

Curriculum Vitae of DIMITRIOS P. KOMILIS

Current position

- Associate tenured professor of Solid Waste Management, Department at Environmental Engineering, Democritus University of Thrace, Xanthi, Greece, 671 31.

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Short summary

I am an environmental scientist (B.Sc., 1992) at the University of the Aegean in Greece and hold M.Sc. (1995) and Ph.D (1999) degrees from the Dept. of Civil and Environmental Engineering of the University of Wisconsin-Madison. During my Ph.D. years, I had worked as a research assistant in a USEPA funded project related to life cycle analysis of municipal solid waste composting.

I have been doing research on the area of municipal solid waste management for the past 17 years. Since 2005, I am a faculty at the Department of Environmental Engineering at the Democritus University of Thrace-DUTH and lead a research group on composting and solid waste management issues. My recent research emphasizes on the aerobic biodegradation of solid wastes, compost maturity and stability indices, pretreatment of organic wastes prior to anaerobic digestion, solid state fermentation, life cycle analysis and mathematical optimization in solid waste management and medical waste management. I currently supervise 2 Ph.D. students at the Dept. of Environmental Engineering in DUTH, co-supervise one Ph.D. student at the Autonomous University of Barcelona (Spain) and I am the external advisor of a Ph.D. student at the dept. of Civil and Environmental Engineering of the University of Leeds (UK).

At the Democritus University of Thrace (D.U.Th.), I currently teach 3 undergraduate courses and participate in the teaching at 3 M.Sc. graduate programs. Since 2004, I am also a collaborating professor of the Hellenic Open University in 2 M.Sc. graduate programs. Since June 2016, I am the director of the M.Sc. graduate program “Environment and Behavior” offered by my department in D.U.Th.

From 2014 to 2016, I was a visiting researcher at the BIO-GLS research center at the Autonomous University Barcelona (UAB) under a 2-year fellowship for experienced researchers provided by the General Secretariat de Catalunya and co-funded by the Marie Skłodowska-Curie actions. There, I have started working on issues related to valorization of organic wastes via solid state fermentation. I am trying to show the efficacy of the process via the combined use of laboratory experiments, that provide original data, and life cycle analysis. My cooperation with the team of researchers in that research center in UAB has already led to the publication of around 15 peer reviewed articles and one chapter book. After the end of my fellowship in UAB, and since Oct. 2016, I have been a visiting professor (professor vinculado) at the Departament de 'Enginyeria Química, Biològica i Ambiental, Escola d'Enginyeria, Universitat Autònoma de Barcelona.

My research interests include municipal solid waste management, organic waste treatment, composting and stability indices, anaerobic treatment and life cycle analyses with applications to solid waste management.

Recently I was promoted to the Full Professor rank.

Academic Education

- **Ph.D.:** [Department of Civil and Environmental Engineering, University of Wisconsin-Madison](#), Madison, USA, 1999. Dissertation: Life Cycle Inventory of Municipal Solid Waste Composting (supervisors: R.K.Ham).¹
- **M.Sc.:** Department of Civil and Environmental Engineering, University of Wisconsin-Madison, Madison, USA, 1995, GPA: 5.0/5.0). attended: Dissertation: The effect of precipitation and lake levels to wastewater flowrates at the Nine Springs wastewater treatment plant (supervisor: P.M.Berthouex)².
- **B.Sc.:** [Department of Environmental Studies, University of the Aegean](#), Mytilene, Greece, 1992, (Grade: 8.51/10.0, with honors). Dissertation: Biogas Production from Municipal Solid Waste Landfills: A mathematical simulation model (supervisor: C.P.Halvadakis).

Publications in peer-reviewed journals (SCI journals)

2018

- [70] Tsalis, T., Amarantidou, S., Calabró P., Nikolaou, I., Komilis* D., 2018. Door to door recyclables' collection programs: willingness to participate and influential factors with a case study in the city of Xanthi (Greece), *Waste Management and Research* (in press).
- [69] Calabró* P., Gentili E., Meoni C., Orsi, S. and D. Komilis, D., 2018. Effect of the recirculation of the reverse osmosis concentrate on leachate generation: A case study in an Italian landfill. *Waste Management* (in press).
- [68] Calabró*, P., Paone, E., Komilis, D., 2018. Strategies for the sustainable management of orange peel waste through anaerobic digestion. *J. of Environm. Manag.* 212, 462-468.
- [67] Catalán, E., Komilis*, D., Sanchez, A., 2018. A life cycle assessment on the dehairing of rawhides: Chemical treatment versus enzymatic recovery through solid state fermentation. *J. of Industrial Ecology* (in press)
- [66] Calabró*, P.S., Catalán, E., Folino A., Sánchez, A., Komilis, D., 2018. Effect of three pretreatment techniques on the chemical composition and on the methane yields of the *Opuntia ficus-indica* (prickly pear) biomass. *Waste Management and Research*, 36, 17-29.

2017

- [65] Oviedo, E., Dominguez, I., Komilis*, D., Sánchez, A., 2017. Co-composting of green waste mixed with unprocessed and processed food waste: influence on the composting process and product quality. *Waste and Biomass Valorization*, <https://doi.org/10.1007/s12649-017-0047-2>.
- [64] Catalán, E., Komilis, D., Sánchez*, A., 2017. Solid-state fermentation and composting as alternatives to treat hair waste: A life-cycle assessment comparative approach. *Waste Management and Research*, 35, 786-790.

¹ **Courses attended:** 1. Hydrogeology, 2. Contaminant Hydrogeology, 3. Technical and Professional Communication, 4. Statistical Experimental Design for Engineers, 5. Soil Microbiology and Biochemistry, 6. Cellulose Chemistry, 7. Carbohydrate Chemistry, 8. Lignin chemistry (audit), 9. Hazardous Waste Remediation - audit.

² **Courses attended:** 1. Wastewater Treatment Plant Design), 2. Solid and Hazardous Wastes I – audit, 3. Cost Engineering Pollution Prevention, 4. Biological Processes – Laboratory in Biological Processes, 5. Special Topics in Environmental Engineering, 6. Industrial Pollution Control, 7. Solid and Hazardous Wastes II, 8. Physicochemical Processes – Physicochemical Processes Laboratory, 9. Water and Wastewater: Field Evaluations, 10. Remediation Geotechnics, 11. Waste Geotechnics..

- [63] Komilis, D., Barrena, R., Grando, R.L., Vogiatzi, V., Sanchez, A., Font*, X., 2017. A state of the art literature review on anaerobic digestion of food waste: influential operating parameters on methane yield. *Reviews in Environmental Science and Bio/Technology (RESB)*, 16(2), 347-360.
- [62] Alonso*, A., Moral-Vico, J., Abo Marked, A., Busquets-Fite, M., Komilis, D., Punes, V., Sanchez, A., Font, X., 2017. Critical review of existing nanomaterial adsorbents to capture carbon dioxide and methane. *Science of the Total Environment* (in press).
- [61] Mejias, L., Komilis*, D., Gea, T., Sanchez, A., 2017. The effect of airflow rates and aeration mode on thre respiration activity of four organic wastes. Implications on the composting process. *Waste Management* (accepted, in-press).
- [60] Abraham, J., Gea, T., Komilis*, D., Sanchez, A., 2017. Reproducibility of solid-state fermentation at bench scale: the case of protease production. *Global Nest Journal*, 19, 2, 183-190.
- [59] Minoglou, M., Gerassimidou, S., Komilis*, D., 2017. Healthcare waste generation worldwide and its dependence on socio-economic and environmental factors. *Sustainability*, 9, 220, doi:[10.3390/su9020220](https://doi.org/10.3390/su9020220).
- [58] Abu Yazid, N., Barrena, R., Komilis, D., Sanchez*, A., 2017. Solid-state fermentation as a novel paradigm for organic waste valorization: a review. *Sustainability*, 9, 224, doi:[10.3390/su9020224](https://doi.org/10.3390/su9020224).
- [57] Oviedo, E., Torres, P., Marmolejo, L.F., Torres, W.A., Dominquez, I., Komilis*, D., Sanchez, A., 2017. A systematic approach to evaluate parameter consistency in the inlet stream of source separated biowaste composting facilities: A case study in Colombia. *Waste Management*, <http://dx.doi.org/10.1016/j.wasman.2017.02.010>
- [56] Evangelou, A., Chintzios, V., Komilis*, D., Sanchez, A., 2017. Effect of air flowrate on the dynamic respiration activity of the raw organic fraction of municipal solid wastes. *Bioresource Technology*, 224, 748-752.
- [55] Komilis*, D., Makroleivaditis, N., Nikolakopoulou, E., 2017. Generation and composition of medical wastes from private medical microbiology laboratories. *Waste Management*, <http://dx.doi.org/10.1016/j.wasman.2017.01.033>
- [54] Komilis D*, Sanchez A., 2017. Life cycle assessment in solid waste management: Facts and Artefacts (editorial). *Waste Management*, 61, 1-2.
- [53] Lakioti, E., Moustakas*, K., Komilis, D., Domopoulou, A., Karayannis, V., 2017. Sustainable solid waste management: Socio-economic considerations. *Chemical Engineering Transactions*, v.56 (in press).

