PERSONAL INFORMATION

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ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΕΜΠΕΙΡΙΑ

02/2022-Σήμερα

Επίκουρος Καθηγητής: Γεωστατιστική στην Περιβαλλοντική Μεταλλευτική-Βιώσιμη Ανάπτυξη
Assistant Professor: Geostatistics in Environmental Mining-Sustainable Development, School of Mineral Resources Engineering, Technical University of Crete

Σχολή Μηχανικών Ορυκτών Πόρων. Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης (ΦΕΚ μονιμοποίησης 934, 20/2/2026)

▪ **Διδασκαλία:** Εφαρμοσμένη Γεωστατιστική, Πιθανότητες & Στατιστική για Μηχανικούς, Γεωστατιστικές Μέθοδοι Προσομοίωσης, Προγραμματισμός για Μηχανικούς, Πεδίο: Γεωστατιστική/Επιστήμη Δεδομένων (Νέο Μεταπτυχιακό).

▪ **Έρευνα:** Μαθηματική/Εφαρμοσμένη Γεωστατιστική, Χωρο-χρονική γεωστατιστική/Περιβαλλοντική στατιστική/ Στοχαστικές Διεργασίες, Περιβαλλοντική Μεταλλευτική & Βιώσιμη Ανάπτυξη, Εκτίμηση περιβαλλοντικών επιπτώσεων / Στόχοι Βιώσιμης Ανάπτυξης (SDGs), Ανάλυση επικινδυνότητας / Ανάλυση κόστους–οφέλους, Μαθηματικά στις γεωεπιστήμες / Ανάλυση χρονοσειρών, Υπόγεια ύδατα / Υδατικοί πόροι / Μηχανική μάθηση

09/2025- Σήμερα

Συντονιστής Joint MSc Programme EURECA PRO

International Joint Master in Responsible Consumption and Production under Sustainable Mining Montanuniversität Leoben and Technical university of Crete, School of mineral resources Engineering.

9/2023- Σήμερα

Coordinator: "Educational Innovation", EURECA-PRO University Alliance

EURECA-PRO Doctoral School: TUC Coordinator

9/2024- 03/2025

Επισκέπτης ερευνητής στο πλαίσιο του Ερευνητικού προγράμματος ΕΛΙΔΕΚ GEONE. Πολυτεχνείο Μιλάνου, Σχολή Πολιτικών Μηχανικών και Μηχανικών Περιβάλλοντος.

Advancing Geostatistical Modeling of Hydrogeological Properties for Groundwater Resources Management

ΕΚΠΑΙΔΕΥΣΗ ΚΑΙ ΚΑΤΑΡΤΙΣΗ

2007-2012

Διδακτορικό Δίπλωμα – Χωρο-χρονική Γεωστατιστική στις Γεωεπιστήμες Πρόγραμμα Μεταπτυχιακών Σπουδών Γεωτεχνολογία και Περιβάλλον

Πολυτεχνείο Κρήτης, Σχολή Μηχανικών Ορυκτών Πόρων
Χωρο-χρονική γεωστατιστική, Υδατικοί πόροι, Στοχαστικές μέθοδοι, Ανάλυση δεδομένων, Χρονοσειρές, Εξόρυξη δεδομένων, Μηχανική μάθηση, Χαρτογράφηση.

2004-2006

Μεταπτυχιακό Δίπλωμα Ειδίκευσης, ΠΜΣ Γεωτεχνολογία και Περιβάλλον Ειδικότητα: Γεωστατιστική

Πολυτεχνείο Κρήτης Σχολή Μηχανικών Ορυκτών Πόρων / Σχολή Μηχανικών Περιβάλλοντος
Γεωστατιστική, Τηλεπισκόπηση /Γεωδαισία, Υδρογεωλογία

1996-2000

Δίπλωμα Χημικού Μηχανικού (Συνεκτιμώμενοι τίτλοι σπουδών Αναγνωρισμένοι από το ΔΟΑΤΑΠ - ως ισότιμο και αντίστοιχο προς τα απονεμόμενα από τα Τμήματα Χημικών Μηχανικών του Ε.Μ.Π και των άλλων Πολυτεχνικών Σχολών των Ελληνικών Ανώτατων Εκπαιδευτικών ιδρυμάτων. Αρ. Πράξης 27-28/2001), Μέλος ΤΕΕ Αρ. Μητρ. 91050 (37034/2002)

