

PERSONAL INFORMATION

Name CHRISTINA PAPADAKI

Address 46.7 km of Athens - Sounio Ave., Anavissos, 19013, Greece

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Nationality Greek
Date of birth 08.03.1984
Web of Science Researcher ID I-1644-2019

ORCID https://orcid.org/0000-0002-2594-8071

Website https://flowtech.hcmr.gr/

WORK EXPERIENCE 1/08/2013-today

Institute of Marine Biological Resources and Inland Waters, Hellenic

Dates (from-to) Centre for Marine Research, 46,7 km Athens Sounio ave. P.O. Box 712, P.C.

Name and address of employer 19013 Anavyssos

Public Research Center Research Associate

Type of business or sector Participating in EU and national research projects in the fields of:

Occupation or position held - Environmental water requirements

Main activities and - E – flows responsibilities - Hydrology

Environmental water resources managementSurface water quality - Environmental monitoring

- G.I.S. applications

Dates (from-to) 01/03/2011-31/12/2012

Name and address of employer Biology Department/ University of Patras, Patra (Greece), Secretariat of

the Department of Biology University of Patras, Campus Rio, Patras,

26500

Type of business or sector Public University
Occupation or position held Associate Scientific Staff

Main activities and responsibilities Participating in an EU Research project in the fields of hydrology, water

quality monitoring and assessment, climate change, water resources

management and ecohydrology

Dates (from-to) 01/07/2007-30/12/2007

Name and address of employer Department of Environmental Science, National Environmental Research

Institute of Denmark, Silkeborg (Denmark)

Type of business or sector
Occupation or position held
Public Research Institute
Associate Scientific Staff

Main activities and responsibilities Investigation and analysis of submerged macrophyte species as part of

the Water Framework Directive implementation, Field work

EDUCATION AND TRAINING

Dates (from - to)

Name and type of organisation providing education and training Principal subjects/occupational

skills covered

Title of qualification awarded

01/07/2013-13/2/2019

Department of Natural Resources Management & Agricultural Engineering / Agricultural University of Athens, Athens (Greece)

Development of habitat suitability curves for the estimation of ecological

flows PhD

Dates (from - to)

Name and type of organisation providing education and training Principal subjects/occupational

skils covered

Title of qualification awarded

01/10/2008-18/06/2010

National Technical University of Athens (NTUA), Metsovo, Greece

Environment and Development of Mountainous Areas, Environmental

and Ecological Sciences, Hydrology, GIS

MSc

Dates (from - to)

Name and type of organisation providing education and training Principal subjects/occupational skills covered

Title of qualification awarded

02/10/2001-15/07/2008

Department of Natural Resources Management & Agricultural Engineering / Agricultural University of Athens, Athens (Greece)

Surface and groundwater hydrology, agricultural hydraulics, soil physics,

water resources management, and environmental engineering,

Agricultural Engineering, BSc & MSc

MOTHER TONGUE OTHER LANGUAGES Greek

English: Excellent (Certificate of Proficiency in English, Michigan State

University, 2014) German: Basic

PERSONAL SKILLS AND COMPETENCES SPECIFIC ITEMS COMPUTER SOFTWARE COMPETENCES

- Microsoft Windows
- Microsoft Office (Word Processing, Spreadsheets, Databases, Information and Communication, ECDL Progress Certificate; PowerPoint, MS Project)
- ESRI ArcGIS, QGIS
- ArcSWAT
- IBM SPSS Statistics, Statistica, R Core Team
- Indicators of Hydrologic Alteration (IHA)
- Global Environmental Flow Calculator (GEFC)
- Photoshop CC, GIMP
- Pix4D
- Python, GitHub, GitLab, Machine Learning

DISTINCTIONS - AWARDS

Post-doc fellowship from the Hellenic State Scholarships Foundation. Project entitled: 'Hydrological regime modification to better balance the tradeoffs between human and environmental needs' (2019). This research is 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 "Reinforcement of Postdoctoral Researchers - 2nd Cycle" (MIS-5033021), implemented by the State Scholarships Foundation (IKY).

