# **CURRICULUM VITAE**

### Vasiliki I. Manakou

Department of Civil Engineering, Aristotle University of Thessaloniki, Greece

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# I. EDUCATION

- **2014 Ph.D.** in Water Resources Management, Department of Planning and Regional Development, University of Thessaly, Greece
- **2006 M.Sc** in Environmental Protection and Management, School of Geosiences, University of Edinburgh, Edinburgh, Scotland
- **2005 BSc** in Forestry and Natural Environment, School of Forestry and Natural Environment, Aristotle University of Thessaloniki, Greece

## **II. Research Interests**

- Environmental management
- Water resources management
- Water pollution
- Water and wastewater treatment
- Solid waste management

### III. Professional, Research and teaching experience

### Professional and Research experience

06/2015-today
Department of Civil Engineering, Aristotle University of Thessaloniki, Greece
Research associate
Research projects and conferences:
<ol> <li>Ecotoxicological analyses of treated wastewater</li> <li>Study of the effect of seawater from the C/S wreckage "SEA DIAMOND" on</li> </ol>
Vibrio fischeri kai Brachionus plicatilis
3. Ecotoxicological analyses in biowaste produced from wastewater treatment plants of EYDAP S.A."
4. Study of chemical and ecotoxicological parameters in Thessaloniki

Wastewater Treatment plant

- 5. Technical study for the environmental impact assessment of the construction of the wastewater treatment plant in the area of Mesimeri of Thermaikos Municipality
- 6. Environmental Impact assessment of the tourist development of Premium Development S.A
- 7. International Conference Protection and restoration of the environment XIII
- 8. Technical report on construction of a wastewater treatment plant on Psachna, Euboea
- 9. Report on the efficacy of the sterilization process that is performed by Hydroclave Hellas SA on medicinal waste (exclusively infectious medicinal waste).
- 10. 19 international symposium on Toxicity assessment
- 11. 9th International Conference on Environmental Management, Engineering, Planning and Economics and SECOTOX Conference
- 12. 8th International Conference on Environmental Management, Engineering, Planning and Economics and SECOTOX Conference
- 13. 7th International Conference on Environmental Management, Engineering, Planning and Economics and SECOTOX Conference
- 14. 6th International Conference on Environmental Management, Engineering, Planning and Economics and SECOTOX Conference
- 15. Sixth International Symposium on Green chemistry, sustainable development and circular economy
- 16. Fifth International Symposium on Green chemistry, sustainable development and circular economy
- 17. Fifth International Conference on small and decentralized water and wastewater treatment plants

### 01/4/2007 - 15/10/2016

Department of Planning and Regional Development, University of Thessaly, Greece

#### Research associate

Projects and conferences

- 1. Development of A Cost Efficient Policy Tool for reduction of Particulate Matter in Air, "ACEPT-AIR" ENV/GR/000289
- 2. Improvement of water quality control using ecotoxicological analyses
- 3. ROADTIRE, Integration of end-of-life tires in the life cyrcle of road constraction
- 4. Eco Efficiency European Services: Scientific support for 2nd phase of registration of Aluminum dross under REACH
- 5. Eco Efficiency European Services: Scientific support for 1st phase of registration of Aluminum dross under REACH
- 6. Physicochemical analyses of wastewater and dehydrated sludge from the wastewater treatment plant of the municipality of Tyrnavos
- 7. Waste analyses for companies
- 8. Eco Efficiency European Services: « Investigation of physicochemical, toxicological and ecotoxicological properties of calcium carbide (CaC<sub>2</sub>)»
- 9. INTERREG III B ARCHIMED "Mediterranean cooperation for on-shore accessibility and sustainability themes-network for managing urban coastal areas-medCOAST.Net".

