

Curriculum vitae

Personal data:

Name: **Aikaterini**
Surname: **Skouroliakou**
Date – place of birth: 1970 – Athens
Address: 10B Eptanissou st., 15231 Halandri,
Athens, Greece.
e-mail: kskourol@teiath.gr

Degrees:

- **Ptyhio in Physics**, National and Kapodistrian University of Athens (1993)
- **Master of Science (M.Sc.)** in Medical Physics, University of Aberdeen, United Kingdom, (1994).
- **PhD in Medical Physics**, Medical School, National and Kapodistrian University of Athens (2007)

Professional licenses:

- Medical Physicist (1996)
- Medical Physicist in the field of non ionizing radiation (2000)

Professional background

- November 1994 – November 1995: Medical Physicist practitioner, Radiology Department, Aretaeion University Hospital, Athens, Greece
- October 1996 – December 1998: Medical Physicist, Nuclear Medicine Diagnostic Department “Medical Imaging” S.A., 26AKampouroglou st., 115 25 N. Psyhiko, Greece
- February 2000 – February 2007: Medical Physicist, Radiology Department, Pediatric Hospital “A. Kyriakou”, Athens Greece.
- 1996 – 2007: Free lance Medical Physicist

Educational posts:

2008 - 2014: Professor of Technological Applications, Department of Physics, Chemistry & Material Technology, Technical Educational Institute (T.E.I. of Athens)

2014- 2017: Assistant Professor, Energy Technology Department, Technical Educational Institute (T.E.I. of Athens)

2018- today: Assistant Professor, Department of Biomedical Engineering, University of West Attica

Reports

Shielding reports, radiation protection reports – “hazard evaluation studies” in various Radiology Departments in Greece (1996-2010).

- Radiology department , Law health insurance organisation (1996, 2003)
- Radiology Department, Apollonia Hospital (1997)
- Radiology Department, Pediatric Hospital “A. Kyriakou”,(1997, 2002, 2003, 2005)
- Nuclear Medicine private clinic (1999, 2001, 2010)
- Radiation protection report – hazard evaluation study, Radiology Department, Private clinic, 3 Ferreou st, N. Ionia, Athens (2002, 2005)
- Shielding Report, Radiology department, Hydra hospital (2004)

- Shielding Report, Radiology department, Skyros hospital (2005)
- Shielding Report, Igoumenitsa Hospital (2008)

Publications

A. Peer-reviewed journals

1. M. Lyra, Skouroliakou A, V. Voliotopoulos, L. Vlachos, G. Limouris; (1998), Practical dosimetric consideration and imaging evaluation in infection scintigraphy, («Radionuclides for inflammation» eds. G.S. Limouris, H.F. Bender, H.--J. Biersack, V. Voliotopoulos), Mediterra, Athens, 105 -109.
2. M. Lyra, L. Skouroliakou A, Vlachos, G. Limouris; (1998), Individualized dosimetry in Ga -- 67 citrate scintigraphy, («Radionuclides for inflammation» (G.S. Limouris, H.F. Bender, H.--J. Biersack, V. Voliotopoulos (eds)),Mediterra, Athens, 105 -109.
3. Skouroliakou A, M. Lyra, et al (1999), Breast Imaging by MIBI Tc99m MIBI Scintigraphy: Diagnostic Evaluation – Dosimetric Consideration, Breast Cancer Research, N. Agnantis, D. Tsiftsis (eds), (41-48).
4. M Lyra, K Skouroliakou, I Stratis, (1999), Nuclear Medicine Image Data Easy Transfer Via E-Mail, Radioactive Isotopes in Clinical Medicine and Research XXIII, Series: Advances in Pharmacological Sciences Sinzinger, H.; Bergmann, Helmar; Köhn, H. (Eds.), XXIX, 561-564 p.
5. Skouroliakou A, M. Lyra, A. Antoniou, L. Vlachos. (2006), Quantitative image analysis in sonograms of the thyroid gland, Nuclear Instruments and Methods in Physics Research, A, 569 pp. 606 – 609. (17 citations)
6. Ntzouni MP, Skouroliakou A, Kostomitsopoulos N, Margaritis LH (2013): Transient and cumulative memory impairments induced by GSM 1.8 GHz cell phone signal in a mouse model. Electromagnetic Biology and Medicine, Vol. 32, No. 1 , Pages 95-120 (doi: 10.3109/15368378.2012.709207) (16 citations)
7. Margaritis, L. H., Manta, A. K., Kokkaliaris, C. D., Skouroliakou A, et al. (2014), Drosophila oogenesis as a bio-marker responding to EMF sources. Electromagn. Biol. Med, 32(1), 95-120. (14 citations)
8. Tsantis S, Spiliopoulos S, Skouroliakou A, Karnabatidis D, Hazle JD and Kagadis GC, (2014), Multiresolution edge detection using enhanced fuzzy c-means clustering for ultrasound image speckle reduction, Med Phys 41 [http://dx.doi.org/ 10.1118/1.4883815](http://dx.doi.org/10.1118/1.4883815). (4 citations)
9. A.S. Skouroliakou, I. Seferis, I. Sianoudis, I. Valais, A.F. Fragopoulou, L.H. Margaritis, (2014) Infrared Thermography Imaging: Evaluating surface emissivity and skin thermal response to IR heating e-JST 3 (9).
10. Fasseas MK, Fragopoulou AF, Manta AK, Skouroliakou A, Vekrellis K, Margaritis LH and Syntichaki P. (2014) Response of Caenorhabditis elegans to wireless devices radiation exposure. Int J Rad Biol, 9:1-34. (1 citation)
11. Gatos I, Tsantis S., Spiliopoulos S., Skouroliakou A., Theotokas I., Zoumpoulis P., Hazle J.D., Kagadis G.C., (2015), A new automated quantification algorithm for the detection and evaluation of focal liver lesions with contrast-enhanced ultrasound, Med Phys;42(7): 3948-59. doi: 10.1118/1.4921753. (7 citations)
12. Sagioglou N, Manta AK, Giannarakis IK, Skouroliakou A, and Margaritis LH , (2016), Apoptotic cell death during Drosophila oogenesis is differentially increased by electromagnetic radiation depending on modulation, intensity and duration of exposure, Electromagn. Biol. Med, doi:10.3109/15368378.2014.971959. (3 citations)