Associate Editor at the "Hydrological Sciences Journal" –

Peer Reviewed Journal.

https://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=thsi20

TRAINING - WORKSHOPS

- **1.** DHI: MIKE HYDRO River Introduction to River and Channel Modelling 24- 25 November 2016, Athens, Greece
- **2.** DHI: MIKE HYDRO River Introduction to integrated catchment modelling using the following software applications: MIKE SHE and MIKE 11, 13 December 2013, Athens, Greece
- 3. IHA: Indicators of Hydrological Alteration Training, 17 February 2015
- **4.** Elsevier Researcher Academy: Funding Hacks for Researchers, 21 August, 2018
- **5.** Elsevier Researcher Academy: Successful research grant applications getting it right, 22 August, 2018
- **6.** Elsevier Researcher Academy: How researchers store, share and use data, 23 August, 2018
- **7.** Elsevier Researcher Academy: Structuring your article correctly, 31 August, 2018
- **8.** Elsevier Researcher Academy: Using proper manuscript language, 31 August, 2018
- **9.** NASA's Applied Remote Sensing Training Program (ARSET): Using Earth Observations to Monitor Water Budgets for River Basin Management, March 13 April 3, 2019
- **10.** A new karst modeling approach along different tectonic contacts. IGCP-715 2020-2021. under the UNESCO IGCP umbrella. Participation in IGCP-715 First Workshop 19/07/2021
- **11.** Machine Learning for All, 2022 an online non-credit course authorized by University of London and offered through Coursera Verify at: https://coursera.org/verify/F6DRGGU3TZ8R
- **12.** MOOC Machine Learning in Weather & Climate from the European Centre for Medium-Range Weather Forecasts (ECMWF)

PARTICIPATION IN RESEARCH PROJECT

- "Estimation of Environmental Flows using Unmanned Vehicles and Acoustic Equipment based on fish habitat requirements FlowTech". (2021 2024) The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "2nd Call for H.F.R.I. Research Projects to support Post-Doctoral Researchers" (Project Number: 454). https://flowtech.hcmr.gr/ Principal Investigator
- 2. "Monitoring and Recording of the Water Status (Quality, Quantity, Pressures, Use) in Greece" (2017 2023) National project: Y.ME.PER.A.A. 2014-2020, https://wfd.hcmr.gr/Project coordinator: Dr. E. Dimitriou
- **3.** "Development of a decision support tool for the sustainable management of water resources, in combination to the optimisation of power production" (2015 2017) National project: Programming Agreements between Research Centers GSRT/IKY/SIEMENS 2014-2016, https://imbriw.hcmr.gr/imbriw-siemens/ Project coordinator: Dr. M. Stoumpoudi
- **4.** "System for the Assessment of Acceptable Ecological Flows in Rivers and Streams of Greece" (2013 2015) National project: ECOFLOW, https://ecoflow.hcmr.gr/ Project coordinator: Dr. E. Dimitriou
- 5. "Adaptive Strategies to Mitigate the Impacts of Climate Change on European Freshwater Ecosystems" (2010-2014) FP7 EU DG: Research European Union's Seventh Programme for research, technological development and demonstration under grant agreement Theme 6 (Environment including Climate Change), https://climate-adapt.eea.europa.eu/en/about coordinated by University College London
- **6.** "Ολοκληρωμένη & Οικονομικά Βιώσιμη Λύση, Internet of Things" https://www.openeliot.com/

ABSTRACT PROFILE

Christina is a postdoctoral fellow and research associate in the Hellenic Centre for Marine Research - Institute of Marine Biological Resources and Inland Waters, with expertise in Ecological flows, Hydrology, Water Management and Environmental Engineering. Environmental Management of Mountain Areas. She received her BSc in Water Resources Management from the Agricultural University of Athens (AUA) - EL in 2008 and attended an MSc in Environment and Development of Mountain Regions at the National Technical University of Athens - EL, during the period 2008-2010. In 2019 she received her PhD from the AUA, - EL on a thesis titled "Development of fish habitat suitability criteria for the estimation of ecological flows". In 2020 she received a Post-doc fellowship from the Hellenic State Scholarships Foundation (IKY). So far in her research career, she has participated as research associate in more than 8 national and European research projects and she is currently principal investigator in a research project supported by the Hellenic Foundation for Research and Innovation (https://flowtech.hcmr.gr/). She has worked as a scientific book editor and she is associated as Member of editorial board in a Science Citation Index Expanded® (SCIE) and Social Sciences Citation Index® (SSCI) journal. She has published > 19 research papers in peer-reviewed international journals, and > 20 articles and abstracts in conference proceedings. She is a reviewer in International, peer-reviewed Journals - https://www.webofscience.com/wos/author/record/I-1644-2019. Finally, she is a presenter of an environmental documentary series (Green Stories in ERT3, a Greek free-to-air television channel owned and operated by state-owned public broadcaster Hellenic Broadcasting Corporation).

