglou (2002). Optimization of testing frequency for systems with components with limited outage duration", PSAM 6, pp.
  6. I.A. Papazoglou, Z. Nivolianitou, M. D. Christou, O.N. Aneziris (2002) "Application of expert judgment deriving from a benchmark exercise in the quantitative risk assessment of chemical installations" in PSAM 6, pp.1279-1285.
  7. Tambouratzis T., Antonopoulos-Domis M., (2002). A non-stationary signal correlator for on-line transit time estimation, in Proceedings of the "Specialists Meeting on Reactor Noise IV", Goteborg, Sweden, May 27<sup>th</sup>-31<sup>st</sup>.
  8. Tambouratzis T., Gazela M., (2003). The accurate estimation of meteorological profiles employing ANNs, in Proceedings of the "International Conference on Artificial Neural Networks and Genetic Algorithms 2003", Roanne, France, April 23<sup>rd</sup>-25<sup>th</sup>, 2003, pp. 131-137, D.W.Pearson, N.C.Steele, R.F.Albrecht (eds) "Artificial Neural Nets and Genetic Algorithms". Springer, Wien.
  9. Tambouratzis T., Tambouratzis G., (2003). Meteorological data mining employing Self-Organising Maps, in Proceedings of the "International Conference on Artificial Neural Networks and Genetic Algorithms 2003", Roanne, France, April 23<sup>rd</sup>-25<sup>th</sup>, 2003, pp. 149-153, D.W.Pearson, N.C.Steele, R.F.Albrecht (eds) "Artificial Neural Nets and Genetic Algorithms". Springer, Wien.
  10. Z. Nivolianitou, M. Konstantinidou, (2003). Accident analysis techniques for hazardous process systems, ESREL 2003 Safety & Reliability, Book of Proceedings (eds. Bedford, van Gelden) pp. 1167-1 177, Maastricht, the Netherlands.
  11. Papazoglou I. A., Aneziris O., Bonanos G.S. (2003), Effect of a concrete wall in the limitation of thermal radiation resulting from large industrial fires, in T. Bedford, P. H. A. J. M. van Gelder (editors) Safety & Reliability Vol 2, (June 2003), pp. 1205-1210.
  12. Tambouratzis T., Antonopoulos-Domis M., (2004). Evaluation of stability during transient BWR operation, in Proceedings of the "International Meeting on Reactor Noise 2004", Budapest, Hungary, May 17<sup>th</sup>-19<sup>th</sup>, 2004.
  13. Papazoglou I.A., Bari R.A. (2004). A Decision Analysis Based Methodology for the Assessment of the Proliferation Resistance of Nuclear Power Systems in C. Spitzer, U. Schmocker, V.N. Dang (editors), PSAM7- ESREL 2004, pp. 882-887.
  14. Papazoglou I.A., Giakoumatos I., Aneziris O.N. (2004). A Practical Method for Reviewing Safety Studies of Process Plants, in C. Spitzer, U. Schmocker, V.N. Dang (editors) PSAM7- ESREL 2004, pp. 2706-2710.
  15. Georgiadou P.S., Papazoglou I.A., Kiranoudis C.T., Markatos N.C.(2004).Emergency Response Optimization for Major Hazard Industrial Sites, in C. Spitzer, U. Schmocker, V.N. Dang (editors) PSAM7- ESREL 2004, pp. 128-133.
  16. Hale A., Goossens L., Ale B., Bellamy L., Post J., Oh J., Papazoglou I.A. (2004). Managing safety barriers and controls at the workplace, in C. Spitzer, U. Schmocker, V.N. Dang (editors) PSAM7- ESREL 2004, pp. 608-613.
  17. Konstantinidou M., Nivolianitou Z., Kyranoudis C., Markatos N., (2004). Fuzzy systems in use for Human Reliability Analysis, 11th International Symposium Loss Prevention 2004 (Loss Prevention and Safety Promotion in the Process Industries), Prague 31 May - 3 June 2004, pp 5110-5118.