<ol> <li>Fifth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.</li> <li>12. 12<sup>th</sup> International Conference on Protection and Restoration of the Environment</li> <li>Forth International Conference on small and decentralized water and wastewater treatment plants</li> <li>Fourth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.</li> <li>3rd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"</li> <li>3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>2nd International Conference on Environmental And Development and Publication on Special Issues in International Scientific Journals"</li> <li>3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>2nd International Conference on Environmental And Development and Publication on Special Issues in International Scientific Journals</li> <li>2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>Second International Conference on small and decentralized water and wastewater treatment plants</li> </ol>	<ol> <li>INTERREG III B ARCHIMED "Management of water resources and wetland protection in tourism developing areas-MANWATER".</li> </ol>
<ol> <li>12. 12<sup>th</sup> International Conference on Protection and Restoration of the Environment</li> <li>13. Forth International Conference on small and decentralized water and wastewater treatment plants</li> <li>14. Fourth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.</li> <li>15. 3rd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals.</li> <li>16. 3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>17. 2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"</li> <li>18. 2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>18. 2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>20. Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>21. 1st International Conference on Environmental Management, Planning</li> </ol>	11. Fifth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on
<ul> <li>wastewater treatment plants</li> <li>14. Fourth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.</li> <li>15. 3rd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"</li> <li>16. 3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>17. 2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals</li> <li>18. 2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>20. Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>21. 1st International Conference on Environmental Management, Planning</li> </ul>	12. 12th International Conference on Protection and Restoration of the
<ul> <li>Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.</li> <li>15. 3rd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"</li> <li>16. 3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>17. 2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"</li> <li>18. 2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>20. Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>21. 1st International Conference on Environmental Management, Planning</li> </ul>	13. Forth International Conference on small and decentralized water and wastewater treatment plants
<ul> <li>and Development and Publication on Special Issues in International Scientific Journals"</li> <li>16. 3<sup>rd</sup> Conference on Planning and Regional Development</li> <li>17. 2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals</li> <li>18. 2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>20. Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>21. 1st International Conference on Environmental Management, Planning</li> </ul>	14. Fourth International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals.
<ol> <li>2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals</li> <li>2<sup>nd</sup> Conference on Planning and Regional Development</li> <li>2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>1st International Conference on Environmental Management, Planning</li> </ol>	15. 3rd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International Scientific Journals"
<ol> <li>2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on Special Issues in International Scientific Journals</li> <li>Second International Conference on small and decentralized water and wastewater treatment plants</li> <li>1st International Conference on Environmental Management, Planning</li> </ol>	17. 2nd International Conference "Green Chemistry for Health, Environment and Development and Publication on Special Issues in International
wastewater treatment plants 21. 1st International Conference on Environmental Management, Planning	19. 2nd International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference and Publication on
	20. Second International Conference on small and decentralized water and wastewater treatment plants
	21. 1st International Conference on Environmental Management, Planning and Economics (CEMEPE) and SECOTOX Conference

10/08/2007- 09/08/2008

Hellenic Solid Waste Management Association

Research Associate

Research project: "Raising public awareness on solid waste management issues-Area of Action Volos

### Teaching experience

10/2021-TODAY
Department of Forestry and Natural Environment Management, University of Thessaly
Forest Hydrology (undergraduate course)

### 10/2021-TODAY

Department of Environmental Sciences, University of Thessaly Quality Assurance in Environmental Management Systems (undergraduate course) 10/2020-2/2021

Department of Agriculture, University of Western Macedonia

Technology and water quality control (undergraduate course)

10/2020-2/2021

Department of organization management, marketing and tourism, International Hellenic University

Supply chain management in Health Care (postgraduate course)

2/2018-6/2018

Department of Agriculture, Alexander Technological Institute of Thessaloniki Sustainable Agricultural Production Systems (postgraduate course)

02/2015-06/2015

Department Planning and Regional Development, University of Thessaly Pollution and Environmental Protection-(postgraduate course)

10/2010-02/2012

Department of Forestry and Natural Environment Management, Technological Institute of Thessaly

Wild life and protected area management

10/2010-02/2012

Department of Forestry and Natural Environment Management, Technological Institute of Thessaly

Protected areas-Habitats

10/2010-02/2012

Department of Forestry and Natural Environment Management, Technological Institute of Thessaly Grasslands management

### **IV. List of Publications**

### A. Book chapters/Editorials

**[A5].** Nardo, A.D., Creaco, E., **Manakou, V.,** Musmarra, D., Prevost, M. (guest editors) (2021). Innovative approach and design for environmental protection from arising threats, Environmental Science and Pollution Research, 28(26), pp. 33806–33808

**[A4]. Manakou V.,** Kungolos A., Emmanouil C. (2019). Causes of greenhouse effect and combatting policies and strategies. In "Towards a sustainable residential environment" Kosmopoulos P. (eds), University Studio Press, Thesaloniki, (in Greek)

**[A3].** Musmarra D., Zafeirakou A., **Manakou, V.,** Emmanouil, C. (guest editors) (2019). Efficient and sustainable environmental management as a means of addressing current pollution issues, Environmental Science and Pollution Research, 25 (27), pp. 14703-14705.

