
Place and date of birth: Patras, Greece, 31 July 1978

Citizenship: Greek

Languages: Greek (mother tongue), English, French, German

Office address

Hellenic Centre for Marine Research

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EDUCATION

09/2008 – 04/2012	MSc in Waste Management, Hellenic Open University, Greece
07/2005 – 11/2010	PhD in Hydrogeology and Isotope Hydrology, National and Kapodistrian University of Athens, Greece
09/2002 – 03/2004	MSc in Water Resources Science and Technology, National Technical University of Athens, Greece
09/1997 – 03/2002	Geology studies, National and Kapodistrian University of Athens, Greece

EMPLOYMENT HISTORY

12/2021 – present	Scientific personnel at Hellenic Centre for Marine Research, Institute of Marine Biological Resources and Inland Waters, Greece
10/2014 – 10/2021	Isotope hydrologist, International Atomic Energy Agency, Austria
04/2013	Post-doc in isotope hydrology, University of Ghent, Belgium
01/2006 – 10/2014	Research Associate, National and Kapodistrian University of Athens, Greece

EXPERTISE AND RESEARCH INTERESTS

- 12 years of professional experience in isotope hydrology, hydro(geo)logy, water resources management
- Coordinator of IAEA international research projects, participation in EU-funded and national (Greek) research projects, and national and international scientific collaborations
- Technical officer on isotope hydrology in > 20 UN Member States (e.g., China, Croatia, Laos, Malta, Mauritius, Mongolia, Namibia, Sierra Leone, Thailand, Tunisia, Zimbabwe)
- Team member of the IAEA Global Network of Isotopes in Rivers (GNIR) (2014-2021)
- Research interests: Isotope hydrology, Hydro(geo)logy, Nitrogen pollution, Aquatic chemistry, Atmospheric pollution, Water resources management

PUBLICATIONS AND SUPERVISION

- >20 articles in international peer-reviewed journals and 30+ contributions (talks and posters) at international conferences
- 4 MSc students supervised under Master's degree program "Environment and Health, Capacity Building for Decision Making", University of Athens, Greece
- Reviewer for 10+ international scientific journals
- Guest Editor of Special issue on "Tracing of Nitrogen Using Stable Isotopes from Precipitation to River and Groundwater Systems" (Water mdpi journal)
- *h*-index: 10 (google scholar), >470 citations

TEACHING

- 7+ years of lecturing experience on isotope hydrology, hydrogeology, water pollution, management of water resources under European MSc programs and IAEA training courses.

HONORS, SCHOLARSHIPS AND AWARDS

- 2020: IAEA Staff Award for Excellence
- 2002: "First in class" prize by the Pantia-Ralli endowment.
- 2002-2006: Scholarship in "Environmental Geology" by the Greek State Scholarship's Foundation.
- 2000: "First in class during Undergraduate studies (1997-1998)" honorary award by the Greek State Scholarship's Foundation

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- COST WATSON action (A19120 - WATer isotopeS in the critical zONe: from groundwater recharge to plant transpiration) as external expert on nitrate isotope applications in water resources.
- Member of IAH (International Association of Hydrogeologists)
- Member of IAHS (International Association of Hydrological Sciences)
- Member of the Geotechnical Chamber of Greece
- Member of the Geological Society of Greece