## 6. Solar & Other Energy Systems Laboratory (SESL)

### 1. PEER-REVIEWED JOURNALS

1. **Papanicolaou E. and V. Belessiotis**, Double-diffusive natural convection in an asymmetric trapezoidal enclosure: unsteady behavior in the laminar and the turbulent-flow regime, *Int. J. Heat Mass Transfer*, 2004 (accepted for publication)
2. **Babalís S.J. and V. Belessiotis**, Influence of the drying conditions on the drying constants and moisture diffusivity during the thin – layer drying of figs, *Journal of Food Eng.*, Vol. 65(3), pp 449-458 , 2004
3. **Papanicolaou E. and V. Belessiotis**, Transient hydrodynamic phenomena and conjugate heat transfer during cooling of water in an underground thermal storage tank , *ASME J. Heat Transfer*, Vol. 126(1), pp. 84-96, 2004
4. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, A hybrid solar desalination and water heating system, *Desalination*, Vol. 164(2), pp. 189-195, 2004
5. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, Experimental investigation of the behavior of a solar still coupled with hot water storage tank, *Desalination*, Vol. 156(1-3), pp. 315-322, 2003
6. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, Solar stills coupled with solar collectors and storage tank – analytical simulation and experimental validation of energy behavior, *Solar Energy*, Vol. 75 (3), pp. 199 -205, 2003
7. **Mathioulakis E. and Belessiotis V.**, Integration of solar still in a multi-source, multi-use environment, *Solar Energy*, Vol. 75(5), pp. 355-437, 2003
8. **Belessiotis V. and Mathioulakis E.**, Analytical approach of thermosyphon solar domestic hot water system performance, *Solar Energy*, Vol. 72 (4), pp. 307-315, 2002
9. **Mathioulakis E. and Belessiotis V.**, A new heat-pipe type solar domestic hot water system, *Solar Energy*, Vol 72(1), pp. 13-20, 2002
10. **Papanicolaou E., Voropoulos K. and Belessiotis V.**, Natural convective heat transfer in an asymmetric, greenhouse-type solar still – Effect of angle of inclination, *Num. Heat Transfer, Part A*, vol. 42 (8), pp. 855-880, 2002
11. **Papanicolaou E. and Belessiotis V.**, Transient natural convection in a cylindrical enclosure at high Rayleigh numbers, *Int. J. Heat Mass Transfer*, Vol 45(7), pp 1425-1444, 2002
12. **Housiadas C., Papanicolaou E. and Drossinos Y.**, Combined heat and mass transfer in laminar flow diffusion nucleation chambers, *J. of Aerosol Science*, Vol. 33 (5), pp. 797-816, 2002
13. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, Analytical simulation of energy behaviour of solar stills and experimental validation , *Desalination*, Vol. 153(1-3), pp 87-94, 2002
14. **Belessiotis V. and Delyannis E.**, Water shortage and renewable energies (RE) desalination – possible technological applications, *Desalination*, Vol. 139(1-3), pp. 133-138, 2001
15. **Gazela M. and Mathioulakis E.**, A new method for typical weather data selection to evaluate long term performance of solar energy systems, *Solar Energy*, Vol. 70(4), pp. 339-348, 2001
16. **Papanicolaou E., Giebert D., Koch R. and Schulz A.**, A Conservation-Based Discretization Scheme for Conjugate Heat Transfer Calculations in Hot-Gas Ducting Turbomachinery Components, *Int. J. Heat Mass Transfer*, vol. 44(18), pp. 3413-3429, 2001
17. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, Experimental investigation of a solar still coupled with solar collectors, *Desalination*, Vol. 138(1-3), pp. 103-110, 2001

### 2. PEER-REVIEWED CONFERENCE PROCEEDINGS

1. **Mathioulakis E., Voropoulos K. and Belessiotis V.**, "Solar energy and energy saving in hotels: The case of Candia Maris Hotel", International Conference for RES for island Tourism & Water, EREC, Crete, 26-28 May 2003
2. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, "Experimental investigation of the behavior of a solar still coupled with hot water storage tank", EDS, European Conference on Desalination and Environment –Fresh Water for All, Malta, 4-8 May 2003
3. **Voropoulos K., Mathioulakis E. and Belessiotis V.**, "Analytical simulation of energy behaviour of solar stills and experimental validation", EDS, EuroMed 2002 conference on *Desalination Strategies in South Mediterranean Countries*, Egypt, 4-6 May, 2002.