**[A2].** Kungolos, A., Di Nardo, A., Mallios, Z., **Manakou, V.,** Emmanouil, C. (guest editors) (2018). Effective environmental management within the context of sustainability and economic development: a special issue from the 13th International Conference on Protection and Restoration of the Environment (PREXIII), July 3–8, 2016, Mykonos island, Greece. (2018) Environmental Science and Pollution Research, 25 (27), pp. 26695-26698.

**[A1].** Kungolos A., Kanakoudis V., Karakasidis T., Laspidou C., Emmanouil C., **Manakou V.** (2017) Fresenius Environmental Bulletin, Volume 26, No. 2/ 2017 Special Issue 12th International Conference on Protection & Restoration of the Environment, Skiathos Island-Greece, June 29 to July 3,2014 PREFACE

### **B.** In peer-reviewed journals

**[B5]** Giannakis I., Emmanouil C., Mitrakas M., **Manakou V.,** Kungolos A. (2020) Chemical and ecotoxicological assessment of sludge-based biosolids used for corn-field fertilization. Environmental Sci Pollut Res <u>https://doi.org/10.1007/s11356-020-09165-6</u>

**[B4]** Giannakis I., Emmanouil C., **Manakou V.,** Kungolos A. (2019). Ecotoxicity assays in a Wastewater Treatment Plant sludge. Hydrotechnica, 29:1-12 (in Greek).

**[B3]** Kungolos A., Emmanouil C., **Manakou V.,** Darakas E. (2015). Assessment of vulnerable freshwater ecosystems and various aquatic effluents by means of ecotoxicological assays. Desalination and Water Treatment 54: 2120–2129.

**[B2] Manakou, V.,** Tsiakis, P. and Kungolos A. (2013). A mathematical programming approach to restore the water balance of the hydrological basin of Lake Koronia. Desalination and Water Treatment, 51: 2955-2976.

**[B1].** Tsiakis P., **Manakou V.**, Perakis K., Kungolos A., (2012). "Design of an electrodialysis brackish water desalination plant using renewable resources based on statistical analysis of climate conditions", Fresenius Environmental Bulletin, Vol. 21, 2012, pp 2482-2485

### C. In peer-reviewed international conference proceedings

**[C7]** Tsiaras S., **Manakou V.** (2021) Assessing the performance of European Union countries on Sustainable Development Goal 15 "Life on Land", Eighth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2021) & SECOTOX Conference, Thessaloniki, Greece, July 20-24, 2022, pp. 728-734

**[C6].** Giannakis I., Emmanouil C., Kungolos A., **Manakou V.** (2020). Ecotoxicity assessment of treated sewage sludge from a WWTP in Attica, Greece, 15th International Conference on Protection and Restoration of the Environment (PREXV)

**[C5] Manakou V.,** Tsiakis P., Tsiakis T. and Kungolos A. (2012). Sustainable Development of the Hydrological Basin of Lake Koronia using Mathematical Programming and Statistical Analysis. Computer Aided Chemical Engineering, Vol. 30, pp 26-30.

**[C4]. Manakou V.,** Tsiakis P., Tsiakis T. and Kungolos A. (2011). Management of the Hydrological Basin of Lake Koronia using Mathematical Programming, Third International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2011) & SECOTOX Conference, Skiathos, Greece, June 19-24, 2011, pp. 165-170

**[C3].** Tsiakis P., Manakou V., Tsiakis T. (2010). Calculating the environmental impact of logistics network in supply chain design, 1st Olympus International Conference on Supply Chains, October 1-2, 2010, Katerini, Greece.

