CURRICULUM VITAE

AIKATERINI D. LYRA

Ph.D. Candicate

Research Member of the Laboratory of Hydrology and Aquatic Systems Analysis,
Department of Civil Engineering,
University of Thessaly

March 2022

*I.*1. PERSONAL

Name:	Aikaterini D. Lyra
Date of Birth:	19th July 1988
Office Address:	Department of Civil Engineering School of Engineering University of Thessaly P e d i o n A r e o s 38334 Volos, Greece
Email:	klyra@uth.gr
Office Phone:	(+30) 2421074153

I. 2. EDUCATION

a) University of Thessaly, 2018-Today

Supervisor: Ph.D, P.E.. Athanasios Loukas, Associate Professor
Field of Research: Quantity and Quality of Water Resources
Ph.D. Dissertation Title: Simulation and Management of Degraded Water Resources of Coastal Watersheds

***β*) Democritus University of Thrace, 2006-2015**

Diploma in Civil Engineering- Integrated Master
Field of Study: Groundwater Hydrology – Hydrogeological Applied Research in Civil Engineering
Supervisor: Ph.D. Fotios-Kon/nos Pliakas, Professor
Dipl. Eng. Thesis Title: Water Resources and DPSIR Framework. The case of Almyros Basin in Magnesia Prefecture.

I. 3. AWARDS AND SCHOLARSHIPS

1) Postgraduate Studies

- Scholarship of Greek State Scholarships Foundation, 2018-2022.
  Co-financed by Greece and the European Union (European Social Fund- ESF) through the Operational Programme «Human Resources Development, Education and Lifelong Learning» in the context of the project "Strengthening Human Resources Research Potential via Doctorate Research" (MIS-5000432), implemented by the State Scholarships Foundation (IKY).

2) Undergraduate Studies

- Maximos Maravelakis Award, by the Hellenic Committee of Hydrogeology at the 11th International Hydrogeological Congress of Greece, organized by the Hellenic Chapter of International Association of Hydrogeologists – IAH and the Cyprus Association of Geologists and Mining Engineers, in Athens, 4-6/10/2017, for my Degree Thesis titled: Water Resources and DPSIR Framework. The case of Almyros Basin in Magnesia Prefecture.

I. 4. Diploma Thesis and Publications

A. Diploma Thesis

Lyra A., (2015). "*Water Resources and DPSIR Framework. The case of the coastal part of Almyros Basin of Magnesia Prefecture.* Diploma Thesis, Department of Civil Engineering, D.U.TH., Xanthi, Greece (Grade: 10/10).

***B*. Papers**

***B.1.* Lyra, A.**, Loukas, A., Sidiropoulos, P., Voudouris, K., Mylopoulos, N. (**2022).** Integrated Modeling of Agronomic and Water Resources Management Scenarios in a Degraded Coastal Watershed (Almyros Basin, Magnesia, Greece). *Water Journal*, *14*, 1086.
***B.2.* Lyra, A.**, Loukas, A., & Sidiropoulos, P. (**2021**). Corrigendum: Water Supply 21 (6), 2748–2759: Impacts of irrigation and nitrate fertilization scenarios on groundwater resources quantity and quality of Almyros Basin, Greece. *Water Supply Journal*, *21*(8), 4658-4661.
***B.3.* Lyra, A.**, Loukas, A., Sidiropoulos, P. (**2021**). Impacts of irrigation and nitrate fertilization scenarios on groundwater resources quantity and quality of the Almyros Basin, Greece. *Water Supply*, *21*(6), 2748-2759.
***B.5.* Lyra, A.**, Loukas, A., Sidiropoulos, P., Tziatzios, G., Mylopoulos, N. (**2021**). An integrated modeling system for the evaluation of water resources in coastal agricultural watersheds: application in Almyros Basin, Thessaly, Greece. *Water Journal*, *13*(3), 268.
***B*.6. Lyra A.**, F. Pliakas, N. Kazakis, (**2017**). "Implementation of CSDA framework in the management of Almyros basin, Magnesia Prefecture, Greece." *Proceedings of the 11th International Hydrogeological Congress of Greece*, 4-6/10/2017, Athens, Greece, pp. 331-340.
***B.7.* Lyra A.**, F. Pliakas, S. Skias, I. Gkiougkis, (**2016**). "Implementation of DPSIR framework in the management of the Almyros basin, Magnesia Prefecture." *Bulletin of the Geological Society of Greece*, Vol. L, Number 2, 2016, *Proceedings of the 14th International Congress*, 25-27 May 2016, Thessaloniki, Greece, pp. 825-834.