4. **Babalís S.J., Mathioulákis E., Belessiotis V.,** *Drying of agricultural products in a tray-type tunnel dryer using an innovative control method*, International Conference on Agricultural Science and Technology, ICAST 2001, Beijing, 7-9 Nov 2001
5. **Voropoulos K., Mathioulákis E. and Belessiotis V.,** *Experimental investigation of a solar still coupled with solar collectors*, EDS European Conference on Desalination and Environment Water Shortage, Limassol, 23-31 May 2001
6. **Belessiotis V and Delyannis E.,** *Water shortage and renewable energies (RE) desalination – possible technological applications*, EDS European Conference on Desalination and Environment Water Shortage, Limassol, 23-31 May 2001

### **GREEK CONFERENCES**

1. **E. Papanicolaou, K. Voropoulos and V. Belessiotis,** “Numerical study of the flow and thermal fields in an greenhouse-type solar still” (in greek), Proc. of the 7<sup>th</sup> Nat. Conf. On Renewable Energy Sources, Patra, Greece, November 2002, vol. A, pp. 40-410.
2. **K. Voropoulos, E. Mathioulákis and V. Belessiotis,** “Solar hybrid desalination-water heating system ” (in greek), Proc. of the 7<sup>th</sup> Nat. Conf. On Renewable Energy Sources, Patra, Greece, November 2002, vol. A, pp. 443-450.
3. **S. Babalís, E. Mathioulákis and V. Belessiotis,** “Investigation of the use of solar energy for partial coverage of the thermal load in mechanical drying of agricultural products” (in greek), Proc. of the 7<sup>th</sup> Nat. Conf. On Renewable Energy Sources, Patra, Greece, November 2002, vol. B, pp. 259-268.
4. **Papanicolaou, E. Mathioulákis and V. Belessiotis ,** “Recent activities of the Solar & other Energy Systems Laboratory Of NCSR “Demokritos” in the field of fluid mechanics” (in greek), Proceedings of “FLOW 2002” (Two-Day Meeting), Patra, Greece, October 2002, pp. 62-67.

### **3. CHAPTERS IN BOOKS**

1. **V. Belessiotis and E. Delyannis,** DRYING METHODS AND SYSTEMS – Drying process principles (in Greek), NCSR "DEMOKRITOS" publication, 810 pages, Athens-Greece 2004 (in press)
2. **E. Mathioulákis,** Measurement, measurement quality and uncertainty (in Greek), Hellaslab publication, 245 pages, Athens-Greece, 2004
3. **E. Delyannis and V. Belessiotis,** Solar water desalination, in Encyclopedia of Energy, Volume 5, Cleveland CJ et al. (eds.), Elsevier Inc., 2004
4. **E. Delyannis, V. Belessiotis,** Solar Energy and Desalination, Chapter 7 in *Advances in Solar Energy*, An Annual Review of research and Development, Vol.14, 287-330, American Solar Energy Society Publishers, Boulder, CO, 2001

### **Dissertations**

1. **K. Voropoulos,** “Integrated solar still system with thermal storage tank”, Doctoral Dissertation, National Technical University of Athens (NTUA), Department of Chemical Engineering, December 2003.

### **4. DETAILED LIST OF CITATIONS**

#### **A. Citations in Journal Papers**

1. **Belessiotis V., Mathioulákis E.,** *Solar Energy*, 72(4), 2002
  1. Chang JM, Leu JS, Shen MC, Huang BJ, *Solar Energy* 76(6): 693-701, 2004
2. **Mathioulákis E., Belessiotis V.,** *Solar Energy*, 72(1), 2002
  1. Soylemez MS, *Energy Conversion and Management*, 44 (15): 2509-2517, Sep 2003
  2. Dunstan D, Probert D, *Applied Energy*, 73 (2): 103-138, Oct 2002