PUBLICATIONS

PUBLICATIONS IN INTERNATIONAL, PEERREVIEWED JOURNALS

- **1. Papadaki Ch.,** Theodoropoulos C., Soulis K.X., Generali K.A., Psomiadis, E., & Dimitriou, E. 2022. Effects of forest fires on headwater streamflow and the habitat suitability for benthic macroinvertebrates. Hydrological Sciences Journal, 67(9), 1356–1371. https://doi.org/10.1080/02626667.2022.2081508
- **2.** Soulis K.X., Generali K.A., **Papadaki Ch.**, Theodoropoulos C., Psomiadis E. 2021. Hydrological Response of Natural Mediterranean Watersheds to Forest Fires. Hydrology, 8, 15. https://doi.org/10.3390/hydrology8010015
- **3. Papadaki Ch.,** Dimitriou E. 2021. River Flow Alterations Caused by Intense Anthropogenic Uses and Future Climate Variability Implications in the Balkans. Hydrology, 8, 7. https://doi.org/10.3390/hydrology8010007
- **4. Papadaki Ch.,** Soulis K.X., Bellos V. et al. 2020. Estimation of a Suitable Range of Discharges for the Development of Instream Flow Recommendations. Environ. Process. https://doi.org/10.1007/s40710-020-00456-1
- **5.** Mitsopoulos G., Theodoropoulos C., **Papadaki Ch.**, Dimitriou E., Santos J.M., Zogaris S. and Stamou A., 2020. Model-based ecological optimization of vertical slot fishways using macroinvertebrates and multispecies fish indicators. Ecological Engineering, 158, p.106081. https://doi.org/10.1016/j.ecoleng.2020.106081
- **6.** Theodoropoulos C., Stamou A., Vardakas L., **Papadaki Ch.**, Dimitriou E., Skoulikidis N., & Kalogianni E. 2020. River restoration is prone to failure unless pre-optimized within a mechanistic ecological framework | Insights from a model-based case study. Water Research, 173. https://doi.org/10.1016/j.watres.2020.115550
- **7.** Papaioannou G., **Papadaki Ch.**, Dimitriou E., 2019. Assessing Weighted Usable Area Sensitivity Using UAV and 2D Hydraulic Modelling, Ecohydrology, https://doi.org/10.1002/eco.2182
- **8.** Theodoropoulos C., **Papadaki Ch.**, Vardakas L., Dimitriou E., Kalogianni E., Skoulikidis N., 2019. Conceptualization and pilot application of a model-based environmental flow assessment adapted for intermittent rivers, Aquatic Sciences. 81: 10, https://doi.org/10.1007/s00027-018-0605-0
- **9.** Stamou A., Polydera A., Papadonikolaki G., Martinez-Capel F., Muñoz-Mas R., **Papadaki Ch.**, & Dimitriou, E., 2018. Determination of environmental flows in rivers using an integrated hydrological-hydrodynamic-habitat modelling approach. Journal of environmental management, 209, 273-285,
- https://doi.org/10.1016/j.jenvman.2017.12.038
- **10. Papadaki Ch.**, Soulis K., Ntoanidis L., Zogaris S., Dercas N., Dimitriou E., 2017. Comparative Assessment of Environmental Flow Estimation Methods in a Mediterranean Mountain River, Environmental Management., https://doi.org/10.1007/s00267-017-0878-4
- **11.** Vardakas L., Kalogianni E., **Papadaki Ch.**, et al., 2017. Defining critical habitat conditions for the conservation of three endemic and endangered cyprinids in a Mediterranean intermittent river before the onset of drought. Aquatic Conservation: Marine and Freshwater Ecosystems, https://doi.org/10.1002/aqc.2735
- **12. Papadaki Ch.,** Bellos V., Stoumboudi M., Kopsiaftis G. and Dimitriou E., 2017. Evaluation of streamflow habitat relationships using habitat suitability curves and HEC-RAS, European Water, 58: 127-134,
- **13. Papadaki Ch.,** Bellos V., Ntoanidis L., Dimitriou E., 2017. Comparison of West Balkan adult trout habitat predictions using a Pseudo-2D and a 2D hydrodynamic model. Hydrology Research, 1–13, https://doi.org/10.2166/nh.2016.352