**[C2].** Tsiakis P., **Manakou V.** and Tsiakis T. (2009). Environmentally focused production and distribution supply chain network structures. Second International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) & SECOTOX Conference, June 21-26, Mykonos, Greece, pp 1651-1656

**[C1]. Manakou V.,** Kungolos A. and Beriatos E., (2008). Hazards that threaten Greek wetlands: the case of Lake Koronia. Risk Analysis VI, eds. C.A. Brebbia, E. Beriatos, WIT Press, Southampton, UK, pp. 3-10.

### D. In peer-reviewed national conference proceedings

**[D2]. Manakou V.,** Tsiakis T., Kungolos A. (2011). How Koronia lake environmental deterioration is covered by the mass media. 4<sup>th</sup> Environmental Congress of Macedonia, 18-20/3/2011, Thessaloniki, Greece (in Greek)

**[D1].** Kipouros S., Tsiridis V., Kungolos A., Papaoikonomou A., **Manakou V.,** Emmanouil C., Kotios A., Petrakos G. (2009). Investigation into environmental issues of Skiathos Island, 2<sup>nd</sup> Panhellenic Congress of Spatial Planning and Development, 24-27/9/2009, Volos Greece. (1057-1063) (in Greek)

### E. Abstracts in international conference proceedings

**[E6].** Giannakis I, Emmanouil C., Christodoulou A., Lioumbas J., Karabougiouki E., Kotoulas E., **Manakou V.,** Kungolos A. (2019). Ecotoxicological assessment of land spreading of treated sludge in cornfields, Seventh International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2019) & SECOTOX Conference, Mykonos, May 19-24, 2019.

**[E5]. Manakou V.,** Tsiakis P., Emmanouil C., and Kungolos A. (2017). Sustainable management of water resources of the protected lake Koronia. Sixth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2017) & SECOTOX Conference, Thessaloniki, June 25-30, 2017.

**[E4]. Manakou V.,** Tsiakis P., Emmanouil C., Perakis K. and Kungolos A. (2015). Farmers' opinion on lake Koronia environmental status: causes, state of art, proposed solutions. Fifth International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2015) & SECOTOX Conference, Mykonos, June 14-18, 2015.

**[E3]. Manakou V.,** Tsiakis P. and Kungolos A. (2010). An Integrated Management Approach for the Hydrological Basin of Lake Koronia. Second International Symposium on Green Chemistry for Environment and Health, September 27-29, 2010, Mykonos, Greece.

**[E2]. Manakou V.,** Faraslis I., Stathakis D., Perakis K. and Kungolos A. (2009). Shoreline changes of Lake Koronia during the last seven decades using remote sensing and GIS techniques. Second International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) & SECOTOX June 21 – 26, Mykonos, Greece, pp 401.

**[E1].** Kipouros S., **Manakou V.,** Papaoikonomou K., Emmanouil C., Kungolos A., Kotios A., Koutoulakis E., Petrakos G. (2009). "Wastewater reuse and public acceptance", 2nd International Conference on Environmental Management, Engineering, Planning and Economics, June 21 – 26, 2009, Mykonos, Greece, pp. 468.

#### F. Abstracts in national conference proceedings

**[F3].** Kipouros S., Kungolos A., Papaoikonomou K., Manakou V., Sakellariou S. (2012). Environmental aspects of road works using tar mixed with tire particles-a case study in Lamia and future perspectives of similar works. 1<sup>st</sup> Environmental Congress of Thessaly, 8-10/9/2012, Skiathos, Greece (in Greek)

**[F2].** Kungolos A., Tsiridis V., Petala M., Emmanouil C., Kipouros S., Manakou V., Darakas E. (2012). Ecotoxicological assays as a tool of monitoring sensitive water ecosystems. 1<sup>st</sup> Environmental Congress of Thessaly, 8-10/9/2012, Skiathos, Greece (in Greek)

**[F1].** Sakellariou S., Ekklisiarxi P., Emmanouil C., Papaoikonomou K., Bakopoulou S., Tsiakis Th., Manakou V. (2012). Environmental aspects of touristic activities in coastal and island Greek areas. 1<sup>st</sup> Environmental Congress of Thessaly, 8-10/9/2012, Skiathos, Greece (in Greek)