

## Loupa Glykeria



**Position:** Academic Staff

**Rank:** Associate professor

**Laboratory:** Atmospheric Pollution and of Pollution Control Engineering of Atmospheric Pollutants

**Specialization:** Indoor Air Quality

**Education:** B.Sc. (Magna Cum Laude), Ph.D.

### Scientific Interests:

Indoor air quality; gaseous and particulate indoor air pollutants; indoor PM concentrations, size distributions, chemical composition; indoor and outdoor sources of atmospheric pollutants-deposition-indoor chemistry (heterogeneous and homogeneous reactions); building's air exchange rate; indoor micro-climatic conditions; noise; indoor air quality models; Effects of air pollutants on human health and on cultural heritage (risk assessment). Occupational safety and health.

**Undergraduate classes:** Indoor Environmental Quality; Occupational Safety and Health; Urban Air Quality Management; Laboratory classes of Atmospheric Pollution; Laboratory classes of Atmospheric Chemistry; Risk assessment of indoor air quality on health.

### Relevant Research Projects:

1. Principal Investigator: "Indoor air pollution in historical churches of Cyprus" (ARESKE), Funding Agency: Research Promotion Foundation of Cyprus, (2002-2004).
2. Principal Investigator: "A model for the assessment of the safety and health at the workplace", Funding Agency: General Secretariat for Research and Technology of Greece, (2004-2006).
3. Principal Investigator: "Thermopolis 2009: An airborne campaign over Athens, Greece, for the study of the urban heat island", Funding Agency: European Space Agency, (2009).
4. Coordinator: "Indoor air quality in three General Hospitals", Funding Agency: Postgraduate master program: "Environmental Engineering and Science" of the Department of Environmental Engineering, DUTH, (2011-2012).
5. Coordinator: "Indoor air quality in secondary education schools", Funding Agency: Postgraduate master program: "Environmental Engineering and Science" of the Department of Environmental Engineering, DUTH, (2012-2013).
6. Coordinator: "Indoor air quality in sports facilities", Funding Agency: Postgraduate master program: "Environmental Engineering and Science" of the Department of Environmental Engineering, DUTH, (2013-2014).
7. Coordinator: "Development of a contemporary model for evacuation of an underground metro tunnel with virtual reality projection for the public". Code number OPS (MIS) 5006334. Funding Agency: General Secretariat for Research and Technology of Greece, (15/3/2018-14/1/2020).

### Examples of recent publications:

1. Loupa G, E. Charpantidou, E. Karageorgos, S. Rapsomanikis, "The chemistry of gaseous acids in medieval churches in Cyprus", *Atmospheric Environment* 41: 9018-9029 (2007).
2. Loupa G. and S. Rapsomanikis, "Air pollutant emission rates and concentrations in medieval churches", *Journal of Atmospheric Chemistry*, 60(2):169-187, DOI 10.1007/s10874-008-9116-z (2009).
3. Loupa G., E. Karageorgos and S. Rapsomanikis "Potential effects of particulate matter from combustion during services on human health and on works of art in medieval churches in Cyprus", *Environmental Pollution*, <http://dx.doi.org/10.1016/j.envpol.2010.06.005> (2010).