- **14. Papadaki, Ch.,** Soulis K., Muñoz-Mas R., Ntoanidis L., Zogaris S., Dercas N., & Dimitriou E., 2016. Potential impacts of climate change on flow regime and fish habitat in montane rivers of the southwestern Balkans, Science of the Total Environment, https://doi.org/10.1016/j.scitotenv.2015.06.134
- **15.** Muñoz-Mas R., **Papadaki Ch.**, Martínez-Capel F., Zogaris S., Ntoanidis, L., Dimitriou, E. 2016. Generalized additive and fuzzy models in environmental flow assessment: A comparison employing the West Balkan trout (Salmo farioides; Karaman, 1938). Ecological Engineering 91: 365–377, https://doi.org/10.1016/j.ecoleng.2016.03.009
- **16.** Soulis K.X., Dercas N. and **Papadaki Ch.** 2015. Effects of forest roads on the hydrological response of a small-scale mountain watershed in Greece. Hydrol. Process., 29: 1772–1782, https://doi.org/10.1002/hyp.10301
- **17. Papadaki Ch.**, Muñoz-Mas R., Ntoanidis L., Martinez-Capel F., Zogaris, S., Dimitriou, E., 2015. Desarrollo de modelos de idoneidad de hábitat para la trucha balcánica (Salmo fariodes, Karaman) y estimación de caudales ecológicos en ríos de montaña de Grecia, Cuad. Soc. Esp. Cienc. For. 41: 253-268
- **18.** Landkildehus F., Søndergaard M., Beklioglu M., Adrian R., Angeler D.G., Hejzlar J., Papastergiadou E., Zingel P., Çakiroğlu A.I., Scharfenberger U., Drakaree S., Nõges T., Sorff M., Stefanidis K., Tavşanoğlub N., Trigale C., Mahdyd A., **Papadaki Ch.,** Tuvikene L., Larsen S., Kernan M., Jeppesen E., 2014. Climate change effects on shallow lakes: Design and preliminary results of a cross- European climate gradient mesocosm experiment. Estonian Journal of Ecology 63 (2): 71–89, doi: 10.3176/eco.2014.2.

BOOKS - BOOK CHAPTERS

Dimitriou E. and **Papadaki Ch.** (eds), 2021. Environmental Water Requirements in Mountainous Areas, Elsevier, Paperback ISBN: 9780128193426; eBook ISBN: 9780128193433, Publication Date: 1st Edition - October 19, 2021

Papadaki, Ch., 2021. Sustainable use of mountain water resources. *Environmental Water Requirements in Mountainous Areas*, 281–292. https://doi.org/10.1016/B978-0-12-819342-6.00005-1