13. Mina D., Sagonas K., Fragopoulou A.F., Pafilis P., Skouroliakou A., Margaritis L.H., Tsitsilonis O.E., Valakos E.D. (2016): Immune responses of a wall lizard to whole- body exposure to radiofrequency electromagnetic radiation, *International Journal of Radiation Biology*, DOI:10.3109/09553002.2016.1135262. (2 citations)
14. Stasinopoulou M*, Fragopoulou AF*, Stamatakis A, Mantziaras G, Skouroliakou K, Papassideri IS, Stylianopoulou F, Lai H, Kostomitsopoulos N and LH Margaritis. (2016) Effects of pre- and post-natal exposure to 1880-1900 MHz DECT base radiation on rat development, *Reprod Toxicol.*; 65:248-262. doi: 10.1016.
15. Manta A.K., Papadopoulou D., Polyzos A.P., Fragopoulou A.F., Skouroliakou A.S., Thanos D., Stravopodis D.J., Margaritis L.H. (2017): Mobile-phone radiation-induced perturbation of gene expression profiling, redox equilibrium and sporadic- apoptosis control in the ovary of *Drosophila melanogaster*, Fly, <http://dx.doi.org/10.1080/19336934.2016.1270487>

B. Conference Proceedings

1. Skouroliakou A, M. Lyra, G. Kouvaris; (1996), Stochastic effects of the Chernobyl accident, *NCRPS Democritus*, 177-184.
2. Lyra M, Skouroliakou, K. Emmanouilides, I. Stratis, I. (1998) Spect and 3D display quantitative evaluation in renal DMSA scintigraphy *Proceedings of the Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON)*, [pg. 1-6] *Electronic Proceedings*.
3. Lyra M., Skouroliakou, K. Stefanides, C. Perris, A. Georgosopoulos, C. Pappas, D. (1998) Nuclear medicine image and data interchange through e-mail, *Proceedings of the Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON)* [pg. 1-5] *Electronic Proceedings*.
4. M. Lyra, K. Skouroliakou, D. Pappas, (1996) Evaluation of 3 -- Dimensional Image Display in Nuclear Medicine, , *EANM Congress, Copenhagen*.
5. M Lyra, K Skouroliakou, C. Georgosopoulos, . Stefanides, J. Jordanou. (2001) Single Photon Emission Computed Tomography and 3 Dimensional Quantitative Evaluation in Renal Scintigraphy. *Medical Image Computing and Computer-Assisted Intervention – MICCAI 2001, Lecture Notes in Computer Science Volume 2208, 2001, pp 1222-1223*
6. M. Lyra, K. Skouroliakou, D. Pappas, (2002) Quantitative Evaluation of Tc--99m DMSA Single Photon Emission Tomography in Paediatric Renal Scintigraphy, *EANM Congress, Vienna 2002*
7. M. Lyra, K. Skouroliakou, D. Pappas (2003) A dosimetric comparison of radiologic and direct nuclear cystography , *EANM Congress, Amsterdam*
8. M. Lyra, K. Skouroliakou, D. Pappas, (2003) Internal dosimetry of children with 123 adrenal abnormalities in I MIBG, *EANM Congress, Amsterdam*.
9. M. Lyra, K. Skouroliakou, H. Koumanidou, (2005) Gastrooesophageal reflux: A dosimetric comparison between radioisotopic and radiologic study, *EANM Congress, Turkey 2005*
10. M. Lyra, K. Skouroliakou , N. Toubanakis, (2006) Quantitative Image Analysis in Thyroid gland Tc99m pertechnetate scintigraphy ,. *EANM Congress, Athens 2006*
11. Lyra, M. E., Skabas, N., Skouroliakou, K., Gavrililli, M., Limouris, G. S., Roussopoulos, C., ... & Pappas, D, (2008) Digital measurements on 3D scintigraphic cardiac studies improve visualization and diagnosis of heart disease. In *EUROPEAN*