1999-2000: MSc in Clean Technology School of Chemical and Process Engineering, Newcastle University, UK

1996-1999: BSc in Chemical and Process Engineering, School of Chemical and Process Engineering, Newcastle University, UK

Περιβαλλοντική Στατιστική, Επιχειρησιακή έρευνα, Μηχανική Ρευστών, Μελέτη Περιβαλλοντικών επιπτώσεων, Σχεδιασμός περιβαλλοντικών εγκαταστάσεων, Παρακολούθηση ρύπανσης και αποκατάσταση υδάτων

ΕΚΠΑΙΔΕΥΤΙΚΟ ΕΡΓΟ

Διδακτικό Έργο
Αυτοδύναμη Διδασκαλία

09/2025 – Σήμερα, **Προγραμματισμός για Μηχανικούς**, (1ο Εξάμηνο), Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

02/2022 – Σήμερα, **Στατιστική και Πιθανότητες για Μηχανικούς** (4ο Εξάμηνο), Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

10/2021 – Σήμερα, **Εφαρμοσμένη Γεωστατιστική** (7ο εξάμηνο)", Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

10/2024 – Σήμερα, **Exploring Data Analytics**, **(MSc Sustainable Technologies of Energy Resources and Raw Materials),** Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

02/2025 – Σήμερα, **Data Science for Exploration and Exploitation** (**MSc Sustainable Technologies of Energy Resources and Raw Materials),** Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

02/2025 – Σήμερα, **Emerging technologies for the exploration of raw materials** (Συνδιδασκαλία Prof. A Vafeidis, Prof. P Partsinevelos, Ast. Prof. Varouchakis) (**MSc Sustainable Technologies of Energy Resources and Raw Materials & EURECAPRO European University),** Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

02/2025 – 6/2025 **Επιμορφωτικό Σεμινάριο ‘’Υπολογιστικά εργαλεία για Μηχανικούς**‘’, **Συντονιστής** επιμορφωτικού σεμιναρίου για τους προπτυχιακούς φοιτητές της Σχολής Μηχανικών Ορυκτών Πόρων του Πολυτεχνείου Κρήτης.

10/2022– 02/2024, **Ανάλυση χρονοσειρών (Μεταπτυχιακό Πρόγραμμα Σπουδών: Γεωτεχνολογία & Περιβάλλον),** Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

02/2022– 06/2024, **Γεωστατιστική και μέθοδοι προσομοίωση (Μεταπτυχιακό Πρόγραμμα Σπουδών: Γεωτεχνολογία & Περιβάλλον),** Σχολή Μηχανικών Ορυκτών Πόρων, Πολυτεχνείο Κρήτης

Επίβλεψη Διπλωματικών Διπλωματικές/μεταπτυχιακές εργασίες

13 Διπλωματικές Εργασίες ολοκληρωμένες, 6 υπό εξέλιξη
1 Μεταπτυχιακή Διατριβή ολοκληρωμένη, 3 υπό εξέλιξη
Συμμετοχή σε εξεταστικές επιτροπές ΜΔΕ, 7 ολοκληρωμένες
Συμμετοχή σε εξεταστικές επιτροπές Διπλωματικών Εργασιών, 16 ολοκληρωμένες

Διδακτορικές Διατριβές

Evangelos Machairas, **Cost Benefit Analysis and Risk Assessment of Mining Activities in Terms of Circular Economy and Environmental Impact**, completed September 2025

Koltsidopoulou Maria, **Advancements in Geostatistical and Machine Learning Modeling for Enhanced Natural Resources Evaluation**, expected June 2027

Koniditsiotis Anastasios, Stochastic meteorological models, (Μέλος τριμελούς επιτροπής)

Μέλος 3μελών, 7μελών επιτροπών ΔΔ

1 υπό εξέλιξη, 8 ολοκληρωμένες (Επιπλέον έγγραφα υποψηφιότητας)

Ακαδημαϊκός σύμβουλος

Ακαδημαϊκός σύμβουλος 2023-24: 2ο έτος σπουδών

Ακαδημαϊκές διακρίσεις

Συμμετοχή στη λίστα των ερευνητών που ανήκουν στο κορυφαίο 2% παγκοσμίως στην επιστημονική περιοχή τους. Stanford University list (Scopus/Elsevier) 2024 and 2025.