3. **Papanicolaou E., Voropoulos K. and Belessiotis V., *Num. Heat Transfer, Part A*, 42 (8), 2002**
  1. Radhwan AM, *Desalination* 161(1): 89-97, 2004
4. **Belessiotis V. and Delyannis E., *Desalination*, 139(1-3), 2001**
  1. Garcia-Rodriguez L, *Solar Energy*, 75 (5): 381-393, 2003
  2. Carta JA, Gonzalez J, Subiela V, *Solar Energy*, 75 (2): 153-168 2003
5. **Voropoulos K., Mathioulakis E. and Belessiotis V., *Desalination*, 138(1-3), 2001**
  1. Garcia-Rodriguez L, *Solar Energy* 75 (5): 381-393, 2003
6. **Gazela M. , Mathioulakis E., *Solar Energy*, 70(4), 2001**
  1. Bulut H, *Renewable Energy*, 29 (9): 1477-1488, Jul 2004
  2. Bulut H, *Inter. J. of Energy Research*, 27 (9): 847-855, Jul 2003
  3. Goldstein RJ, Eckert ERG, Ibele WE, et al., *Inter. J. of Heat and Mass Transfer*, 46 (11): 1887-1992, May 2003
7. **E. Papanicolaou, D. Giebert, R. Koch and A. Schulz, *Int. J. Heat Mass Transfer*, 2001**
  1. Goldstein RJ, Eckert ERG, Ibele WE et al., *Inter. J. Heat & Mass Transfer*, 46: (11), 1887-1992, May 2003
8. **Voropoulos K., Mathioulakis E., Belessiotis V., *Desalination*, 129 (3), 2000**
  1. Goldstein RJ, Eckert ERG, Ibele WE, et al., *Inter. J. Heat & Mass Transfer*, 44(19), 2853-2957, 2001
9. **Belessiotis V. and Delyannis E., *Desalination*, 128(2), 2000**
  1. Carta JA, Gonzalez J, Subiela V, *Desalination*, 161 (1): 33-48, Feb 5 2004
  2. Garcia-Rodriguez L, *Solar Energy* 75 (5): 381-393, 2003
10. **Mathioulakis E., Voropoulos K. and Belessiotis V., *Solar Energy*, 66(5), 1999.**
  1. Ballestrin J, *Solar Energy*, 73 (3): 159-168, 2002
  2. Sabatelli V, Marano D, Braccio G, Sharma VK, *Energy Conversion and Management*, 43 (17): 2287-2295, Nov 2002
  3. Goldstein RJ, Eckert ERG, Ibele WE, et al., *Int. J. Heat & Mass Transfer*, 44(19), 2853-2957, 2001
11. **Mathioulakis E, Voropoulos K, Belessiotis V., *Desalination*, 122(1), 1999.**
  1. Rubio-Cerda E, Porta-Gandara MA, Fernandez-Zayas JL, *Renewable Energy*, 27 (2): 301-308, Oct 2002
12. **Karathanos V., Belessiotis V., *J. of Agric. Eng. Research*, 1999**
  1. Doymaz I, *Journal of Food Engineering*, 65 (2): 205-209, Nov 2004
  2. Doymaz I, *Journal of Food Engineering*, 64 (4): 465-470, Oct 2004
  3. Doymaz I, Pala M, *Nahrung-Food*, 47 (5): 304-308, Oct 2003
  4. Bala BK, Mondol MRA, Biswas BK, et al., *Renewable Energy*, 28 (2): 183-190, Feb 2003
  5. El-Sebaai AA, Aboul-Enein S, Ramadan MRI, El-Gohary HG, *Energy*, 27 (9): 845-859 Sep 2002
13. **Mathioulakis, E., Karathanos, V.T., Belessiotis, V.G., *Journal of Food Engineering*, 36 (2), 1998.**
  1. Therdthai N, Zhou WB, Adamczak T, *Journal of Food Engineering*, 60 (2): 211-217, Nov 2003
  2. Thepdthai N, Zhou WB, *Food Science and Technology Research*, 9 (3): 219-226, Aug 2003