2016

- [52] Martínez-Valdez F., Komilis D., Saucedo-Castañeda G., Barrena* R., Sanchez A. 2016. The effect of a short term aerobic pretreatment step on the anaerobic co-digestion of the organic fraction of municipal solid wastes: Liquid Extract Addition versus Solid Phase addition. *Waste and Biomass Valorization*, doi:10.1007/s12649-016-9743-6.
- [51] Karayannis*, V., Karapanagioti H., Domopoulou, A., Komilis D., 2016. Stabilization / Solidification of Hazardous Metals from Solid Wastes into ceramics, *Waste and Biomass Valorization*, doi:10.1007/s12649-016-9713-z
- [50] Evangelou A., Gerassimidou, S., Mavrakis N., Komilis* D., 2016. Monitoring the performances of a real scale municipal solid waste composting and a biodrying facility using respiration activity indices. *Environmental Monitoring and Assessment*, 188, 1-14.
- [49] Zulkeflee Z., Shamsuddin ZH, Aris AZ, Yusoff MK, Komilis* D., Sanchez A., 2016. Glutamic Acid Independent Production of bioflocclants by Bacillus subtilis UPMB13. *Environmental Processes*, 3, 353-367.
- [48] Zulkeflee, Z., Shamsuddin ZH, Aris AZ, Yusoff MK, Komilis* D., Sanchez A., 2016. Performance, yield and characteristics of Bioflocclants (UPMBF13) produced by Bacillus Subtilis UPMB13 during submerged and solid-state fermentation. *Global Nest Journal*, 18, 611-620.

- [47] Oviedo ER., Dominguez I., Torres P., Marmolejo LF, Komilis* D, Sanchez A., 2016. A qualitative model to evaluate biowaste composting management systems using causal diagrams: a case study in Colombia. *Journal of Cleaner Production*, 133, 201-211.
- [46] Young, B., Rizzo, P.F., Riera, NI., Della Torre V., Lopez VA., Molina CD., Fernandez FE., Crespo DC., Barrena R., Komilis* D., Sanchez A., 2016. Development of phytotoxicity indexes and their correlation with ecotoxicological, stability and physicochemical parameters during passive composting of poultry manure. *Waste Management*, 54, 101-109.
- [45] Komilis, D., 2016. Issues on medical waste management research. *Waste Management*, 48, 1-2 (editorial).
- [44] Contreras Rodríguez A.R., Saiz-Poseu J., García-Pardo J., García B., Lorenzo J., Ojea-Jiménez I., Komilis D., Sedó J., Busqué F., Sánchez A., Ruiz-Molina D, Font* X., 2016. Biocompatible polydopamine-like particles for the removal of heavy metals at extremely low concentration, *RSC Advances*, 6, 46, 40058-40066.
- [43] Evangelou, A., Calabro, P.S., Greco, R., Sánchez A., Komilis* D., 2016. Biodegradation activity of eight organic substrates: A correlation study of different test methods. *Waste Biomass and Valorization*, 7,5, 1067-1080.
- [42] Bogiatzidis, C. Komilis*, D., 2016. Economic and life cycle analysis of municipal solid waste management for small islands: On-site management scenarios versus off-site transportation. *Global Nest Journal*, 18, 197-213.

2015

- [41] Calabró*, PS., Greco, R., Evangelou A., Komilis D., 2015. Anaerobic digestion of tomato processing waste: Effect of alkaline pretreatment. *Journal of Environmental Management*, 163, 49-52.
- [40] Contreras AR., Casals E., Puntos CV., Komilis D., Sanchez* A, Font X., 2015. Use of cerium oxide nanoparticles for the adsorption of dissolved cadmium (II), lead (II) and chromium (VI) at two different pHs in single and multi-component systems. *Global Nest Journal*, 17, 536-543.
- [39] Oviedo E. R., Torres P., Marmolejo L.F., Hoyos L.V., Gonzales S, Barrena R, Komilis* D, Sanchez A., 2015. Stability and maturity of biowaste composts derived by small municipalities: correlation among physical, chemical and biological indices. *Waste Management*, 44, 63-71
- [38] Almeida N., Komilis D., Barrena R., Gea T., Sanchez* A., 2015. The importance of aeration mode and flowrate in the determination of the biological activity and stability of organic wastes by respiration indices. *Bioresource Technology*, 196, 256-262.
- [37] Komilis*, D., 2015. Compost quality: Is research still needed to assess it or do we have enough knowledge? *Waste Management (editorial)*, 38, 1-2.
- [36] Gerassimidou, S., Komilis*, D., 2015. Assessing the leaching of hazardous metals from pharmaceutical wastes and their ashes. *Waste Management and Research*, 33(2), 191-198.

2014

- [35] Komilis*, D., Liogkas V, 2014. Full cost accounting on existing and future municipal solid waste management facilities in Greece. *Global Nest Journal*, 16, 4, 787-796.
- [34] Komilis*, D., Athiniotou A., 2014. A water budget model for operating landfills-An application in Greece. *Waste Management and Research*, 32(8), 717-725.
- [33] Komilis*, D., Kissas, K., Symeonidis, A., 2014. Effect of organic matter and moisture on the calorific value of solid wastes: An update of the Tanner diagram. *Waste Management*, 34, 249-255.

2013

- [32] Minoglou, M., Komilis*, D., 2013. Optimizing the treatment and disposal of municipal solid wastes using mathematical programming - A case study in a Greek region. *Resources, Conservation and Recycling*, 80, 46-57.

- [31] Komilis*, D., Tataki, V., Tsakmakis, T., 2013. Leaching of heavy metals from personal computer components: Comparison of TCLP with a European leaching test. *ASCE J. Environm. Engineering*, 139, 1375-1381.
- [30] Gerassimidou, S., Evangelou, A., Komilis*, D., 2013. Aerobic biological pretreatment of municipal solid waste with a high content of putrescibles: Effect on landfill emissions. *Waste Management and Research*, 31(8), 783-791.
- [29] Avramidou, P., Evangelou, A., Komilis*, D., 2013. Use of municipal solid waste compost as a growth media for an energy plant (rapeseed). *Journal of Environmental Management*, 121, 152-159.
- [28] Markidis, I., Komilis*, D., Tsagas, F., Petalas, A., 2013. A fractional factorial field experiment to study the decomposition of municipal solid wastes stored in wrapped bales. *J. Environ. Management*, 115, 32-41.

2012

- [27] Komilis*, D., Kletsas, C., 2012. Static respiration indices to investigate compost stability: Effect of sample weight and temperature and comparison with dynamic respiration indices. *Bioresource Technology*, 121, 467-470.
- [26] Komilis*, D., Kanellos, D., 2012. A modified dynamic respiration test to assess compost stability: Effect of sample size and air flowrate. *Bioresource Technology*, 117, 300-309.
- [25] Komilis*, D., Fouki, A., Papadopoulos, D., 2012. Hazardous medical waste generation rates of different categories of health-care facilities. *Waste Management*, 32, 1434-1441.
- [24] Chatzouridis, C., Komilis*, D., 2012. A methodology to optimally site and design municipal solid waste transfer stations using binary programming. *Resources, Conservation and Recycling*, 60, 89-98.
- [23] Komilis*, D., Evangelou, A., Giannakis, G., Lymperis, C., 2012. Revisiting the elemental composition and the calorific value of the organic fraction of municipal solid wastes. *Waste Management*, 32, 372-381.