Ερευνητική μονάδα

2022- Σήμερα: Δημιουργία ερευνητικής μονάδας Περιβαλλοντικής Μεταλλευτικής - Βιώσιμης ανάπτυξης/Γεωστατιστικής. https://www.envi-stat.tuc.gr/en/home

ΕΡΕΥΝΗΤΙΚΟ ΕΡΓΟ
Δημοσιεύσεις σε Διεθνή επιστημονικά περιοδικά

81) Koltsidopoulou, M.D., Pavlides, A., Hristopulos, D.T., **E. A. Varouchakis+**, Enhancing Geostatistical Analysis of Natural Resources Data with Complex Spatial Formations Using Non-Euclidean Distances. Math Geosci (2026). https://doi.org/10.1007/s11004-025-10269-3

80) **E. A. Varouchakis+**, Evangelos Machairas, Ioulia Koroptsenko, Stylianos Tampouris, Christos Stenos and Michail Galetakis, Quantitative Assessment of Pit Lake Rehabilitation Using Virtual Reality Imagery and Machine Learning Validation, Geosciences (2026), 16(4), 149; https://www.mdpi.com/2076-3263/16/4/149

79) Nahed Ben-Salem, Amir Rouhani, Nadim K. Copty, **Emmanouil A. Varouchakis**, J. Jaime Gómez-Hernández, George P. Karatzas, Michael Rode, Seifeddine Jomaa, The role of secondary data in estimating groundwater levels in the Iberian Peninsula, Groundwater for Sustainable Development, Volume 33, 2026, 101594, https://doi.org/10.1016/j.gsd.2026.101594.

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75) A. Pavlides, M. D. Koltsidopoulou, M. Chrysanthi, **E. A. Varouchakis+**, (2025). A Kernel-Based Nonparametric Approach for Data Gaussian Anamorphosis, Mathematical Geosciences, https://doi.org/10.1007/s11004-025-10251-z

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72) M. Chrysanthi, A. Pavlides, **E. A. Varouchakis+**. "A Bayesian Geostatistical Approach to Analyzing Groundwater Depth in Mining Areas," Geosciences, 2025, 15(11), 410; https://doi.org/10.3390/geosciences15110410

71) **E.A. Varouchakis+**, Konstantinos Komnitsas, Michail Galetakis. "Spatiotemporal Analysis of Vegetation Health and Moisture Dynamics in Rehabilitated Mining Quarries Using Satellite Imagery," Environmental Processes, 12, article number 45, (2025), https://doi.org/10.1007/s40710-025-00781-3

70) **E.A. Varouchakis+**, Ashok Krishnamurthy, Konstantinos Komnitsas. "Modeling Extreme Rainfall Using the Principle of Maximum Entropy," Mining, Metallurgy & Exploration, 42, pages 2685–2697, (2025), https://doi.org/10.1007/s42461-025-01274-5

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61) Chen, Y., Wang, W., Qiao, Y., Zheng, Q., Deveci, M., ***Varouchakis, E.A***. and Al-Hinai, A., 2024. Assessing adoption barriers to digital technology in the natural gas supply chain using an spherical fuzzy RAFSI model. Resources Policy, 94, p.105103, https://doi.org/10.1016/j.resourpol.2024.105103

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57) Lino Pereira, J., ***E. A. Varouchakis***, G. P. Karatzas, and L. Azevedo. 2024. Uncertainty Quantification in Geostatistical Modelling of Saltwater Intrusion at a Coastal Aquifer System, Mathematical Geosciences, doi:10.1007/s11004-023-10120-7.

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53) Pavlides, A., ***E. A. Varouchakis***+, and D. T. Hristopulos. 2023. Geostatistical analysis of groundwater levels in a mining area with three active mines, Hydrogeol. J., 31(6), 1425-1441, doi:10.1007/s10040-023-02676-9.