12. M. Lyra, K. Skouroliaou, (2008) Computerized analysis of breast lesions using Tc99m Tetrofosmin scintigraphy and digital mammography. EANM Congress, Munich 2008, European Radiology, 19(1)S, p. 255.
13. Lyra, M. ; Striligas, J. ; Gavrielli, M. ; Chatzijiannis, C. ; Skouroliaou, K. (2008) Thyroid volume determination by single photon tomography and 3D processing for activity dose estimation IEEE International Workshop on Imaging Systems and Techniques, 2008. IST 2008, IEEE, 17 – 20, D.O.I.: 10.1109/IST.2008.4659932
14. Lyra, M. ; Gavrielli, M. ; Lyra, V. ; Kokona, G. ; Skouroliaou, K. (2008) Lungs SPECT image processing for volume and perfusion index estimation 8th IEEE International Conference on BioInformatics and BioEngineering, 2008. BIBE 2008. IEEE, 1 – 5 D.O.I.: 10.1109/BIBE.2008.4696800
15. Lyra, M. ; Lyra, S. ; Kostakis, B. ; Drosos, S. ; Georgosopoulos, C. ; SkouroliaouK. , (2008) Digital mammography texture analysis by computer assisted image processing, International Workshop on Imaging Systems and Techniques, 2008. IST 2008. IEEE, 73 – 76 D.O.I.: 10.1109/IST.2008.4659944
16. M. Lyra, K Skouroliaou, (2009) Texture analysis of breast lesions using mammography and breast ultrasonography, ECR Congress, Vienna 2009
17. ME Lyra, N Lagopati, P Charalabatou, K Skouroliaou , (2010) Texture characterization in ultasonograms of the thyroid gland, Information Technology and Applications in Biomedicine (ITAB), 2010 10th IEEE International Conference on, pp. 1-4, D.O I. : 10.1109/ITAB.2010.5687628
18. Skouroliaou A, Fragopoulou AF, Giannarakis IK, Manta A, Ntzouni MP, Margaritis LH. (2012) Insight into the biological effects of non-ionizing radiation through the properties of the electromagnetic waves, 2012, e-JST (3), 7, 41-52.
19. Fragopoulou A, Stamatakis A, Mina D, Skouroliaou K, Kostomitsopoulos N, Stylianopoulou F & Margaritis LH. 2 (2013) 450 MHz Wi-Fi router electromagnetic radiation effects on mice motor coordination, anxiety, learning and memory Proceedings of the BioEM International Coference, Thessaloniki,2013.
20. Manta A, Sagioglou N, Giannarakis G, Skouroliaou K, Stravopodis D & Margaritis LH (2013) Comparative effects of CW and FM signals on apoptosis and oxidative stress in Drosophila, Proceedings of the BioEM International Coference, Thessaloniki,2013
21. Fasseas M, Syntichaki P, Fragopoulou A, Skouroliaou K & Margaritis LH (2013) Effect of electromagnetic radiation from GSM mobile phones, Wi-Fi routers and DECT wireless phones on the model Caenorhabditis elegans, Proceedings of the BioEM International Coference, Thessaloniki,2013.
22. Skouroliaou K, Giannarakis G, Stefi A, Fragopoulou A, Manta A & L. Margaritis. (2014) Dosimetry (measurements) Pulsed EM field characteristics and dosimetric relevance. BIOEM 2014, Cape Town, South Africa, 8 – 13 June 2014. Proceedings, page 69.
23. Stefi A, Fragopoulou AF, Manta AK, Skouroliaou A, Kyriazi M, Rallis M, KatsarouA, Margaritis LH. (2014) Is non-ionizing radiation capable of affecting TEWL and inducing oxidative stress in human skin? 6th International Conference on Oxidative Stress in Skin Medicine and Biology. Andros island, Greece, 28-31 .On-line proceedings.
24. Fragopoulou A, Malamou A, Stamatakis A, Samara P, Xilouri M, Balafas E, Polissidis A, Skouroliaou A, Stylianopoulou F, Tsitsilonis O, Stravopodis D,