2011

- [22] Stefanakis A., Komilis*, D., Tsihrintzis, V., 2011. Stability and maturity of thickened wastewater sludge treated in pilot-scale sludge treatment wetlands. *Water Research*, 45, 6441-6452.
- [21] Komilis*, D., Evangelou, A., Voudrias, E., 2011. Monitoring and optimizing the co-composting of dewatered sludge: A mixture experimental design approach. *Journal of Environmental Management*, 92, 2241-2249.
- [20] Komilis*, D.P. and Katsafaros N., 2011. Statistical predictors of hazardous medical waste generation rates in a 40-bed general hospital. *Global Nest Journal*, 13, 170-175.
- [19] Komilis*, D.P., Bandi, D., Kakaronis, G., Zouppouris, G., 2011. The influence of spent household batteries on the organic fraction of municipal solid waste during composting. *Science of the Total Environment*, 409, 2555-2566.
- [18] Komilis*, D.P., Kontou, I., Ntougias, S., 2011. A modified static respiration assay and its relationship with an enzymatic test to assess compost stability and maturity. *Bioresource Technology*, 102, 5863-5872.
- [17] Komilis*, D.P., Katsafaros, N., Vassilopoulos, P., 2011. Hazardous waste medical waste generation in Greece: Case studies from medical facilities in Attica and from a small insular hospital. *Waste Management & Research*, 29, 807-814.

2010

- [16] Komilis*, D.P., Vrohidou, A-E., Voudrias, E., 2010. Kinetics of aerobic bioremediation of a diesel-contaminated sandy soil: Effect of nitrogen addition. *Water, Air & Soil Pollution*, 208, 1-4, 193-208.

2009

- [15] Komilis*, D.P, Tziouvaras, I., 2009. A statistical analysis to assess the maturity and stability of six composts. *Waste Management*, 29, 1504-1513.

- [14] Komilis*, D.P., Voudrias, E.A., Anthonlakis, S., Iosifidis, N., 2009. Composition and production rate of solid waste from dental laboratories in Xanthi, Greece. *Waste Management* 29, 1208-1212.
- 2008**
- [13] Komilis*, D.P. 2008. Conceptual modeling to optimize the haul and transfer of municipal solid waste. *Waste Management*, 28, 2355-2365.
- 2007**
- [12] Komilis*, D.P., Haritopoulou, R., Togia, A., 2007. Municipal solid waste unit production rates and estimation of the required number of waste storage containers in the municipality of Athens. *Global Nest Journal*, 9, 1-5.
- 2006**
- [11] Komilis*, D.P., 2006. A kinetic analysis of solid waste composting at optimal conditions. *Waste Management* 26, 82-91.
- [10] Komilis*, D.P., Ham, R.K., 2006. Carbon dioxide and ammonia emissions during composting of mixed paper, yard waste and food waste. *Waste Management*, 26, 62-70.
- 2005**
- [9] Kontos*, Th., Komilis, D.P., Halvadakis, C.P., 2005. Siting MSW Landfills with a spatial multiple criteria analysis methodology, *Waste Management* 25, 818-832.
- [8] Komilis*, D.P., Karatzas, E., Halvadakis, C.P., 2005. The effect of olive mill wastewater on seed germination after various pretreatment techniques. *J. Env. Management* 74, 339-348.
- 2004**
- [7] Komilis*, D.P., Ham, R.K., 2004. Life-cycle inventory of municipal solid waste and yard waste windrow composting in the United States, *ASCE J. Env Eng*, 130, 11 1390-1400.
- [6] Komilis, D.P., Ham, R.K., Park*, J.K., 2004. Emission of volatile organic compounds during composting of municipal solid wastes. *Water Research*, 38, 7, 1707-1714.
- 2003**
- [5] Komilis*, D.P., Ham, R.K., 2003. The effect of lignin and sugars to the aerobic decomposition of solid wastes, *Waste Management*, 23, 5, 419-423.
- [4] Kontos, T.D., Komilis*, D.P., Halvadakis, C.P., 2003. Siting MSW landfills on Lesbos island with a GIS-based methodology, *Waste Management and Research* 21, 262-277.
- 2000**
- [3] Komilis*, D.P., Ham, R.K., 2000. A laboratory method to investigate gaseous emissions and solids decomposition during composting of municipal solid wastes. *Compost Science and Utilization* 8, 254-265.
- 1999**
- [2] Komilis*, D.P., Ham, R.K., Stegmann, R., 1999. The effect of municipal solid waste pretreatment on landfill behavior: A literature review. *Waste Management and Research* 17, 10-19.
- [1] Komilis*, D.P., Ham, R.K., Stegmann, R., 1999. The effect of landfill design and operation practices on waste degradation behavior: A review. *Waste Management and Research* 17, 20-26.

*: indicates corresponding author.

Based on Scopus: H index: 17, Citations: >**1116**.

Based on Google Scholar, index h: 19 and citations > **1800** (Oct. 2017)

Books and Book chapters

Books

1. Komilis D (2012) **Statistical Analysis and Experimental Design** (ISBN 978-960-8065-93-2), Publications Zygou, Thessaloniki, Greece (in Greek).

Book Chapters

1. Ponsá S, Bolzonella D., Colón J., Deshusses MA, Fonts I., Gil N, Komilis D., Lyberatos G., Perez-Elvira S, Sánchez J., 2017. **Chapter 15: Recovering energy from sludge.** In: *Innovative Wastewater Treatment and Resource Recovery Technologies-Impacts on Energy, Economy and Environment*. Edited by J.M. Lema and S.S.Martinez, IWA Publishing, London, UK.
2. Sánchez, A., Gabarrell, X., Artola, A., Barrena, R., Colón, J., Font X. and Komilis D., 2015. **Chapter 5: Composting of wastes.** In: *Resource recovery to approach zero municipal waste*, Edited by N.M.Taherzadeh, T. Richards, CRC Press, Taylor & Francis Group, FL, USA, ISBN 9781482240351.
3. Komilis, D.P. and Timotheatou E., 2011. **Bioremediation of a diesel-contaminated soil: Effect of compost addition.** *Special Issue Compost III-Dynamic Plant, Dynamic Soil. Global Science Books. Ed. A. Sanchez* (peer reviewed book chapter after invitation).

Presentations in conferences (after peer review)

1. **Calabró, P.**, Komilis, D., 2017. Performance and customer satisfaction evaluation during separate collection and street cleaning services: An Italian case study. Sardinia 16th International Waste Management and Landfill Symposium, Sardinia, Italy (oral presentation)
2. Amarantidou, S., Tsalis, T., Calabró, P., Nikolaou, I., **Komilis, D.**, 2017. Door to door recyclables' collection programs: Willingness to participate and influential factors with a case study in the city of Xanthi (Greece). 5th International Conference on Sustainable Solid Waste Management (June 2017), Athens, Greece.
3. **Calabró, P.**, Catalan E., Folino A., Sánchez A., Komilis D., 2016. Effect of three pretreatment techniques on the chemical composition and the methane yields of the opuntia ficus-indica (prickly pear) biomass. 6th International Symposium on energy from biomass and waste. Oral presentation, Venice, Italy.
4. **Calabro PS.**, Komilis D., Gentili E., Meoni C., Orsi S., 2016. Long term monitoring of the leachate quality in an Italian landfill with concentrated leachate recirculation. (oral presentation). 5th International Conference on Industrial and Hazardous Waste Management, Crete September 2016.
5. Gerassimidou, S., **Minoglou M.**, Komilis D., 2016. Medical Waste generation worldwide and its dependence on social and economic factors. (oral presentation). 5th International Conference on Industrial and Hazardous Waste Management, Crete September 2016.
6. **Calabró PS**, Folino A., Frontera P., Komilis D., 2016. Evaluation of the biochemical methane potential of Opuntia-Ficus Indica biomass after physicochemical pretreatment. (Oral Presentation), X Simposio Internazionale di Ingegneria Sanitaria Ambientale, oral presentation, SIDISA, Rome, Italy.
7. **Catalán E.**, Komilis D., Sánchez A., 2016. Solid state fermentation and composting as treatment alternatives for hair waste compared through LCA. Oral presentation, 10th International Conference on Circular Economy and Organic Waste, ORBIT 2016, Heraklion, Crete.
8. **Evangelou A.**, Chintzios D., Komilis D., 2016. Effect of aeration rate on the respiration activity of the fresh organic fraction of municipal solid wastes. Oral presentation, Eurasia 2016 Waste Management Symposium, Istanbul, Turkey.
9. **Komilis, D.**, Calabro, PS, Evangelou A, Greco R, 2015. Respiration activity of eight organic substrates: Comparison of stability indices at two different scales. Sardinia 15th International Waste Management and Landfill Symposium, Sardinia, Italy (oral presentation).