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51) Petrakis, E., ***E. Varouchakis***, and K. Komnitsas. 2023, Reliability of the Non-linear Modeling in Predicting the Size Distribution of the Grinding Products Under Different Operating Conditions, Mining, Metallurgy & Exploration, 40(4), 1265-1278. https://doi.org/10.1007/s42461-

023-00793-3

50) Deveci, M., ***E. A. Varouchakis***, P. R. Brito-Parada, A. R. Mishra, P. Rani, M. Bolgkoranou, and M. Galetakis, 2023. Evaluation of risks impeding sustainable mining using Fermatean fuzzy score function based SWARA method, Applied Soft Computing, 139, 110220**.** https://doi.org/10.1016/j.asoc.2023.110220

49) ***E.A. Varouchakis*+,** Solomatine, D., Perez, G.A.C., Jomaa, S., Karatzas, G.P., 2023. Combination of geostatistics and self-organizing maps for the spatial analysis of groundwater level variations in complex hydrogeological systems. Stoch. Env. Res. Risk A. 37(8), 3009-3020. DOI:10.1007/s00477-023-02436-x

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43) Tzanakakis, V. A., A. Pavlaki, E. Lekkas, **E. A. Varouchakis**, N. V. Paranychianakis, G. Fasarakis, and A. N. Angelakis, 2022. Uncoupled Precipitation and Water Availability: The Case Study of Municipality of Sfakia, Crete, Greece. Water 14(3), 462.

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---------- **Πριν την ανάληψη καθηκόντων** ----------

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38) ***E. A. Varouchakis*+**, A. Kamińska-Chuchmała, G. Kowalik, K. Spanoudaki and M. Graña. "Combining Geostatistics and Remote Sensing Data to Improve Spatiotemporal Analysis of Precipitation", ***Sensors***, 21(9), 3132, 2021, https://doi.org/10.3390/s21093132

37) ***E. A. Varouchakis*+**, "Gaussian Transformation Methods for Spatial Data", ***Geosciences***, 11, 196, 2021, https://doi.org/10.3390/geosciences11050196 (Sole author publication)

36) ***E. A. Varouchakis***+, D. T. Hristopulos, G. P. Karatzas, G. A. Corzo Perez, V. Diaz, "Spatiotemporal geostatistical analysis of precipitation combining ground and satellite observations", ***Hydrology Research journal***, 52(3), 804–820, 2021, https://doi.org/10.2166/nh.2021.160

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2025_7 Maria Chrysanthi, Andrew Pavlides and Emmanouil Varouchakis, "Geostatistical Modelling using Novel Covariance Functions and Application to Heterotopic Datasets", Proceedings of the 4th EURECA-PRO International Conference on Responsible Consumption and Production, Chania, Greece, 23–24 September 2025.

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Μνημόνια συνεργασίας

The Technical University of Crete, Greece, and the Universidad Católica del Norte, Chile. Key contributors: Assistant Professor Emmanouil Varouchakis from School of Mineral Resources Engineering, specializing in Geostatistics, and Associate Professor Mohammad Maleki: link

Agreement on a cooperation in the frame of the EURECA PRO Joint Degree Programme: “International Master of Science in Advanced Mineral Resources Development” between Technische Universität Bergakademie Freiberg, Montanuniversität Leoben and, Technical university of Crete, School of mineral resources Engineering.

Ερευνητικά έργα
Επιστημονικός Υπεύθυνος

Scientific Coordinator:

MINERVA, AI-Enhanced GIS Platform for Environmental Monitoring in Coal Mine Just Transition, RFCS-2025-01-RPJ, 08/2026-07/2029**,** (**TUC Scientific Coordinator**), (261,950 ευρώ)

AI-LEARN: Environmental & Water Learning (Erasmus+ 2025-1-NL01-KA220-HED-000355215), Cooperation partnerships in higher education**,** 10/2025-09/2028 **(TUC Scientific Coordinator**), (116,000 ευρώ)

Χρηματοδότηση και Έγκριση από την ΕΘΑΑΕ του νέου κοινού ΠΜΣ (Joint Master Program) “Responsible Consumption and Production under Sustainable Mining” μεταξύ Πολυτεχνείου Κρήτης και Πολυτεχνείου Montanuniversität Leoben της Αυστρίας (2025-2027), Ταμείο Ανάκαμψης και Ανθεκτικότητας και Εθνικό Πρόγραμμα Δημοσίων Επενδύσεων,**(Scientific Coordinator**) (736.746 ευρώ)