3. Wang LJ and Sun DW, *Trends in Food Science & Technology*, 14(10): 408-423, 2003
4. Xia B and Sun DW, *Computers and Electronics in Agriculture*, 34(1-3): 5-24, 2002
14. **Grignon M., Mathioulakis E., Ngae P, et al., *Int. J. Heat & Mass Transfer*, 1998.**
  1. Goldstein RJ, Eckert ERG, Ibele WE, et al., *Inter J. Heat & Mass Transfer*, 44 (2): 253-366, Jan 2001
15. **Karathanos V., Belessiotis V., *J. of Food Engineering*, 1997.**
  1. Doymaz I, *Journal of Food Engineering*, 64 (4): 465-470, Oct 2004
  2. Ertekin C, Yaldiz O, *Journal of Food Engineering*, 63 (3): 349-359, Aug 2004
  3. Bahnasawy AH, Shenana ME, *Journal of Food Engineering* 61 (3): 309-319, Feb 2004
  4. Krokida MK, Foundoukidis E, Maroulis Z, *Journal of Food Engineering* 61 (3): 321-330, Feb 2004
  5. Doymaz I, *Journal of Food Engineering*, 61(3): 341-346, Feb 2004
  6. Dincer I, Hussain MM, *Inter. J. Heat & Mass Transfer*, 47 (4): 653-658, Feb 2004
  7. Doymaz I, Pala M, *Nahrung-Food*, 47 (5): 304-308, Oct 2003
  8. Bennamoun L, Belhamri A, *Journal of Food Engineering*, 59 (2-3): 259-266, Sep 2003
  9. Bala BK, Mondol MRA, Biswas BK, et al., *Renewable Energy*, 28 (2): 183-190, Feb 2003
  10. Maskan A, Kaya S, Maskan M, *Journal of Food Engineering*, 54 (1): 81-88, Aug 2002
  11. Doymaz I, Pala M, *Journal of Food Engineering*, 52 (4): 413-417, May 2002
  12. Midilli A, *Inter. J. of Energy Research*, 25 (8): 715-725, Jun 25 2001
  13. Maskan M, *Journal of Food Engineering*, 48 (2): 177-182, May 2001
16. **Karathanos V., Kanellopoulos N. and Belessiotis V., *J. of Food Engineering*, 1996.**
  1. Marabi A, Saguy IS, *Journal of the Science of Food and Agriculture*, 84 (10): 1105-1110, Aug 15 2004
  3. Kalogianni EP, Savopoulos T, Karapantsios TD, et al., *Colloids And Surfaces B-Biointerfaces*, 35 (3-4): 159-167, Jun 1 2004
  4. Ramos IN, Silva CLM, Sereno AM, Aguilera JM, *Journal of Food Engineering*, 62 (2): 159-164, Apr 2004
  5. Marabi A, Jacobson M, Livings SJ, Saguy IS, *European Food Research and Technology*, 218 (4): 339-344, Mar 2004
  6. Nieto AB, Salvatori DM, Castro MA, et al., *Journal of Food Engineering*, 61 (2): 269-278, Feb 2004
  7. Heredia-Leon JC, Talamas-Abbud R, Mendoza-Guzman V, et al., *Journal of the Science of Food and Agriculture*, 84 (1): 59-65, Jan 15 2004
  8. Rahman MS, Sablani SS, *Food and Bioproducts Processing*, 81 (C4): 309-315, Dec 2003
  9. Kassama LS, Ngadi MO, Raghavan GSV, *Inter. J. of Food Properties*, 6 (3): 519-529 2003
  10. Bazhal MI, Ngadi MO, Raghavan VGS, *Biosystems Engineering*, 86 (1): 51-57, Sep 2003
  11. Ramos IN, Brandao TRS, Silva CLM, *Food Science and Technology International*, 9 (3): 201-206, Jun 2003
  12. Prothon F, Ahrne L, Sjöholm I, *Critical Reviews In Food Science And Nutrition*, 43 (4): 447-479, 2003
  13. Khalloufi S, Ratti C, *Journal of Food Science*, 68 (3): 892-903, Apr 2003