10. Almeida N., **Komilis D.**, Barrena R., Gea T., Sanchez A., 2015. Effect of aeration regime and of sample size on the dynamic respiration activity of solid organic residues. Sardinia 15th International Waste Management and Landfill Symposium, Sardinia, Italy (oral presentation).
11. Calabro, PS, Greco, R., Evangelou A., **Komilis D.**, 2015. Anaerobic digestion of tomato processing waste: Effect of alkaline pretreatment. CEST 2015, 14th International Conference on Environmental Science and Technology, Rhodes, Greece (oral presentation).
12. **Evgenidou, C.**, Petalas, A., Komilis, D. (2014). Comparing MSW management scenarios using different life cycle assessment software: A case study in a prefecture in North Greece. 4th International Conference on Industrial and Hazardous Waste Management, Crete September 2014 (oral presentation).
13. Ntalos, G., **Tsanaktsis, C.**, Komilis, D. (2014). A study of the aerobic degradation of wood manufacturing wastes: Effect of compost addition. 4th International Conference on Industrial and Hazardous Waste Management, Crete September 2014 (oral presentation).
14. **Gerassimidou, S.**, Papaspyros, I., Evangelou, A., Komilis, D. (2014). Assessing the leaching of heavy metals from incinerated expired drugs. 4th International Conference on Industrial and Hazardous Waste Management, Crete September 2014 (oral presentation).
15. **Evangelou, A.**, Tsikampakas, D., Komilis, D., (2014). A correlation between solid and liquid phase microbial respiration tests to assess compost stability. Eurasia 2014 Waste Management Symposium, Istanbul, Turkey, April (oral).
16. Eleftheriadou, K., Evangelou, A., **Komilis, D.**, (2014). Qualitative characterization of wastewater sludge in the Region of East Macedonia and Thrace. IWA Regional Symposium on Water, Wastewater and Environment: Traditions and Culture, Patras Greece, March (oral).
17. **Komilis, D.**, Athiniotou, A. (2013). Modeling leachate generation from an operating landfill in Greece using a 1.5-year database. 14th international Waste Management and Landfill Symposium, Sardinia, Italy, October, (oral).
18. Evangelou, A., Kotsiari, E., Gerassimidou, S., Mavrakis, N., **Komilis, D.** (2013) Monitoring the performance of two municipal solid waste mechanical and biological pretreatment facilities in Greece. 13th International Conference on Environmental Science and Technology, Athens, October, (oral).
19. Liogkas, V., **Komilis, D.** (2013). Full cost accounting of municipal solid waste management facilities in Greece. 13th International Conference on Environmental Science and Technology, Athens, October, (oral).
20. Athiniotou, A., Papaspyros, I., **Komilis, D.**, (2012). Modelling leachate generation from an active sanitary landfill. 4th international conference of the Hellenic Solid Waste Association, Athens, November.
21. **Komilis, D.**, Fouki, A., Arampatzi, D., Papadopoulos, D., (2012). Hazardous medical waste generation rates of different categories of health-care facilities in Greece, 3rd International Conference on Industrial and Hazardous Waste Management, Crete September 2012 (oral presentation).
22. Minoglou, M., **Komilis, D.** (2012). Optimization of a municipal solid waste management system using mathematical programming, 11th conference on the Protection and Restoration of the Environment, Thessaloniki, July (oral presentation).
23. **Komilis D.**, Kanellos, D., Kletsas, C. (2012). Effect of operating parameters during compost stability respiration activity tests, ORBIT 2012, Rennes, France, June 2012 (oral presentation).
24. **Komilis D.**, Markidis I., Dermatas D., Tsagas F., (2011). Degradation of municipal solid wastes stored in bales: A fractional factorial field experiment. Oral presentation at the 13th international Waste Management and Landfill Symposium, Sardinia, Italy (October 2011).
25. **Komilis D.**, Gerassimidou S., Kosmidis G., Lazaridis V., Mplouhou A., Papanastassiou V., Tsipissi S. (2011). Biological aerobic pre-treatment of municipal solid wastes: Effect of different pretreatment periods on anaerobic emissions. Oral presentation at the 13th international Waste Management and Landfill Symposium, Sardinia, Italy (October 2011).

26. **Chatzouridis C., Komilis D.** (2011). A methodology to optimize the siting of municipal solid waste transfer stations: A case study in the Region of Eastern Macedonia-Thrace in Greece. Oral presentation at the 12th International conference on Environmental Science and Technology. Rhodes, Greece (September 2011).
27. **Komilis, D., N.Katsafaros, P.Vassilopoulos** (2010). Hazardous medical waste production rates in Greece: Case studies from Medical Facilities in Attica and from a small insular hospital. Oral presentation, 2nd international conference of Hazardous and Industrial Waste Management, October, Chanea, Crete.
28. **Komilis, D., I. Kontou, S.Ntougias** (2010). Correlation among fluorescein release rates and other stability and maturity indices for thirteen composts. Oral presentation, ORBIT 2010 international conference, Heraklion, Crete.
29. **Markidis, I., D.Komilis, D.Dermatas, F.Tsagas** (2010). Monitoring the gaseous emissions and solids degradation in municipal solid wastes stored in bales. Poster presentation, 10th international conference on the protection and restoration of the Environment, July, Corfu.
30. **Milatos A., D. Komilis** (2009). Multi-criteria evaluation of the hazard potential of uncontrolled solid waste landfills. A decision support tool. Oral pres. 3rd International Conference of the Hellenic Solid Waste Association, Athens. (in Greek)
31. **Komilis, D., D. Bandi, G. Kakaronis, G. Zouppouris, E. Voudrias** (2009). The effect of household batteries on the heavy metal content of the organic fraction of municipal solid waste during active composting. 12th International Landfill Symposium, Sardinia, Italy.
32. **Komilis, D., Evangelou, A., Apostolou, A., Giannakis, G., Kalpakis, D., Lazaridis, G., Margariti, M., Voudrias, E.** (2008). Co-composting of de-watered wastewater sludge with the organic fraction of municipal solid waste. Oral presentation, APLAS Sapporo. The 5th Asian-Pacific Landfill Symposium, Sapporo, Hokkaido, Japan.
33. **Komilis, D., Vrohidou A., Voudrias, E.** (2008). The effect of nitrogen addition on the aerobic bioremediation of diesel contaminated soils. Oral presentation, 1st intern. conference, Hazardous Waste Management, Chania, Crete, Greece.
34. **Komilis, D., Tsakmakis, T.** (2008). A sequential TCLP to assess leaching of heavy metals from personal computer components. Oral presentation, 1st intern. conference, Hazardous Waste Management, Chania, Crete, Greece.
35. **Komilis, D. I. Tziouvaras** (2008). A statistical analysis to evaluate maturity and stability of composts, Oral presentation at the IX International Conference on the Protection and Restoration of the Environment, Kefalonia, Greece.
36. **Komilis, D.** (2007). Conceptual models to optimize the haul, transfer and disposal of municipal solid waste. Oral presentation, 11th International Landfill and Waste Management Symposium, October, Sardinia, Italy.
37. **Lazaridi, K., M. Kehagioglou, D.Komilis, A.Rovolis** (2006). Municipal Solid Waste Costs: A comparative analysis of local authority policies in Attica, 46th Congress of the European Regional Science Association, Aug.30-Sept.3, Conference proceedings, Vol II, 125-139, Volos, Greece.
38. **Komilis, D., A.Lazaridi, T. Haritopoulou, A.Togia** (2006). Optimizing the haul and disposal of municipal solid waste produced by the municipality of Athens using mixed linear and integer programming, oral presentation, 8th international conference on the protection and restoration of the environment, e-proceedings, oral presentation, July, Chania, Crete, Greece.
39. **Komilis, D., A. Lazaridi, T.Haritopoulou, A.Togia** (2006). Mathematical optimization model of the Municipal Solid Waste collection-transfer-disposal system of the Municipality of Athens, 2nd international conference of the Hellenic Solid Waste Management Association, e-proceedings, February 3-4, Athens, Greece.
40. **Komilis, D., T.Haritopoulou, A. Togia** (2005). Solid waste production rates and estimating the number of waste storage containers in the Municipality of Athens, oral presentation at the 9th CONFERENCE ON ENVIRONMENTAL SCIENCE AND TECHNOLOGY, Sept., Rhodes, Greece.