- Kostomitsopoulos N, Margaritis L. (2014) Exposure of rats to cordless DECT base radiation during gestation alone and gestation – postnatal life: effects on the brain and immune system functions. ERRS 2014, Rhodes, Greece, 14-19 Sept, 2014. Proceedings, page 73.
25. Malamou A, Fragopoulou A, Stamatakis A, Xilouri M, Balafas E, Polissidis A, Skouroliakou A, Stylianopoulou F, Stravopodis D, Kostomitsopoulos N and L. Margaritis. (2014) Cordless phone radiation effects on the rat brain following whole body exposure during pregnancy or during pregnancy and postnatal life. HSBLAS/ESLAV/ECLAM Meeting BRFAA, Athens, Greece, 22-23 Sept 2014 Proceedings, pages 19-20.
 26. =A. Skouroliakou, P. Kontaxis, S. Anagnostakis, S. Triantopoulos, S. Tsantis, (2014) Measurement of Extra Low Frequency Electromagnetic Fields in Indoor Working Areas 2014, European Journal of Medical Physics, 30 (Supplement 1), Page e89, [http:// dx.doi.org/10.1016/j.ejmp.2014.07.256](http://dx.doi.org/10.1016/j.ejmp.2014.07.256)
 27. Manta A, Papadopoulou D, Polyzos A, Fragopoulou AF, Skouroliakou K, Thanos D, Stravopodis DJ, Margaritis LH. (2015) Alterations in gene expression induced by cell phone radiation during Drosophila melanogaster oogenesis: A microarray analysis. BIOEM 2015, California, 14-19 June, 2015.
 28. Gatos I., Tsantis S., Skouroliakou A., Theotokas I., Zoumpoulis P.S., Kagadis G.C. (2015) Optimal Elasticity cut-off value for discriminating Healthy to Pathological Fibrotic patients employing Fuzzy C-Means automatic segmentation in Liver Shear Wave Elastography images, Journal of Physics: Conference Series.
 29. I Gatos, S Tsantis, M Karamesini, A Skouroliakou and G Kagadis, (2015) “Development of a Support Vector Machine - Based Image Analysis System for Focal Liver Lesions Classification in Magnetic Resonance Images”, Journal of Physics: Conference Series 633 (2015) 012116 doi: 10.1088/1742-6596/633/1/012116
 30. I. Stathopoulos , K. Skouroliakou , C. Michail and I. Valais, (2015) Dynamic Infrared Thermography Study of Blood Flow Relative to Lower Limb Position, Journal of Physics: Conference Series 637, 012027 doi: 10.1088/1742-6596/637/1/012027.
 31. A. Papapoulou , I. Kalatzis, N. Kalyvas, A. Skouroliakou, (2016) Thermographic Image Analysis in Scoliosis, Physica Medica 32, 284–339.
 32. Skouroliakou A, Kalatzis I, Kalyvas N, Grivas TB, (2017) Infrared thermography quantitative image processing, J. Phys.: Conf. Ser. 931 012033

C. Abstracts in conference Proceedings

1. Skouroliakou A, Fragopoulou AF, and LH Margaritis. Comparative measurements of electric field intensity levels in the frequency range of radio and TV broadcasting antennas and wireless communications devices: Hazard evaluation study. Proceedings of the 32th Scientific Conference of Hellenic Association for Biological Science, Poster and oral presentation. Karpenissi, Greece, 20 – 22 May 2010. Proceedings, pp 350-351..
2. K. Skouroliakou, A. Fragopoulou, , L. Margaritis, Measurement of non ionizing radiation exposure levels: A risk assessment Proceedings of the 32th Scientific Conference of Hellenic Association for Biological Science, page 253, Poster and oral presentation. Karpenissi, Greece, 20 – 22 May 2010. Proceedings, pp 335-336..