4. Loupa G. "Case study: Health hazards of automotive repair mechanics: Thermal and lighting comfort, particulate matter and noise" *Journal of Occupational and Environmental Hygiene* 10(10): D135-D146. <http://dx.doi.org/10.1080/15459624.2013.818222> (2013).
5. Rapsomanikis S., Trepekli A., Loupa G., Polyzou C. "Vertical energy and momentum fluxes in the centre of Athens, Greece, during a heatwave period (Thermopolis 2009 Campaign)". *Boundary-Layer Meteorology*, 1-16, doi: 10.1007/s10546-014-9979-2 (2014).
6. Zarogianni, A.M., Loupa G., Rapsomanikis S. "A comparison of fragrance ingredients in green and non-green detergents". *Environmental Forensics* 18:110-121 doi:10.1080/15275922.2016.1263902 (2017)
7. Loupa G., Polyzou C., Zarogianni A.M., Ouzounis K., Rapsomanikis S. "Indoor and outdoor elemental mercury: a comparison of three different cases." *Environmental Monitoring and Assessment* 189:72 doi:10.1007/s10661-017-5781-1 (2017)
8. Zarogianni AM, Loupa G, Rapsomanikis S Fragrances and Aerosol during Office Cleaning Aerosol and Air Quality Research doi:10.4209/aaqr.2017.08.0270 (2018)
9. Loupa G, Katikaridis A, Karali D, Rapsomanikis S. Mapping the noise in a Greek general hospital. *Science of the Total Environment* 2019; 646: 923-929.
10. Polyzou C, Loupa G, Trepekli A, Rapsomanikis S. Fluxes of gaseous elemental mercury on a Mediterranean coastal grassland. *Atmosphere*. 2019;10(9). doi:10.3390/atmos10090485.
11. Loupa G, Karali D, Rapsomanikis S. The trace of airborne particulate matter from smoking e-cigarette, tobacco heating system, conventional and hand-rolled cigarettes in a residential environment. *Air Quality, Atmosphere & Health*. 2019. doi:10.1007/s11869-019-00760-2.
12. Sakkas KM, Vagiokas N, Kallianiotis A, Loupa G, Concrete behaviour under elevated temperature. *International Journal of Engineering Science Invention (IJESI)*, ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726, [www.ijesi.org](http://www.ijesi.org) ||Volume 8 Issue 02 Series. I || Feb 2019 || PP 13-17.
13. Karali, D., Loupa, G., & Rapsomanikis, S. (2019). Origins of regulated semi-volatile PAHs and metals near an industrial area and a highway in the region of Alexandroupolis, Greece. *Air Quality, Atmosphere & Health*, 12(7), 767-774, doi:10.1007/s11869-019-00702-y.
14. Loupa, G. (2020). Influence of Noise on Patient Recovery. *Current Pollution Reports* 6: 1-7.
15. Loupa, G., Karali, D., & Rapsomanikis, S. (2019). Aerosol filtering efficiency of respiratory face masks used during the COVID-19 pandemic. medRxiv preprint doi: <https://doi.org/10.1101/2020.07.16.20155119>.this version posted July 21, 2020.
16. Karali, D., Loupa, G., & Rapsomanikis, S. (2020a). Nephelometer Sensitivities for the Determination of PM<sub>2.5</sub> Mass Concentration in Ambient and Indoor Air. *Aerosol and Air Quality Research*, 20, doi:10.4209/aaqr.2020.04.0159.
17. Karali, D., Stavridis, A., Loupa, G., & Rapsomanikis, S. (2020b). Dispersion Effects of Particulate Lead (Pb) from the Stack of a Lead Battery Recycling Plant. *Energies*, 13(21), 5690.
18. Polyzou C, Loupa G, Rapsomanikis S. Concentrations of Gaseous Elemental Mercury in the Atmosphere of a Mediterranean Coastal Site in Greece. *Adv Environ Eng Res* 2021;2(2):19; doi:10.21926/aeer.2102007.
19. Loupa G, Karali D, Rapsomanikis S. Simple Measures to Improve the Environmental Quality in Gyms” has been accepted for publication in the *Integrated Journal of Environmental Research [IJER]* (27/4/2020).

#### **Distinctions:**

1. Ravilious Kate "Poor air degrades church artwork", Story from BBC NEWS: Published: 2006/10/04 12:12:16 GMT <http://news.bbc.co.uk/1/hi/sci/tech/5406048.stm>
2. Ravilious Kate "Churches may be more polluted than roads" *Environmental Research Web*, Oct 12, 2010, <http://environmentalresearchweb.org/cws/article/news/44002>

#### **Contact details:**

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