41. **Haritopoulou**, T, D.Komilis, A.Lazaridi, A.Togia (2005). Development and implementation of the Waste Management Plan of the City of Athens for the 2004 Olympic Games, poster presentation, 9th CONFERENCE ON ENVIRONMENTAL SCIENCE AND TECHNOLOGY, Sept., Rhodes, Greece.
42. **Siaparinas**, K., D. Komilis (2005). Salt intrusion in the drainage basin of Thermi in Lesvos, 7th Hellenic Hydrogeological conference, Vol I, 445-452, October, Athens (in Greek).
43. **Lazaridi**, K, D. Komilis, A. Rovolis (2004). Comparative analysis and geographical differentiation of the municipal solid waste management cost in urban and rural municipalities, 7th Geographical Conference, October, Mytilene, Greece (in Greek).
44. **Komilis**, D. (2004). Environmental Legislation in the EU, presented at the International Issues on Environmental Engineering and Education conference, organised by P.M.Bethouex, UW-Extension, e-proceedings, 12-15 Aug., Pyle Center, Madison, WI, U.S.A.
45. **Komilis**, D.P., E. Kouzoumi, C.P. Halvadakis (2003). Financial and Environmental Analysis of Typical Three Phased Olive Mills in Greece, poster presentation at the 8th Environmental Conference of Science and Technology, 8-10 Sept., Lemnos, Greece.
46. **Stathis**, C. D. Komilis, C.P.Halvadakis (2003). Financial optimization of the municipal solid waste system using linear programming and optimization methods - A case study at the Island of Kithira. Oral presentation, international environmental conference HELECO 2003, Technical Chamber of Greece, Vol II, pp.53-60, February, Athens (in Greek).
47. **Komilis**, D., Kouris S., Halvadakis C.P. (2002). Economic Analysis of the Municipal Solid Waste Management System in 5 municipalities in the island of Lesvos, oral presentation, 1st conference of the Hellenic Solid Waste Association, e-proceedings, September, Athens, Greece (in Greek).
48. **Stathis**, C., D.Komilis, C.Halvadakis, (2002). Financial optimization of a solid waste management system using linear programming and optimization tools, poster in 2nd Intercontinental Landfill Symposium, Oct., N. Carolina, U.S.A.
49. **Komilis**, D.P., R.K.Ham (2002). The effect of lignin and sugars to the aerobic decomposition of solid wastes, oral presentation, 2002 ISWA World Congress, vol. 1, 661-670, 8-12 July, Istanbul, Turkey.
50. **Komilis**, D.P., R.K.Ham (2001). Global emissions during solid waste composting using LCA principles, oral presentation in 2nd ISWA Beacon specialized conference of ISWA Biological Treatment of Wastes Working Group, 91-114, Dec., Pollutec, Paris, France.
51. **Komilis**, D.P., R.K.Ham, (2001). A life cycle inventory for MSW composting facilities, oral presentation, ISWA World Congress 2001, pp. 298-310, 3-5 September, Stavanger, Norway.
52. **Komilis**, D.P., R.K.Ham (1999). Predicting carbon dioxide and ammonia yields during composting of individual municipal solid waste components and mixtures of components, HELECO' 99 international conference, June, Vol. I, pp.423-429, Thessaloniki, Greece.
53. **Komilis**, D.P., J.K.Park, R.K.Ham, (1998). Production of volatile organic compounds during composting of municipal solid wastes, oral presentation, WEFTEC 98 technical conf., vol. 6, pp. 179-190, October, Orlando, Florida, USA.

Highlight indicates the individual that presented the work.

Other publications

1. Komilis D. (2010). Invited preface in *Terrestrial and Aquatic Environmental Toxicology* (ISSN-1749-0324), Global Science Books Ltd. (Ed. A.Muscolo), Sept., [http://wwglobalsciencebooksinfo/JournalsSup/images/WebJournals/TAET_4\(SI1\)Web.pdf](http://wwglobalsciencebooksinfo/JournalsSup/images/WebJournals/TAET_4(SI1)Web.pdf)
2. Komilis, D., (2006). **Biological Waste Treatment Survey "Status and Trends"**, author of chapter for Greece, Edited by W. Rogalski, C. Fischer Schleiss, International Solid Waste Association, Vienna, Austria.

3. Ham, R.K (P.I.). and Komilis, D. (2003). **A Laboratory Study to Investigate Gaseous Emissions and Solids Decomposition During Composting of Municipal Solid Wastes**, EPA-600/R-03/004, January, National Risk Management Research Laboratory, RTP, NC, USA.
4. Komilis, D.P. and Ham, R.K (P.I.). (2000). **Life cycle inventory and cost model for mixed municipal and yard waste composting**. EPA/R-99/XXX, United States Environmental Protection Agency, Washington, July 2000, https://mswdst.rti.org/docs/Compost_Model_OCR.pdf

Teaching experience at academic level

Graduate level

1. Director of M.Sc. graduate program “Environment and Behavior” and teaching activities in 2 other M.Sc. graduate programs (a) Environmental Engineering and Science, b) Technologies in the Environmental Legislation managed by the dept. of Environmental Engineering. Lectures given on:
 1. Solid Waste Management
 2. Research Methodology and Applied Statistics.

(please see attached documents that contain the precise number of hours taught)

2. Collaborating professor of the Hellenic Open University (distance teaching) since 2004:
 1. M.Sc. program “Environmental Design of Infrastructures” 2004-2010
 2. M.Sc. program “Waste Management”, 2013- to date.
 - Coordinator of course “Solid Waste Management” (2017- to date)
 - Assistant coordinator of the course “Solid Waste Management” (2016-2017).

(please see attached documents that contain the precise number of hours taught, > 6 semesters combined taught)

Undergraduate level

1. **Technology and Management of Solid Waste I** (6 credits, 3 theory/3 laboratory, 3rd year undergraduate). Legislation, Generation and Characterization (Lab), Collection system, Transfer, Introduction to route optimization, Waste facility siting methodologies, Composting-Anaerobic digestion (Lab), Thermal Treatment (Lab), Landfilling (Lab).
2. **Technology and Management of Solid Waste II - Landfill Design project** (3 credits, 7th undergraduate semester): This course is mandatory and consists of the 5 following laboratory exercises as part of the whole landfill design project: Solid Waste Management and Technology II (co-teaching with prof. E.Voudrias). It includes 5 exercises (class projects) that are prepared by student groups during the fall semester. Contents are: 1. Landfill siting methodology, 2. Estimation of the size of the landfill based on population projections and recycling targets, 3. Soil excavation and waste placement, 4. Leachate estimation, collection and treatment, 5. Biogas production estimation, design of biogas recovery systems using extraction wells.
3. **Applied Statistics (4 credits, 3rd semester)**: Co-teaching with 2 other faculty members. My focus in lectures is on principles of experimental design and analysis of variance. Contents: The proper use of graphs. Main statistical distributions. Significance test. Analysis of variance for k averages. Tukey and Dunnett tests. Data transformation. Full and

fractional factorial designs. The course includes exercises, and final exams. Textbook: Experimental Design and Statistical Analysis, Published by Zygos, Thessaloniki, 2012, by D.P.Komilis (in Greek).

4. **Control of Solid Waste Treatment Systems (3 credits, 9th undergraduate semester):** The course includes detailed design aspects of waste collection and treatment facilities via the aid of life cycle analysis principles and specialized laboratory measurements. Specialized laboratories will be included focusing on microbial respiration testing (static aerobic, dynamic aerobic tests, anaerobic tests). Grading is based on class project.

As an adjunct lecturer at the University of the Aegean - Dept of Environmental Studies (2000-2004), I taught the 5 following undergraduate courses:

- 1) Environmental Hydrogeology, 2) Aquatic Chemistry, 3) Solid and Hazardous Waste Management, 4) Optimization in Solid Waste Management, 5) Introduction to Environmental Engineering.