14. Moreira R, Sereno AM, *Journal of Food Engineering*, 57 (1): 25-31, Mar 2003
  15. Bazhal MI, Ngadi MO, Raghavan GSV, Nguyen DH, *Journal of Food Science*, 68 (1): 249-253, Jan-Feb 2003
  16. Lebovka NI, Bazhal MI, Vorobiev E, *Journal of Food Engineering*, 54 (4): 337- 346, Oct 2002
  17. Rahman MS, Al-Amri OS, Al-Bulushi IM, *Journal of Food Engineering*, 53 (4): 301-313, Aug 2002
  18. Kunzek H, Muller S, Vetter S, Godeck R, *European Food Research and Technology*, 214 (5): 361-376, May 2002
  19. Caixeta AT, Moreira R, Castell-Perez ME, *Journal of Food Process Engineering*, 25 (1): 63-90, Apr 2002
  20. Hossain MA, Bala BK, *Drying Technology*, 20 (2): 489-505, 2002
  21. Rassis DK, Saguy IS, Nussinovitch A, *Food Hydrocolloids*, 16 (2): 139-151, Mar 2002
  22. Sobral PJD, Lebert A, Bimbenet JJ, *Sciences des Aliments*, 21 (3): 231-242, 2001
  23. Nouviaire A, Louka N, Rezzoug SA, Allaf K, *Sciences des Aliments*, 21 (2): 177-192, 2001
  24. Rahman MS, *Drying Technology*, 19 (1): 1-13, 2001
  25. Ramesh MN, Wolf W, Tevini D, Jung G, *Journal of Food Engineering*, 49 (1): 63-72, Jul 2001
  26. Costa RM, Oliveira FAR, Boutcheva G, *Inter. J. of Food Science and Technology*, 36 (1): 11-23, Jan 2001
17. **Papanicolaou E. and Gopalakrishna S.** *ASME J. of Electr. Packaging.*, 117(4), 1995.
    1. Guo G and Sharif MAR, *Inter. J. Thermal Sciences*, 43 (5): 465-475, May 2004
    2. Dallago S and Venchi G, *IEEE Trans. on Power Electronics*, 17:(2) 187-195, 2002
  18. **Papanicolaou E. and Jaluria Y.** *ASME J. Heat Transfer*, 117(3), 1995.
    1. Moraga NO, Lopez SE , *Numer. Heat Transfer A-Appl*, 45(8): 811-824, 2004
    2. Guo G and Sharif MAR, *Inter. J. of Thermal Sciences*, 43 (5): 465-475, 2004
    3. Bae K, Chung H, Jeong H, *KSME International Journal* , 16(5): 676-682, 2002
  19. **Mavros P., Belessiotis V. and Haralambopoulos D.** *Solar Energy*, 52(4), 1994.
    1. Homan KO, *ASME Journal Of Heat Transfer*, 125(2): 273-281, Apr 2003
    2. Hegazy AA, Diab MR, *Applied Energy*, 71(4): 287-306, Apr 2002
    3. Rosen MA, *Solar Energy*, 71(3): 173-185, 2001
  20. **Papanicolaou E. and Jaluria Y.** *ASME J. Heat Transfer*, 116(4), 1994.
    1. Guo G and Sharif MAR, *Inter. J. of Thermal Sciences*, 43(5): 465-475, May 2004
    2. Singh S, Sharif MAR, *Numer. Heat Transfer A-Appl.*, 44(3): 233-253, 2003
    3. Xin GJ, Chow WK, Liu SD, *Chaos Solitons & Fractals*, 15(3): 543-558, 2003
    4. Raji A and Hasnaoui M, *Engineering Computations*, 18(7-8): 922-949, 2001
  21. **Papanicolaou E. and Jaluria Y.** *Num. Heat Transfer A-Appl*, 23(4), 1993.
    1. Deng QH, Zhou J, Mei C, Shen YM, *Inter. J. Heat & Mass Transfer* 47(24): 5257-5269, 2004.
    2. Moraga NO, Lopez SE , *Numer. Heat Transfer A-Appl.*, 45(8): 811-824, 2004
    3. Guo G and Sharif MAR, *Inter. J. of Thermal Sciences*, 43(5): 465-475, 2004
    4. Najam M ,El Alami M, Oubarra A, *Energy Conversion & Management*, 45(1): 113-125, 2004

6. Manca O, Nardini S, Khanafer K, Vafai K, *Numer. Heat Transfer A-Appl.*, 43(3): 259–282, 2003
8. Chen S, Liu Y, *Heat & Mass Transfer*, 39(1): 3-9, 2002.
9. Chen S, Liu Y, Chan SF, Leung CW and Chan TL, *Heat & Mass Transfer*, 37(2-3): 251-257, 2001.