PUBLICATIONS RECORD

Researchgate: <https://www.researchgate.net/profile/loannis-Matiatos>

Googlescholar: <https://scholar.google.at/citations?user=6iCsmXEAAA&hl=en>

Publications in peer-reviewed scientific journals

- Matiatos, I., Wassenaar, L.I., Monteiro, L.R., Terzer-Wassmuth, S. and Douence, C., 2022. Isotopic composition ($\delta^{15}\text{N}$, $\delta^{18}\text{O}$) of nitrate in high-frequency precipitation events differentiate atmospheric processes and anthropogenic NO_x emissions. *Atmospheric Research*, 267, p.105971.
- Vystavna, Y., Harjung, A., Monteiro, L.R., Matiatos, I., Wassenaar, L., 2021. Stable isotopes in global lakes integrate catchment and climatic controls on evaporation. *Nature Communications* 12, 7224.
- Monteiro, L.R., Terzer-Wassmuth, S., Matiatos, I., Douence, C. and Wassenaar, L.I., 2021. Distinguishing in-cloud and below-cloud short and distal N-sources from high-temporal resolution seasonal nitrate and ammonium deposition in Vienna, Austria. *Atmospheric Environment*, p.118740.
- Blarasin, M., Matiatos, I., Cabrera, A., Lutri, V., Giacobone, D., Quinodoz, F.B., Matteoda, E., Eric, C., Felizzia, J. and Albo, J.G., 2021. Characterization of groundwater dynamics and contamination in an unconfined aquifer using isotope techniques to evaluate domestic supply in an urban area. *Journal of South American Earth Sciences*, 110, p.103360.
- Vystavna, Y., Matiatos, I. and Wassenaar, L.I., 2021. Temperature and precipitation effects on the isotopic composition of global precipitation reveal long-term climate dynamics. *Scientific Reports*, 11(1), pp.1-9.
- Villalobos-Forbes, M., Esquivel-Hernández, G., Sánchez-Murillo, R., Sánchez-Gutiérrez, R. and Matiatos, I., 2021. Stable isotopic characterization of nitrate wet deposition in the tropical urban atmosphere of Costa Rica. *Environmental Science and Pollution Research*, pp.1-16.
- Re, V., Kammoun, S., Sacchi, E., Trabelsi, R., Zouari, K., Matiatos, I., Allais, E. and Daniele, S., 2021. A critical assessment of widely used techniques for nitrate source apportionment in arid and semi-arid regions. *Science of The Total Environment*, 775, p.145688.
- Matiatos, I., Wassenaar, L.I., Monteiro, L.R., Venkiteswaran, J.J., Gooddy, D.C., Boeckx, P., Sacchi, E., Yue, F.J., Michalski, G., Alonso-Hernández, C. and Biasi, C., 2021. Global patterns of nitrate isotope composition in rivers and adjacent aquifers reveal reactive nitrogen cascading. *Communications Earth & Environment*, 2(1), pp.1-10.
- Vystavna, Y., Matiatos, I. and Wassenaar, L.I., 2020. 60-year trends of $\delta^{18}\text{O}$ in global precipitation reveal large scale hydroclimatic variations. *Global and Planetary Change*, 195, p.103335.
- Blarasin, M., Cabrera, A., Matiatos, I., Lutri, V., Maldonado, L., Giacobone, D., Matteoda, E., Becher Quinodoz, F., Giuliano Albo, J., Eric, C. and Felizzia, J., 2020. Application of isotope techniques to enhance the conceptual hydrogeological model and to assess groundwater sustainability in the Pampean plain in Córdoba, Argentina. *Isotopes in Environmental and Health Studies*, 56(5-6), pp.402-417.
- Blarasin, M., Cabrera, A., Matiatos, I., Quinodóz, F.B., Albo, J.G., Lutri, V., Matteoda, E. and Panarello, H., 2020. Comparative evaluation of urban versus agricultural nitrate sources and sinks in an unconfined aquifer by isotopic and multivariate analyses. *Science of The Total Environment*, 741, p.140374.