Member of Ph.D. tribunal examination committees / evaluator of doctoral theses

- **External advisor** of Ph.D. student Spiridoula Gerasimidou working on Ph.D. topic “*Characterization of thermal behaviour of solid recovered fuels to use in cement industry and development of a finger-printing novel tool for quality management*”, Dept. of Civil and Environmental Engineering, University of Leeds, UK. (2017 in progress).
- **Member of tribunal** examination committee: Francesco Storino Ph.D. thesis “*Home and community composting of organic fraction of municipal waste*”, Universidad Pública de Navarra, Pamplona, Spain (presented June 2017).
- **External evaluator** (from distance) of the Ph.D. thesis by Anubhav Shrivastava “*FRAMEWORK FOR COMMUNITY E-PARTICIPATION IN CONTEXT TO SLUM REHABILITATION AND REDEVELOPMENT PROGRAMME*”, Maulana Azad National Institute of Technology, Bhopal, 462051, INDIA, (2017 in progress).
- **Member of tribunal** advising and examination committee: Francesca Pelleria Ph.D. thesis “*Integrated treatment and valorization of solid organic wastes in the Mediterranean area with the use of anaerobic digestion*”, Dept. of Environmental Engineering, Technical University of Crete, Chanea (presented January 2017).
- **Member of tribunal** examination committee: Cindy Ballardo Ph.d. thesis “*Valorización de residuos solidos organicos como sustrato para el crecimiento de Bacillus thuringiensis mediante fermentación en estado solido- Aplicación a la fraccion organica de residuos municipales*” presented at the Dept. of Chemical Engineering, Universitat Autonoma de Barcelona (presented October 2016)
- **External evaluator** (from distance) of the Ph.D. thesis by Arti Jaiswal “*AN ANALYTICAL APPROACH FOR SITING MUNICIPAL SOLID WASTE TRANSFER STATIONS WITHIN URBAN AREAS*”, Maulana Azad National Institute of Technology, Bhopal, 462051, INDIA, (presented Feb 2016)
- **Member of tribunal** advising and examination committee: Athanasia Kousaiti Ph.D. thesis “*Life Cycle Analysis during recycling and recovery of metals from WEEE*”, (Dept. of Environmental Engineering, Technical University of Crete, Chanea (2015 in progress).
- **Member of tribunal** examination committee: Juliana Abraham: Ph.D. thesis “*Production of proteases from industrial wastes through solid-state fermentation at different scales-Potential applications*” presented at the Dept. of Chemical Engineering, Universitat Autonoma de Barcelona (presented October 2014)

- **Member of tribunal** examination committee: Md Albarune Chowdhury Ph.D. thesis: “Greenhouse gas and ammonia emissions from composting of animal manure and other organic waste products” presented at the Dept. of Plant and Environmental Sciences, University of Copenhagen, Denmark (presented September 2013)

Research programs

See Table 1 in Appendix

Administrative university work

- Representative of the department of Environmental Engineering at the national committee (DOATAP) that recognizes the university and technological degrees awarded by foreign academic institutions (2017 - To date).
- Chair of the committee of the internal evaluation (OMEA) of the department of Environmental Engineering (2016 - To date).
- Director of M.Sc. graduate program "Environment and Behavior" (2016 - To date)
- Responsible for establishing two Erasmus programs for undergraduate studies in the Dept. of Environmental Engineering i) with Technical University of Kaunas, Lithuania, ii) with University of Reggio, Calabria, Italy.

Guest speaker

1. **Organic waste valorization under the framework of circular economy**, 2018. 2nd International Conference on Multidisciplinary Research, Assiut University, Red Sea, Egypt, January 28-30.
2. **Mathematical optimization in municipal solid waste management: A case study in a Hellenic region**. Workshop on Environmental Technology. Wastewater and municipal solid waste management. International Workshop on Higher Education, Universitat de Vic, University of Central Catalunya, Vic, Spain, June 2015.
3. **Recycling in Greece: Existing situation and legal framework**.
 - a. Presentation to personnel from high schools in Xanthi, Greece, April, 2013.
 - b. Presentation to local institutions in Xanthi, Greece, December, 2005.
4. **Environmental Legislation in the EU**. «International Issues on Environmental Engineering and Education» UW-Madison alumni reunion Dept. of Civil and Environmental Engineering, University of Wisconsin-Madison. UW-Extension, 10-12 Aug., Pyle Center, Madison, WI, U.S.A. (http://www.engr.wisc.edu/cee/newsletter/2004_summer/article03_environ_conf.html), 2004.
5. **Economics of municipal solid waste management for 26 municipalities in Greece**. Presentation in Athens «National Strategy for Recycling» Organized by Municipality of Daphni, Attica, Greece, Evgenideio Foundation,, (http://www.iforce.gr/press_release/29aprioliou2004.html), 2004.

Other experience

- **Visiting experienced researcher**. Dept. of Chemical Engineering, Autonomous University of Barcelona (2014-2016) (*on a sabbatical leave from D.U.Th. for period 2015-2016*). Techniospring and Generalitat de Catalunya / Marie Curie fellow.
- **Member** of advising committee assigned by the Hellenic Ministry of Interior to provide strategic guidelines on issues of solid waste management in Greece (2016-2017).

- **Lecturer and Assistant professor** of Solid and Hazardous Wastes, Dept. of Environmental Engineering, Democritus University of Thrace (2005-2014).
- **Sept. 13 – To date:** Collaborating professor at the Hellenic Open University at graduate program “Waste Management”.
- **Sept.’04 – 2010:** Collaborating professor at the Hellenic Open University at graduate program “Environmental Design of Infrastructures”. See M.Sc. dissertations section.
- **Sept.’03 – Sept.’05:** Scientific personnel at the Directorate of Environment and Industrial Siting, Ministry of Development, Greece.
- **Sept’00 – Aug’04:** Non-tenure track lecturer at the Environmental Engineering Sector of the Department of Environmental Studies, University of the Aegean (Mytilene, Greece); (courses taught: Solid Waste Management I, Environmental Hydrogeology, Introduction to Environmental Engineering, Solid Waste Management II: Linear programming and Optimization, Aquatic Chemistry).
- **Oct.’01 – Oct’02:** Environmental Consultant, LDK-ECO S.A. Environmental Consultants, Athens, Greece.
- **Sept ’00 - Sept’01:** Special advisor of the Governness of the Region of North Aegean, Mytilene, Lesvos, Greece.
- **Feb’01 - May ’01:** Scientific coordinator of educational seminars on Solid Waste Management, Prefecture of Lesvos, Mytilene, Greece.
- **May ’99 - May ’00:** Military service (Gunner in Armored Vehicles of the Hellenic Army).
- **Jan.’95 - March’99:** Research Assistant, Dept. of Civil and Environmental Engineering, UW-Madison, (PI and research advisor: R.K.Ham, 50% appointment)
- **Sept.’98-Dec.’98:** Teaching Assistant, Department of Civil and Environmental Engineering, UW-Madison; course: “*Introduction to Environmental Engineering*” taught by Assist. prof. G.Harrington (25% appointment).
- **Jan.’94 - Jan.’95:** Research Assistant, Department of Civil and Environmental Engineering, UW-Madison (PI and research advisor: Paul M. Berthouex, 33% appointment)
- **Sept.’92 - June.’93:** Graduate student: Department of Environmental Science, University of the Aegean - Greece, 1992-1993, assisted in the teaching of undergraduate courses: “*Water chemistry*” and “*Introduction to Environmental Engineering and Science*”
- **1988 - 1993:** Part time work at the BIOSFERIKI O.E. environmental engineering private consulting firm on issues related to solid waste and wastewater management in islands.

Evaluator

- Evaluator of research proposals for the call “Research-Create-Innovate”, European Funds (ESPA 2014-2018), Oct. 2017
- Evaluator of international research proposals:
 - Ministry of Research, Croatia, in 2006.
 - National Science Center (Poland) in 2015,
 - Ministry of Education, Italy (evaluation of Italian universities) in 2016.
- External evaluator of the program for the updating of the knowledge of university graduates titled “Environmental Management – Modern Tools” by the Dept. of Environmental Studies of the University of the Aegean (2015).
- Evaluator of research proposals by the General Secretariat of Research and Technology, Greece (2014-2015)
 - Valorization of demolition waste in road paving infrastructures.
 - Novel techniques to extract enzymes from dairy products.

- Critical reader – evaluator of book «Current practises of sustainable and integrated management of solid waste and wastewater» by author Karagiannidis A., www.kallipos.gr (2014).

Editor and reviewer tasks

- Top reviewer for journal “Waste Management” (2016).
- Associate Editor “Waste Management” (June 2013 – to date)
- Associate Editor “Global Nest journal” (May 2013 – to date)
- Guest Editor ““Global Nest journal” , Special Issue: Multi-disciplinarity and Environmental Research, scheduled for 2019.
- Guest Editor “Sustainability”, Special Issue: Organic Waste Management (2017, in progress).
- Guest Editor “Waste Biomass Valorization”, Special Issue: Solid Waste Management (2016)
- Guest Editor “Sustainability”, Special Issue: Sustainability in Solid Waste Management (2016).
- Top reviewer for journal “Waste Management” (2012).
- Regular reviewer in more than 25 journals on environmental management issues with emphasis on solid waste management since 2005.