**22. Papanicolaou E. and Jaluria Y., *Journal of Fluid Mechanics*, 239, 1992.**

1. Guo G and Sharif MAR, *Inter. J. of Thermal Sciences*, 43(5): 465-475, 2004
2. Yang H, Zhu Z, *Inter. J. Heat & Mass Transfer*, 47(6-7): 1217-1226, 2004
3. Xin GJ, Chow WK, Liu SD, *Chaos Solitons & Fractals*, 15(3): 543-558, 2003
4. Chen S, Liu Y, *Heat & Mass Transfer*, 39(1): 3-9, 2002.
5. Chen S, Liu Y, Chan SF, Leung CW and Chan TL, *Heat & Mass Transfer*, 37(2-3): 251-257, 2001.

**23. Papanicolaou E. and Jaluria Y., *Num. Heat Transfer A-Appl.*, 18(4), 1990.**

1. Deng QH, Zhou J, Mei C, Shen YM, *Inter. J. Heat & Mass Transfer* 47(24): 5257-5269, 2004.
2. Guo G and Sharif MAR, *Inter. J. of Thermal Sciences*, 43(5): 465-475, 2004
3. Moraga NO, Lopez SE, *Numer. Heat Transfer A-Appl.*, 45(8): 811-824, 2004
4. Fang LC, *Inter. J. Numer. Methods in Fluids*, 44(12): 1389-1404, 2004
5. Singh S, Sharif MAR, *Numer. Heat Transfer A-Appl.*, 44(3): 233-253, 2003
6. Fang LC, *Inter. J. Heat & Mass Transfer*, 46(11): 2039-2049, 2003
7. Manca O, Nardini S, Khanafer K, Vafai K, *Numer. Heat Transfer A-Appl.*, 43(3): 259 – 282, 2003
8. Wang QH, Jaluria Y, *Physics of Fluids* 14(7): 2113-2127, 2002
9. Deng QH, Tang GF, *Inter. J. Heat & Mass Transfer* 45(11): 2387-2396, 2002.

**B. Citations in Books - Dissertations**

1. **Mavros P., Belessiotis V. and Haralambopoulos D., *Solar Energy*, 52(4), 1994**

1. Zurigat YH, Ghajar AJ, “Heat Transfer and Stratification in Sensible Heat Storage Systems”, in *“Thermal Energy Storage-Systems and Applications”*, Dincer I, Rosen MA (eds.), John Wiley & Sons, Ltd., 2002, Chap. 6, p. 300.
2. Rosen MA, Dincer I, “Energy and Exergy Analyses of Thermal Energy Storage Systems”, in *“Thermal Energy Storage-Systems and Applications”*, Dincer I, Rosen MA (eds.), John Wiley & Sons, Ltd., 2002, Chap. 10, p. 506.

2. **Papanicolaou E. and Rodi W., *ASME J. of Turbomachinery*, 121(1), 1999**

1. Savill AM, in “Closure Strategies for Turbulent and Transitional Flows”, Launder BE and Sandham ND (eds.), Cambridge University Press, 2002, Chap. 18, p. 519.

3. **Belessiotis V., Voropoulos K. and Delyannis E., *Desalination*, 100(1-3), 1996**

1. Ian Goldie, "Economically viable solar stills", Dissertation presented at the University of Stellenbosch, December 2003

4. **Belessiotis V. and Delyannis E., *Desalination*, 105(1-2), 1996**

1. Ian Goldie, "Economically viable solar stills", Dissertation presented at the University of Stellenbosch, December 2003

5. **Delyannis E. and Belessiotis V., *Desalination*, Vol. 100(1-3), pp. 27-34, 1995**

1. Ian Goldie, "Economically viable solar stills", Dissertation presented at the University of Stellenbosch, December 2003

**C. Citations in Conference Proceedings**

1. **E. Delyannis and V. Belessiotis, *Mediterranean Conference on Policies and Strategies for Desalination and Renewable Energies*, Santorini, 21-23 Ιουνίου 2000**

1. M. Hermann, J. Koschikowski, M. Rommel, *Solar Energy*, 72(5): 415-426, 2002.