Advanced geostatistical modelling for natural resources evaluation (HFRI - Hellenic Foundation for Research & Innovation) 2023-2025 (**Scientific Coordinator**), (189.000 ευρώ) https://www.geone.tuc.gr/en/home

Universidad Católica del Norte, Dr. Mohammad Maleki, has been awarded a Fondecyt Regular 2025 Project N°1250432, called "**Enhanced Geological and Geometallurgical Modeling through Machine Learning**", in interdisciplinary and international collaboration with academics from AMTC - Universidad de Chile, Nadia Mery and Xavier Emery, Pontificia Universidad Católica de Chile, Enrique Jélvez and the **Technical University of Crete, Greece, Emmanouil Varouchakis**, (2025-2027)

Immersive virtual tours on critical minerals for clean energy transitions (IMMERSE), ERASMUS+ research funding, 2023-2025 (**TUC Scientific Coordinator**), (90.000 ευρώ), https://www.envi-stat.gr

Plan4cold, Supporting South Europe municipalities in the definition of Sustainable Local Heating and Cooling Plans" under the LIFE Clean Energy Transition (LIFE-2023-CET) program (2024-2027) **Scientific Coordinator**), (108000 ευρώ), https://fedarene.org/project/plan4cold/

OurMED "Sustainable water storage and distribution in the Mediterranean" PRIMA-MED 2023-2026 (**WP2 Leader**)

European Geosciences Union (Training School Organization Hydroinformatics) for The 15th International Conference on Geostatistics for Environmental Applications, 2024 (6000 ευρώ)

Proof-of-Concept, GNΩSI, Funding for the Operation of Structures and Technology Transfer Actions – **Database development for Crete hydrological data** - GNΩSI foundation &Technical University of Crete " 2022-2023 (no: 25912/24-11-2022**),** (**Scientific Coordinator**)

International mobility Erasmus+ KA171, CALL 2023, 2023-1-EL01-KA171-HED-000147091. (University of Kentucky-School of Mineral Resources Engineering)

Ερευνητικά έργα
Συνεργαζόμενος Ερευνητής

Research team member:

HYDROMINE Pumped HYDROelectric Storage in post MINEd areas to support regional net-zero emission

Gravitational Energy storage in the post-Mine areas (GrEnMine), 2024-2027, RFCS Fund
Topic: Satellite data analysis using Machine learning techniques, Database development

European University on Responsible Consumption and Production/ Eureca Pro 2.0, EU funding, 2023-2027, (**WP3 Leader- EURECA-PRO Doctoral Coordinator**)

REECOL Ecological rehabilitation and long term monitoring of post mining areas, 2023–2026, RFCS Fund. Topic: Satellite data analysis using Machine learning techniques, Database development

Groundwater modelling of three aquifers in the context of the River Basin Management Plan update for the River Basin District of Crete (2022-2023 **TUC Scientific Co-coordinator**)

InTheMed, Innovative and Sustainable Groundwater Management in the Mediterranean, under PRIMA call - Coordination and support for the partnership for research and innovation in the Mediterranean area, April 2020-April 2023. (Associate Researcher)

Sustain-COAST "Sustainable coastal groundwater management and pollution reduction through innovative governance in a changing climate" PRIMA-MED 2019-2022 (Associate Researcher)

----------Πριν το 2022----------

Uncertainty-aware intervention design for Mediterranean aquifer recharge, Funding: Prince Albert II of Monaco Foundation, 2019-2022 (**Scientific coordinator**, Principal proposer and researcher along with IHE-Delft).

Natural Resources Research Postdoc Research Scholarship: A Bayesian space-time geostatistical model for groundwater level variability estimation, Funding: International Association for Mathematical Geosciences (IAMG), 10/2015-10/2016. (**Principal Researcher**)

Sustain-Coast, Sustainable coastal groundwater management and pollution reduction through innovative governance in a changing climate, under PRIMA call - Coordination and support for the partnership for research and innovation in the Mediterranean area, June 2019-June 2022. (Associate Researcher)

ELIDEK 2018 (National grant): Spatio-temporal Modelling of the Significant Wave Height Variability for Estimating the Wave Energy Potential in the Mediterranean Sea, with field applications in the Aegean and Ionian Sea, Foundation of Research and Technology (FORTH), Heraklion, Crete, 2019-2021. (Researchers consortium member)