- Kazakis, N., Matiatos, I., Ntona, M.M., Bannenberg, M., Kalaitzidou, K., Kaprara, E., Mitrakas, M., Ioannidou, A., Vargemezis, G. and Voudouris, K., 2020. Origin, implications and management strategies for nitrate pollution in surface and ground waters of Anthemountas basin based on a $\delta^{15}\text{N-NO}_3^-$ and $\delta^{18}\text{O-NO}_3^-$ isotope approach. *Science of The Total Environment*, 724, p.138211.
- Vystavna, Y., Schmidt, S.I., Kopáček, J., Hejzlar, J., Holko, L., Matiatos, I., Wassenaar, L.I., Persoiu, A., Badaluta, C.A. and Huneau, F., 2020. Small-scale chemical and isotopic variability of hydrological pathways in a mountain lake catchment. *Journal of Hydrology*, 585, p.124834.
- Romanelli, A., Soto, D.X., Matiatos, I., Martínez, D.E. and Esquiú, S., 2020. A biological and nitrate isotopic assessment framework to understand eutrophication in aquatic ecosystems. *Science of the Total Environment*, 715, p.136909.
- Luu, T.N.M., Do, T.N., Matiatos, I., Panizzo, V.N. and Trinh, A.D., 2020. Stable isotopes as an effective tool for N nutrient source identification in a heavily urbanized and agriculturally intensive tropical lowland basin. *Biogeochemistry*, 149(1), pp.17-35.
- Kamdee, K., Corcho Alvarado, J.A., Occarach, O., Hunyek, V., Wongsit, A., Saengkorakot, C., Chanruang, P., Polee, C., Khaweerat, S., Matiatos, I. and Matsumoto, T., 2020. Application of isotope techniques to study groundwater resources in the unconsolidated aquifers along the Ping River (Thailand). *Isotopes in environmental and health studies*, 56(2), pp.95-110.
- Matiatos, I., Varouchakis, E.A. and Papadopoulou, M.P., 2019. Performance evaluation of multiple groundwater flow and nitrate mass transport numerical models. *Environmental Modeling & Assessment*, 24(6), pp.659-675.
- Matiatos, I., Paraskevopoulou, V., Lazogiannis, K., Botsou, F., Dassenakis, M., Ghionis, G., Alexopoulos, J.D. and Poulos, S.E., 2018. Surface-ground water interactions and hydrogeochemical evolution in a fluvio-deltaic setting: the case study of the Pinios River delta. *Journal of Hydrology*, 561, pp.236-249.
- Matiatos, I., 2016. Nitrate source identification in groundwater of multiple land-use areas by combining isotopes and multivariate statistical analysis: A case study of Asopos basin (Central Greece). *Science of the Total Environment*, 541, pp.802-814.
- Nicolopoulou-Stamati, P., Matiatos, I., Kotampasi, C., Stamatis, P., Sascio, A.J., Protopapa, E. and Hens, L., 2015. Training in environmental health necessitates tacit knowledge. *Environment, Development and Sustainability*, 17(2), pp.299-314.
- Matiatos, I., Alexopoulos, A. and Godelitsas, A., 2014. Multivariate statistical analysis of the hydrogeochemical and isotopic composition of the groundwater resources in northeastern Peloponnesus (Greece). *Science of the Total Environment*, 476, pp.577-590.
- Nicolopoulou-Stamati, P., Xiangli, N., Matiatos, I., Kotampasi, C., Stamatis, P., Sascio, A.J. and Hens, L., 2013. Green Economy: the Contribution of Corporate Social Responsibility. *Mechanism of Economic Regulation*, (2), pp.30-44.
- Matiatos, I. and Alexopoulos, A., 2011. Application of stable isotopes and hydrochemical analysis in groundwater aquifers of