Distinctions and fellowships

- **Techniospring** (Government of Catalunya) and **Marie Curie** fellow: Visiting (experienced) researcher at the BIO-GLS research center (GICOM-Composting Research Group of BIO-GLS) of the Autonomous University of Barcelona (2014-2016).
- **Bilateral educational exchange scholar** (funded by the Hellenic Ministry of Education and Religious Affairs, Culture and Sports and the D.A.A.D.- Deutscher Akademischer Austausch Dienst) for year 2013 (one week educational trip to the Technical University of Hamburg – Institute of Environmental Technology and Energy Economics; December 2013).
- **Member of scientific committees** and chair of sessions in several international conferences: i) IWA regional symposium on Water, Wastewater and Environment: Traditions and Culture (member of scientific committee), ii) ORBIT 2010, 2012, 2016 (member of scientific committee and chair), iii) Conferences on Environmental Science and Technology (CEST) 2011 & 2013 (member of scientific committee and chair of sessions), v) Hellenic Solid Waste Association conferences 2009 & 2012 (member of scientific committees and chair of sessions), vi) 2nd, 3rd and 4th International Conferences on Hazardous Waste Management (chair of sessions), vii) Tinos 2015, 3rd International Solid Waste Conference, viii) Sardinia International Landfill Symposium (2015).
- **Research Assistant** (1994-1999) and **Teaching Assistant** (1998), Dept. of Civil and Environmental Engineering, UW-Madison. Research Assistanships were awarded by the Nine Springs Wastewater Treatment Plant, Madison, WI (1994-1995) and the United States Environmental Protection Agency (1995-1999).
- **Fulbright** foundation grantee (graduate studies in the US, 1993),

- **North Atlantic Treaty Organization (N.A.T.O.)** granted via the Ministry of National Economy) fellow (graduate studies in the US, 1993-1994),
- **Lilian Voudouris Foundation** grantee (graduate studies in the US, 1993),
- Undergraduate degree (1992) with honors (final grade 8.51/10.0)
- **Hellenic Scholarships Foundation** grantee during undergraduate studies (1988-1991),
- **Ioniki Bank** grantee for excellence during undergraduate studies in Greece.

Current Memberships

International Waste Working Group (IWWG) member since 2007. Member of 2 task groups in IWWG.

Languages: Greek (native), English (fluent, Diploma of Proficiency, Cambridge, 1993), Spanish (level B1 from Instituto Cervantes, 2015)

Appendix

Table 1. Principal Investigator (PI) and participant in research programs in Greece

Funded by	Role / Contents of work	Title	Budget (not incl. VAT) / Duration
BAUER NIMR LLC	PI , Monitoring the performance of the Composting Trial at NWTP (Nimr Water Treatment Plant) in Oman via laboratory measurements	Monitoring the performance of the Composting Trial at NWTP (Nimr Water Treatment Plant) in Oman via laboratory measurements	€4822 (6 months)
ΔΕΛΤΑ ΑΞΙΟΥ ΕΝΕΡΓΕΙΑΚΗ Α.Ε.	PI , Estimation of the biochemical methane potential of three types of agricultural wastes and manures	Estimation of the biochemical methane potential of three types of agricultural wastes and manures	€2100 (3 months)
DIAAMATH (Solid Waste Association of the Region of Eastern Macedonia - Thrace), 2014-2015	PI , Laboratory characterization of home composting samples in the Region of Eastern Macedonia and Thrace.	Laboratory characterization of home composting samples in the Region of Eastern Macedonia	32000€ / 1 year (2014-2015)

		and Thrace	
RAM Europe S.A., 2011	PI , Analysis of the total content of 9 metals, respiration indexes, pH, organic matter, elemental analysis and compositional analysis of the solid wastes and the composted matter at several stages of the composting facility	EVALUATING THE QUALITY OF COMPOST PRODUCED FROM A NOVEL COMPOSTING FACILITY IN KALAMATA-GREECE	9000€ / 3 months (2012)
DIAAMATH (Solid Waste Association of the Region of Eastern Macedonia - Thrace), 2010-2011	PI , Monitoring of CH ₄ , CO ₂ and O ₂ in the interior of 24 bales following the principles of fractional factorial design. Elemental analysis of solid waste in two of the bales after 1 year.	MONITORING THE BIODEGRADATION OF SOLID WASTES STORED IN WRAPPED BALES IN THE ISLAND OF THASSOS	6800€, 18 months (2010-2012)
MESOGIOS S.A. and MESOGIOS ENVIRONMENTAL SERVICES S.A., 2010-2012	PI , Characterization of solid wastes (moisture, organic matter, pH, elemental analysis, respiration index, K, Na) in a new composting facility in Kefallonia Measurements of calorific value, elemental analysis, organic matter and moisture contents at the inlet and outlet of a biodrying facility in Crete.	MONITORING THE PERFORMANCE OF A MSW BIODRYING FACILITY (CRETE) AND A MSW COMPOSTING	Approx. 62000€. (2010-2013)

		FACILITY (KEFALLONIA)	
Dept. of Environmental Engineering	PI , The main goal of the work was study the effect of aerobic pre-treatment on the anaerobic emissions following the landfilling of municipal solid wastes (MSW). In this experimental work, MSW were simulated using a consistent mixture of office paper and food wastes. MSW were, then, aerobically pretreated in 200 L plastic lysimeters under a continuous air flow regime and at different time periods (0, 10, 45, 60 and 90 days). The aerobically pretreated MSW were placed in 150 L air-tight anaerobic lysimeters, whilst control anaerobic lysimeters were filled with untreated MSW. Anaerobic experiments lasted up to 550 days so that to approach the extent of biodegradation for most runs. The experiments took place in a temperature controlled room at mesophilic conditions at 37°C±2°C at both the aerobic and anaerobic phases. The project also funded the development of two novel respiration tests to assess compost stability (static and dynamic regimes).*	Mechanical and Biological Pretreatment of Solid Wastes	Approx. 52000€, (2006-2012)
Dept. of Environmental Engineering	PI , Emphasis will be given on the use of compost based biofilters to treat VOCs generated in MSW management facilities. *	Control of MSW management systems	16000€, In progress
General Secretariat of Research and Technology	Participant , During this project, I was responsible for the setting up of experiments with air tight aerobic reactors to investigate the co-composting of dewatered wastewater sludge with the organic fraction of municipal solid wastes. Mass balances of carbon and nitrogen were performed.	INTEGRATED MANAGEMENT OF WASTEWATER AND WASTEWATER SLUDGE USING	

		NATURAL TREATMENT SYSTEMS	
EU Regional Development Directorate-General	Participant: During this project, I was responsible for designing treatment facilities for two remote olive mill plants in the island of Lesvos. In addition, I was involved with the economics of olive mill wastewater management in central and decentralized level in the island of Lesvos.	Innovative Olive Mill Waste Management Systems (NAIAS Project)	Approx. 800.000€ for the whole project (other tasks were involved).
Prefecture of Kozani	Participant: Developed a methodology to assess the maximum number of tourists in a cave near Ptolemais to avoid deterioration of the carbonate rock formations (stalagmites etc.). Included measurements of CO ₂ contents within the cave, measurements of [Ca ⁺⁺] in the cave water and measurements of aeration rates through the cave.	Environmental Impacts of Tourism on Ermakia Cave of the Kozani prefecture	5000€
Prefecture of Chios	Participant: Developed a methodology to assess the maximum number of tourists in a cave (Olimpi village) to avoid deterioration of the carbonate rock formations. As mentioned in previous section.	Measurement of Environmental Parameters for an Environmental Impact Study of Sykia Cave, Municipality of Mastihoria, Prefecture of Chios	5000€
Environmental Committee of the Municipality of	Participant: Developed siting criteria to re-assess a site in Aitolokarnania (Western Greece) as a proposed new landfill site within the prefecture.	Evaluating a site as a proposed landfill site in the Municipality of	6000€

Neapoli, Aitoloakarnania		Neapoli in Agrinio – Western Greece	
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* Funding provided by the Dept. of Environmental Engineering.