PUBLICATIONS IN PEER REVIEWED CONFERENCE PROCEEDINGS

- **1.Papadaki Ch.**, Kavvadias A., Zogaris S., and Dimitriou E., 2022. A Short Review of Hydraulic-Habitat Modelling for Environmental Flows, Proceedings of the Marine and Inland Waters Research Symposium 2022 former Panhellenic Symposium on Oceanography & Fisheries, AKS Porto Heli Conference Center, Porto Heli, Argolida, Greece 16-19 September 2022, available at: https://symposia.gr/wpcontent/uploads/2022/10/Proceedings 5.1 0.22.pdf, accessed at: February062023
- **2. Papadaki Ch.,** Bellos V., Soulis K., and Dimitriou E., 2019. Incorporating biological components to analyse the hydrological variability for ecological flow recommendations. Proceedings of the 11th World Congress on Water Resources and Environment (EWRA 2019) "Managing Water Resources for a Sustainable Future" Madrid, Spain, 25-29 June 2019
- **3. Papadaki Ch.,** Bellos V., Stoumboudi M., Kopsiaftis G., and Dimitriou E., 2017. Evaluation of streamflow habitat relationships using habitat suitability curves and HEC-RAS, Panta Rhei. Proceedings of the 10th World Congress of EWRA on Water Resources and Environment, 5-9 July 2017, Athens, Greece
- **4. Papadaki Ch.,** Soulis K., Muñoz-Mas R., Ntoanidis L., Zogaris S., Dercas N., & Dimitriou E., 2015, A new approach for determining the environmental flow regime in a Greek river, 9th World Congress European Water Resources Association, ISBN: 978-975-441-442-4, pp. 291, Istanbul, Turkey
- **5. Papadaki Ch.,** Vardakas L., Dimitriou E., Kommatas D., Kalogianni E., 2015. Microhabitat use by two Greek endemic chub species, in two Greek rivers Preliminary results, 11th Panhellenic Symposium on Oceanography and Fisheries, pp. 629- 632 Mytilene, Lesvos island, Greece
- **6.** Muñoz-Mas R., **Papadaki Ch.**, Ntoanidis L., Martinez-Capel F., Zogaris S., and Dimitriou E., 2015. Habitat suitability models for West Balkan Trout for the estimation of environmental flows in a mountain river of Greece, 36th IAHR World Congress, The Hague, the Netherlands
- 7. Papadaki Ch., Mentzafou A., Ntoanidis L., Zogaris S., Evelpidou N., Argyropoulos D., Dimitriou E., 2014. Habitat hydraulic modeling for assessing changes of mesohabitat types of a Greek mountainous river, EGU, March, 2014. Austria
- **8. Papadaki Ch.,** Ntoanidis L., Zogaris S., Francisco Martinez-Capel, Rafael Munoz-Mas, Evelpidou N., Dimitriou E., 2014. Habitat hydraulic modeling for environmental flow restoration in upland streams in Greece, 12th International Conference "Protection & Restoration of the Environment, Skiathos, June 29th July 3rd 2014, ISBN 978-960-88-490-5-1, p.385.
- 9. Evelpidou N., Dimitriou E., Papadaki Ch., Stamatakis M., Ntoanidis L., Koutsomichou I., Anastasatou M., Karkani A., 2014, A correlation of the structure and chemical composition of the habitat sediments with the ecological flow of Acheloos river, in Trikala Prefecture, Thessaly, Central Greece, 10th International Congress of Hellenic Geographical Society
- **10. Papadaki Ch.,** Dimitriou E., Mentzafou A., Skoulikidis N., Zogaris S., Oikonomou A., Stoumpoudi M., 2016. Eco-hydraulic models and ecological flow: applications in Greece. In S. Zogaris, N. Skoulikidis, A. Oikonomou, D. Mpompori, M. Gkini, & K. Stergiou (Eds.), EU Directive 2000/60 and the conservation of inland waters: Research and Proposals (pp. 38-40). Athens, IMBRIW-HCMR (in Greek)

- **11.** Ntoanidis L., Mentzafou A., **Papadaki Ch.,** Zogaris S., Evelpidou, N., Argyropoulou Pappa, M., & Dimitriou, E., 2015. Investigation of hydraulic approaches for assessing spatial variation of habitats in a river-Acheloos River case study. Workshop: "The ecological flow in rivers and the importance of its correct estimation", second workshop of the project "ECOFLOW: System of estimation of the acceptable ecological flow in rivers and streams in Greece", 3 February 2015, Athens. (in Greek)
- **12. Papadaki, Ch.,** Ntoanidis, L., Mentzafou, A., Zogaris, S., Evelpidou, N., ArgyropoulouPappa, M., & Dimitriou, E., 2015. Modeling habitats to simulate and assess the differences between habitat eligibility criteria, focusing on the trout of Greek rivers. Workshop: "The ecological flow in rivers and the importance of its correct estimation", second workshop of the project "ECOFLOW: System of estimation of the acceptable ecological flow in rivers and streams in Greece", 3 February 2015, Athens. (in Greek)

EVALUATION AND PEER REVIEW

Evaluation of European Research Projects Proposals 2022 – Biodiversa European Biodiversity Partnership

JOURNAL REVIEWER

https://www.webofscience.com/wos/author/record/I-1644-2019

OTHER ACTIVITIES

Presenter of an environmental documentary series (Green Stories in ERT3, a Greek free-to-air television channel owned and operated by state-owned public broadcaster Hellenic Broadcasting Corporation).

OTHER SKILLS

Marathon Runner (Time in classic marathon of Athens 2017: 04:57:35)

Skiing, Climbing, Horseback riding and Swimming