Argolis Peninsula (Greece). *Isotopes in Environmental and Health Studies*, 47(4), pp.512-529.

Publications in peer-reviewed conference proceedings

- Matiatos, I., Dimitriou, E., Papadopoulos, A., and Arvanitis, P., 2022. Systematic monitoring of water isotopes in Pinios River Basin-preliminary results. 12th International Hydrogeological Conference, 20-22 of March 2022, Cyprus (accepted).
- Matiatos, I., Dimitriou, E., Papadopoulos, A., and Arvanitis, P., 2022. Preliminary findings of a water isotope survey in Evrotas River Basin. 12th International Hydrogeological Conference, 20-22 of March 2022, Cyprus (accepted).
- Heracleous, T., Christofi, C., Rigas, M., Manolaki, P. and Matiatos, I., 2022. Assessment of the origin of nitrate pollution in groundwater in Cyprus – The case of Tremithos river bed and Kiti-Pervolia aquifer. 12th International Hydrogeological Conference, 20-22 of March 2022, Cyprus (accepted).
- Matiatos, I., 2020. A global synthesis of dual nitrate isotope values in rivers and groundwaters (No. EGU2020-22154). Copernicus Meetings.
- Matiatos, I. and Alexopoulos, A., 2017. Application of a General Linear Model to predict the isotopic composition of regional shallow groundwater, 11th International Hydrogeological Congress 2, 341-350.
- Matiatos, I., Ilija, I., and Tsangaratos, P., 2017. Statistical analysis of trends distribution of water isotopes in precipitation in Switzerland, 11th International Hydrogeological Congress 2, 351-361.
- Matiatos, I., Paraskevopoulou, V., Botsou, F., Dassenakis, M., Lazogiannis, K., Ghionis, G. and Poulos, S., 2016, April. Hydrogeochemical assessment of groundwater quality in a river delta using multivariate statistical techniques. In EGU General Assembly Conference Abstracts (pp. EPSC2016-14568).
- Matiatos, I., Alexopoulos, J.D., Panagopoulos, A., Nastos, P.T., Kotsopoulos, S., Ghionis, G. and Poulos, S., 2016, April. Climate change impact on freshwater resources in a deltaic environment: A groundwater modeling study. In EGU General Assembly Conference Abstracts (pp. EPSC2016-14898).
- Matiatos, I., Papadopoulou, M.P. and Varouchakis, E.A., 2016, April. Statistical Performance Evaluation of Spatiotemporal Characteristics of Groundwater Flow and Contaminant Mass Transport. In EGU General Assembly Conference Abstracts (pp. EPSC2016-6781).
- Alexopoulos, J.D., Matiatos, I., Dilalos, S., Vassilakis, E., Panagopoulos, A., Ghionis, G., Poulos, S., 2014. Investigation of the phreatic aquifer development at the Pinios Delta basin (Thessaly), through a combination of geophysical and hydrogeological data, 10th Congress of the Hellenic Geographical Society.
- Matiatos, I., Paraskevopoulou, V., Dassenakis, M., Alexopoulos, J., Panagopoulos, A., Lazogiannis, K., Poulos, S., Arampatzis, G., Ghionis, G., Kotsopoulos, S., Botsou, F., Teou, X., Sakkelari, A., Diamantis, V., 2014. Groundwater flow regime and quality assessment of the alluvial aquifer in the deltaic environment of river Pinios (Thessaly), 10th Congress of the Hellenic Geographical Society.
- Matiatos, I., Varouchakis, E.A. and Papadopoulou, M.P., 2015, April. Estimation of water table level and nitrate pollution based on geostatistical and multiple mass transport models. In EGU General Assembly Conference Abstracts (p. 4049).
- Pisinaras, V., Ilias, A., Paraskevas, C., Poulos, S., Matiatos, I., Alexopoulos, J., Kotsopoulos, S., Alexiou, I., Lazogiannis, K., Arampatzis, G., Kalogianni, H., Tsekoura, D., Panagopoulos, A. 2014. 10th International Hydrogeological Congress of Greece 1.
- Lazogiannis, K., Paraskevopoulou, V., Poulos, S., Teou, X., Kotsopoulos, S., Farsiroto, E., Ghionis, G., Matiatos, I., Panagopoulos, A., Sifnioti, D., Giannouli, D., Tsanakas, K., Dassenakis, M., Drakopoulos, P.G., Botsou, F., Alexiou, I., Alexopoulos, J.D., 2014. 12th International Conference on Protection and Restoration of the Environment.
- Kotsopoulos, S., Poulos, S.E., Panagopoulos, A., Nastos, P., Skiannis, G., Ghionis, G., Alexiou, I., Ilias, A., Matiatos, I., Pisinaras, V., Lazogiannis, K., Arampatzis, G., Kosmidis, E., Boskidis, I., Pappas, I., 2014. Proc. of International Water Association (IWA).
- Poulos, S.E., Alexopoulos, I., Dassenakis, M., Kotsopoulos, S., Lazogiannis, K., Matiatos, I., Paraskevopoulou, V., Sifnioti, D.E., Ghionis, G., Alexiou, I. and Panagopoulos, A., 2013, September. An investigation of the impact of the climate change on river deltas. Case Study: the delta of R. Pinios (Thessaly, Greece)–Concept and preliminary results on surface water environmental state. In Proceedings of the 13th International Conference on Environmental Science and Technology Athens, Greece (pp. 5-7).
- Matiatos, I. and Alexopoulos, A., 2013. Analysis of temporal hydrochemical and isotopic variations in spring waters of eastern Peloponnesus (Greece). *Bulletin of the Geological Society of Greece*, 47(2), pp.750-760.
- Matiatos, I. and Evelpidou, N., 2013. Assessment of groundwater quality contamination by nitrate leaching using multivariate statistics and Geographic Information Systems. *Understanding freshwater quality problems in a changing world*, 361, pp.183-190.
- Matiatos, I. and Lappas, I. 2013. Multivariate statistical evaluation of groundwater quality characteristics in western Chalkidiki, Greece. *Bulletin of the Geological Society of Greece*, V47.
- Lappas, I. and Matiatos, I., 2013. Modelling of rainfall data using stochastic methods (Seasonal ARIMA), Case study of Atalanti meteorological station in Central–Eastern Greece. *Proceedings of the 13th International Congress, Chania*.
- Matiatos, I. and Alexopoulos, A., 2007, May. Isotopic and chemical investigation of water samples in Argolis Peninsula (Greece). In *Proceedings of International Symposium Advances in Isotope Hydrology and Its Role in Sustainable Water Resources Management (IHS-2007) (Vol. 2, pp. 101-9)*. IAEA Publishing Vienna, Austria.

Technical reports

- Zouridakis, N., Arnidi, E., Matiatos, I., 2009: Isotopic analysis of O-18 and Tritium of the atmospheric precipitation in Greece, DEMO 2009/1G, Greek National Centre of Scientific Research “Demokritos”, p. 19, Athens, Greece.
- Zouridakis, N., Arnidi, E., Matiatos, I., 2009: Oxygen-18 and Tritium isotopes in groundwater samples for the period 2004-2008, DEMO 2009/2G, Greek National Centre of Scientific Research “Demokritos”, p. 28, Athens, Greece.