Table 2. List of graduate level dissertations supervised at the Democritus University of Thrace

Title of thesis	Level	Student name	Start year	End year
Development of a novel compost stability index	Ph.D.	Evangelou A.	2012	In progress
Life cycle analysis on medical waste treatment processes	Ph.D.	Liagkos S.	2018	In progress
A methodology to site abandoned quarries for stabilized MSW disposal	M.Sc.	Hatzidimitriou M.	2017	In progress
Assessment of the quantities of recycled scrap and EOLV in the city of Xanthi	M.Sc.	Topalidis A.	2017	In progress
Anaerobic digestion of agricultural and animal wastes: Centralized vs decentralized systems	M.Sc.	Kontanas A.	2017	In progress
Production and composition of medical wastes generated from pathologo-anatomical laboratories	M.Sc.	Kalogiannidou K.	2017	In progress
Comparison of the environmental burdens and cost between incineration of biodried waste and mass-burn incineration	M.Sc.	Psaltis P.	2017	In progress
Factors that influence the generation of selected special solid waste streams in Greece and worldwide	M.Sc.	Namlis K.	2016	In progress
Assessing the willingness to participate in door to door recyclable collection programs: A case study in Xanthi, Greece	M.Sc.	S. Amarantidou	2016	2017
Optimization of animal waste management	M.Sc.	E. Felekidis	2014	Student quit
Medical waste management and legislation worldwide (exl. Europe)	M.Sc.	N. Traiforos	2014	2015
Medical waste management and	M.Sc.	M. Imam	2014	2015

legislation in Europe				
Estimation of solid waste generation rates from elementary schools	M.Sc.	T. Katsaveri	2014	2015
Composting as a means to treat industrial wood wastes	M.Sc.	Tsanaktsis C.	2013	2014
Leaching tests to assess the environmental impact of pharmaceutical wastes and their ashes	M.Sc.	Gerassimidou S.	2013	2014
Characterization of municipal wastewater sludges in the Region of Eastern Macedonia-Thrace	M.Sc.	Eleftheriadou K.	2012	2013
Comparison of two MSW energy recovery technologies using LCA principles: Application in the Region of Eastern Macedonia-Thrace	M.Sc.	Evgenidou C.	2012	2013
Economics of MSW management systems in Greece	M.Sc.	Liogkas V.	2011	2012
Effect of MSW compost on the growth of <i>Brassica napus</i> (rapeseed)	M.Sc.	Avramidou P.	2011	2012
Financial and environmental evaluation of a MBT facility to pretreat MSW	M.Sc.	Tziouvaras I.	2010	2011
Monitoring the biodegradation of municipal solid wastes stored in bales: A case study in the island of Thassos	M.Sc.	Markidis I.	2010	2011
Optimization of the municipal solid waste management system using linear and binary programming	M.Sc.	Minoglou M.	2009	2010

List of Engineering Diploma theses that I supervised at the Democritus University of Thrace

Assessing the effect of alkaline pretreatment on the biochemical methane potential of sugar canes	Averopoulou A.	2016	In progress
Siting of green spots in the city of Kavala using GIS	Aidinidou M.	2016	2017
Biochemical methane potentials of several organic substrates	Diafonidis O.	2015	2016
Development of a landfill leachate prediction model in VBA	Dimitrakis S.	2013	2015
Development of a laboratory scale anaerobic test to assess the degradability of organic substrates	Symeonidis A.	2012	2014
Effect of initial physicochemical parameters of solid wastes on their calorific value	Kissas C.	2012	2013
Comparison of 2 alternative respirometry based compost stability techniques	Tsikampakas D.	2012	2014
Effect of operating parameters during the aerobic biodegradation of the organic fraction of municipal solid wastes during dynamic respiration tests	Chintzios V.	2011	2015
Degradability of MSW in a biodrying plant	Kotsiari E.	2011	2012
Developing a dynamic respiration assay to study the stability of composts	Kanellos D.	2011	2012
The effect of a short term aerobic pretreatment step to the emissions of MSW at anaerobic environments	Gerassimidou S.	2010	2012
Optimizing a compost static respiration test	Kletsas K.	2010	2012
Anaerobic digestion of the organic fraction of MSW in pilot anaerobic lysimeters	Lazaridis V.	2010	2012
The effect of a 90-day aerobic pretreatment period to emissions after landfilling	Mplouchou K.	2009	2011
The effect of a 60-day aerobic pretreatment period to emissions after landfilling	Papanastassiou V.	2009	2011
The effect of a 30-day aerobic pretreatment period to emissions after landfilling	Kosmidis G.	2009	2011
The correlation of stability and maturity indices for 13	Kontou I.	2009	2012

organic composts			
Life cycle inventories of alternative MSW management systems	Tsigardas I.	2008	2010
Measurements of calorific value of municipal solid waste components	Limperis K.	2008	2012
A European based leaching test to quantify metals from computer wastes	Tataki V.	2008	2010
Mathematical optimization of the MSW haul and transfer system in the Region of E. Macedonia-Thrace	Chatzouridis K.	2007	2009
Bioremediation of diesel-contaminated soils using composts	Timotheatou E.	2007	2009
Co-composting of dewatered biosolids and bulking amendments using pilot aerobic lysimeters	Giannakis G.	2007	2009
Co-composting of dewatered sludge and the organic fraction of MSW using pilot aerobic lysimeters	Kalpakis D.	2007	2009
Fate of heavy metals during co-composting of dewatered sludge with other organic amendments	Apostolou A.	2007	2009
A TCLP to quantify metals from computer wastes	Tsakmakis T	2006	-
Elemental analysis of 24 MSW components	Chatzivariti A.	2006	2008
Assessment of stability and maturity of six composts	Tziouvaras I.	2006	2008
Comparison of two different MSW management regimes from the Hellenic municipalities	Potolidis D.	2005	2010
MSW generation and management cost for 40 Hellenic municipalities	Markidis I.	2005	2008

**List of M.Sc. dissertations that I
supervised at the Hellenic Open University**

Title of thesis	Student name	Start year
Assessing the quantities of solid waste generated by refugees in the island of Lesbos	Mpletsa G.	2016
Production and disposal of pesticide packaging in the prefecture of Drama	Garbounis G.	2016
Fate of materials in car recycling facilities	Nikolopoulos G.	2016
Generation of medical wastes from medical microbiology laboratories	Makroleivaditis N.	2015
Scenarios of municipal solid waste management in the Hellenic island of Siros – Application of LCA principles	Bogiatzidis K.	2013
Environmental impacts of medical waste management in a Hellenic health center	Kaffe D.	2013
Development of solid waste management optimization program in VBA	Kalligeris V.	2013
Management of Construction and Demolition debris – A case study in the Region of Eastern Macedonia-Thrace	Kagiantalidoy K.	2012
Assessment of the landfilling cost and the municipal solid waste generation rates in the Region of Eastern Macedonia-Thrace	Passou D.	2011
Study of medical waste generation in the AHEPA hospital of Thessaloniki	Arampatzi D.	2010
Comparative financial and economic assessment of the MSW transfer network in Western Macedonia	Iasonidou E.	2010
Disposal of hazardous medical wastes to an incinerator in Ano Liossia: Analysis of records from 2009-2010	Fouki A.	2011

Ranking the hazard potential of uncontrolled dumps in the prefecture of Arcadia	Kostaraki A.	2010
Developing an environmental management system according to the international standard ISO 14000, a health and safety system according to the international standard OHSAS 18001 and a quality system according to the international system ISO 9001 for a municipal solid waste landfill.	Sfetsos G.	2010
Evaluation of the professional hazard sources in industrial dye plants	Fanoulis I.	2010
Comparison of scenarios to manage the wastewater sludge generated by the wastewater treatment plant in Thessaloniki	Ntomoutsoglou E	2010
Design of MSW composting plants using spreadsheets	Papanikolaou K	2009
Alternative MSW management scenarios in the municipality Ierapetra in Crete	Kassotaki E.	2009
Municipal wastewater sludge management scenarios in Kastoria	Evangelou A	2009
MSW management cost of the 4th management unit in the prefecture of Chalkidiki - Comparison of different management scenarios	Vagkli E.	2008
Generation of medical wastes in the General Hospital of Ikaria	Katsafaros N.	2008
Economic analysis of the MSW management system of 11 municipalities in the Prefecture of Messinia	Kouvelas D.	2007
A mass balance of the recycling system of packaging material in South-Eastern Thessaloniki	Pavlidou E.	2007
Financial and economic evaluation of 3 MSW treatment technologies in the Region of Eastern Macedonia-Thrace	Kleanthidou S.	2007
A methodology to rank the hazard potential of MSW uncontrolled dumps with emphasis on geologic and	Milatos A.	2007

hydrogeologic criteria		
Generation and incineration of medical wastes in Attica: A case study in the medical waste incinerator in Ano Liossia	Vassilopoulos P.	2007
Economics of MSW management in the municipalities of the island of Chios	Tsikoli A.	2006
Evaluation of the aerobic biological stabilization of MSW as a pretreatment method prior to landfilling	Tsioptsias K.	2006
Design of a mechanical pretreatment and biodrying plant	Papagoras P	2006
A life cycle inventory and cost evaluation of the municipal solid waste MBT plant in Chanea, Crete	Mavrakis E.	2006
Preliminary design of a MSW recycling system at the Municipality of Arta	Zarkada I.	2006
Economic analysis of the MSW management cost in 5 municipalities of the Prefecture of Ioannina	Anagnostou D.	2005
Unit MSW management cost of several municipalities in the Prefecture of Serres, Greece	Tragoudas K	2005