***C*. Conference Presentations & Extended Abstracts**

***C.1.* Lyra A.**, Loukas A., Tziatzios G., Sidiropoulos P., Mylopoulos N., Voudouris K. Intercomparison of Water Resources Management Scenarios in Almyros Basin, Magnesia, Greece. Extended Abstract in Proceedings *"Youth" in the forefront: before and after World Water Forum. Online Youth Water Congress: "Emerging water challenges since COVID-19"*, 6-8 April **2022**, Online.
***C.2.* Lyra A.**, Loukas A., Sidiropoulos P., Mylopoulos N., Voudouris K. SEAWATER INTRUSION IN ALMYROS AQUIFER, IN THESSALY, GREECE**.** *Extended Abstract in Proceedings of the International Hydrogeological Congress of Greece and Cyprus*, 20-22 March **2022**, Nicosia, Cyprus.
***C.4.* Lyra, A.**, Loukas, A., Voudouris, K., & Mylopoulos, N. (**2021**, April). Evaluation of water resources management and agronomic scenarios using an integrated modelling system for coastal agricultural watersheds: The case of Almyros Basin, Thessaly, Greece. In *EGU General Assembly Conference Abstracts* (pp. EGU21-13137).
***C.5.* Lyra A.**, Loukas A., Tziatzios G., Sidiropoulos, P. & Mylopoulos N. (**2020**). "An Integrated Modeling System for the Simulation and Management of Degraded Water Resources of Coastal Agricultural Watersheds: The case of Almyros basin, Thessaly, Greece.", *Proceedings of the AgroClimaWater Conference*, Water Efficiency & Climate Resilient Agriculture International Conference, 15-17 July **2020**, Chania, Greece.

***I*.5. Certificate of Participation in Education Workshop**

A. **Techniques and tools for the delineation of protection zones in springs and wells**. 22 March 2022 Nicosia, Cyprus

B. Attending hourly online seminars in Public Safety with GIS organized by Esri on 14 September 2021, 13 October 2021, 9 November and obtaining certification in **Assessing Risk and Vulnerability**, **Designing Effective Risk Reduction Strategies,** and **Effectively Communicate Risk to Enhance Resilience using GIS**.

C. Attending hourly online seminar "**Climate Change and Water Resources: Evidence, Impacts, Adaptation**", 7 October 2021, organized by WATER MDPI Journal (WATER 2021 Webinars). (https://www.mdpi.com/about/announcements/2928)

D. **Imagery in Action MOOC** Attending an online seminar from 11 August to September 21, 2021, for Imagery applications and advanced tools to extract information from imagery and remotely sensed data ArcGIS desktop and cloud-based apps (Marathon Data representative of ESRI in Greece) and obtaining a certification in Imagery with GIS.

E. **Cartography MOOC**: Attending an online seminar from 22 April 2020 to 15 March 2021 for Digital Cartography using ArcGIS Pro software organized by ESRI (Marathon Data representative of ESRI in Greece) and obtaining a certification in Digital Cartography.

F. **Spatial Data Science: The New Frontier in Analytics MOOC**: Attending a 6-week online seminar from 28 October 2020 to 10 December 2020 for Spatial Analysis using ArcGIS Pro and ArcGIS Notebooks organized by ESRI to obtain a certification for using a comprehensive set of analytical methods and spatial algorithms, including machine learning and deep learning techniques to find patterns and tackle complex problems.

G. **Going Places with Spatial Analysis MOOC:** Attending an online seminar from 12 August 2020 to 23 September 2020 for Spatial Analysis using ArcGIS Online organized by ESRI to obtain a certification in Spatial Analysis.

H. **Do-It-Yourself-GeoApps MOOC:** Attending an online seminar from July 22, 2020 to September 5, 2020 for the Development of Geo-Information Systems Applications using the software ArcGIS AppStudio and the ArcGIS Online organized by ESRI and obtain a certification in Geo-Information Systems Applications Development.

I. **Karla School:** Summer for Young Scientists of relevant capacities with the Environment, 2-8 July 2018, Kanalia, Magnesia. Modules: Water Quality and Water Resources Management, Avifauna, Inland Fish Fauna, Agricultural Ecosystems, Ecotourism and Natural and Cultural Heritage Interpretation, Workshop on the Use of unmanned volatile medium for the inspection and monitoring of the Protected Area (duration: 56 hours).

J. **Successful Attendance of Distance Course: Global Environmental Management** Completed November 2015 at: coursera.org Online course created by: Technical University of Denmark (DTU) Level: Intermediate, Grade Achieved: 70.6%

***I*.6. Technical Skills**

A. Information Systems
B. CADD Methods
C. ArcGIS 10.+/ ArcGIS Pro
D. MODFLOW, MT3DMS, SEAWAT
E. FORTRAN Programming Language
F. R Programming Language
G. Visual Basic Programming Language (VBA)
H. Earth Engine JavaScript (Cloud Geospatial Processing)

Native Language	Greek				
Other Languages	COMPREHENSION		COMMUNICATION		WRITING
	C2	C2	C2	C2	C2
English					
	Proficiency in English (Honors, Michigan-Cambridge) Proficient Communication (Edexcel)				
	Levels: A1/A2: Basic User - B1/B2: Independent User - C1/C2: Experienced User Common European Framework of Reference for Languages				