3. Skouroliakou A, Giannarakis YK, Margaritis LH. EMF risk estimation through field measurements and experimental design of the frequency/modulation/duration – dependent bioeffects. Proceedings of the 34th Scientific Conference of Hellenic Association for Biological Science, page 253, Trikala May 17-19 2012.
4. Stasinopoulou M, Fragopoulou AF, Mantziaras G, Paronis E, Skouroliakou A, Kostomitsopoulos N, Margaritis LH. Exposure of pregnant rats to wireless DECT radiation: effects on embryos, newborns and adults. Proceedings of the 34th Scientific Conference of Hellenic Association for Biological Science, page 263, Trikala May 17-19 2012.
5. Mina D, Fragopoulou A, Stamatakis A, Skouroliakou K, Kostomitsopoulos N, Stylianopoulou F & Margaritis LH. Is Wi-Fi router electromagnetic radiation inducing stress response and memory deficit in mice; Proceedings of the 35th Scientific Conference of Hellenic Association for Biological Science, page 223, Nafplio, May 23-25, 2013.
6. Sagioglou N, Skouroliakou K, Giannarakis G & Margaritis LH. Apoptotic cell death in drosophila oogenesis is induced by CW/FM signal generator under different modulation, frequencies and power density, Proceedings of the 35th Scientific Conference of Hellenic Association for Biological Science, page 305, Nafplio, May 23-25, 2013.
7. Stefi A.L., Velentzas A., Skouroliakou A.S, Kefalas A.K., Palles D., Margaritis L.H. Effect of electromagnetic and magnetic fields on calcium carbonate microcrystallization, Proceedings of the 35th Scientific Conference of Hellenic Association for Biological Science, page 333, Nafplio, May 23-25, 2013.
8. Manta AK, Sagioglou NE, Skouroliakou AS, Fragopoulou AF, Giannarakis IK, Ntzouni MP and LH Margaritis. Effects on Oogenesis and Oxidative Stress Induction on the Standard Biological System *D. Melanogaster*: Comparison of Non Ionizing Electromagnetic Radiation Emitted by a Cellular Phone and a Frequency Generator. BIOMEPE 2013 (2nd Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences). TEI of Athens, Athens, Greece, 21-22 June, 2013
9. Skouroliakou AS, Sianoudis I, Valais I, Seferis I, Fragopoulou AF, Mitsou G, Michail C and LH Margaritis. Infrared Thermography Imaging: Skin Temperature Variations Caused by Exposure to Non Ionizing Radiation. BIOMEPE 2013 (2nd Conference on Bio- Medical Instrumentation and related Engineering and Physical Sciences). TEI of Athens, Athens, Greece, 21-22 June, 2013
10. Dimitriadou A, Fragopoulou AF, Skouroliakou AS, Margaritis LH and C. Consoulas. Phototaxis and synaptic function deregulation after exposure of *Drosophila* to wireless DECT and mobile phone electromagnetic fields (EMF). Eugenides Foundation, 26th Meeting of the Hellenic Society for Neuroscience, Jointly with FP7 REGPOT NEUROSIGN. Nov 29-Dec 1, 2013. Proceedings, page 70
11. Fragopoulou AF, Papadopoulou D, Polyzos A, Manta AK, Skouroliakou A, Balafas E, Kostomitsopoulos N, Stravopodis DJ, Thanos D and LH Margaritis. Alterations of hippocampal transcriptome profiling triggered by acute exposure of mice to GSM 1800 MHz mobile phone radiation. 37th Scientific Conference of the Hellenic Society for Biological Sciences. Volos, 21-23 May 2015

Research projects

1. **Doppler power ultrasonography, University of Athens, Coordinator: M. Lyra, Ass. Professor, School of Medicine, University of Athens. 1997**
2. **Quantitative evaluation of ultrasonographic parameters. University of Athens, Coordinator: M. Lyra, Ass. Professor, School of Medicine, University of Athens. 1998**
3. **Lasers in Medicine, GSRT “Diaulos”, 1998**

4. Digital processing of ultrasonographic images, University of Athens, Coordinator: M. Lyra, Ass. Professor, School of Medicine, University of Athens. 2003

5.«Archimedes III» (<http://archimedes.teiath.gr/index.php?p=proj18>)

- *“INTER-IMAGING COMPUTER AIDED SYSTEM TOWARDS LIVER DISEASE EVALUATION”*
- Budget: 83000€
- **Head of the research team**
- Duration: 1/3/2012 – 30/9/2015

6. «Thales, MIS375784»

- *“BIOLOGICAL EFFECTS OF NON-IONIZING ELECTROMAGNETIC FIELDS: A MULTIDISCIPLINARY APPROACH”*
- Budget: 600.000€
- **Member of the main research team**
- Duration: 1/2/2012 – 31/3/2015