DESIRES: Platform for Desalination Plant powered with RES design, Sea wave spatiotemporal analysis in the Mediterranean Region, Funding: ERANET-MED, September 07/2017-07/2018. (Associate Researcher)

RECARE: Preventing and remediating degradation of soils in Europe through land care, Funding: EU FP7-ENV, 1/02/2013 – 28/02/2017. (Associate Researcher)

SPARTA: Development of Space-Time Random Fields based on Local Interaction Models and Applications in the Processing of Spatiotemporal Datasets, Excellence Research Grant 2011, 01/2012 – 11/2015. (Associate Researcher)

THALIS – CYBERSENSORS: High frequency monitoring system for integrated water resources management of rivers, Funding: Hellenic Ministry of Education, GSRT-EU-GR, 1/1/2013 – 30/9/2015. (Associate Researcher)

SPATSAT: Development of Spartan Spatial Random Fields for geostatistical applications. The Marie Curie Transfer Of Knowledge Grant, Funding: EU Contract No. MTKD-CT-2004-014135, 1/9/05 – 1/9/08. (Junior Researcher)

Application of geostatistical methods in environmental applications-Geostatistical analysis of hydrological data from the island of Crete. Funding: Hellenic Ministry of Education, Pythagoras Program II, 1/1/06 – 30/4/07. (Junior Researcher)

Spartan Spatial Random Fields for environmental geostatistical applications. Funding: Technical University of Crete. Support funding for basic research, 1/4/05 – 31/3/06. (Scholar Researcher)

Συντάκτης σε διεθνή επιστημονικά περιοδικά

Advisory board: Stochastic Environmental Research & Risk Assessment Journal, Springer, 2025-2027

Associate editor: Geostatistics, Hydrology Research Journal, IWA, 2020-2026

Guest Editor: Mathematical Geosciences Journal, geoENV2024, Environmental Geostratistics, 2024-2026

Guest Editor: Special Issue Advancements in Mineral Resource Characterization Using Machine Learning

Guest Editor: Special Issue "Geostatistics in the Life Cycle of Mines

Guest Editor: Hydrogeology Journal, Application of geostatistics to hydrogeology, 2022-2023

Guest Editor: *Entropy Journal*: Spatiotemporal Prediction and Simulation Methods at the Nexus of Statistical Physics, Spatial Statistics and Machine Learning, 20 June 2022

Guest Editor: *Stochastic Environmental Research & Risk Assessment Journal*, Special Issue: Space–time models for hydrological and environmental applications, July 2020.

Guest Editor: *Spatial Statistics Journal*, Special Issue: Spatio-temporal and geostatistical analysis of hydrological events and/or related hazards, December 2019.

Κριτής σε διεθνή επιστημονικά περιοδικά

International Journal of Mining, Reclamation and Environment (2025-today), Mining Metallurgy & Exploration (2025-today), Scientific reports (2024- today), Hydrology and Earth System Sciences (2022-today), Environmental Modelling & Software (2021-today), Science of the total environment (2019-today), International Journal of Systems Science (2019-today), Hydrology Research (2018-today), Environmental Modelling & Assessment,(2017-today), Water Resources Research (2016-today), Advances in Water Resources, (2016-today), Spatial Statistics (2016-today), Applied Statistics (2016-today), Journal of Hydroinformatics (2016-today), Water Resources Management Journal (2016-today), Hydrological Sciences Journal (2016-today), Water Policy Journal (2016-today), Water MDPI (2016-today), Journal of hydrology (2015-today), Hydrogeology Journal (2015-today), Computer & Geosciences (2015-today), Journal of Hydrologic Engineering (ASCE) (2013-today), Environmental Monitoring & Assessment (2012-today), Stochastic Environmental Research and Risk Assessment (SERRA) (2011-today)

Εξωτερικός αξιολογητής ερευνητικών έργων

- EU experts - Horizon Europe - Mission Soil WP2025
- Research Fund for Coal and Steel (RFCS)
- Dutch Research Council (NWO) | Domain Applied and Engineering Sciences (AES)
- Chile, National Science Centre, Reviewer of research proposals, Geosciences
- Polish National Science Centre, Reviewer of research proposals in Physical Sciences and Engineering discipline, (2019,2021,2022)
- External reviewer of proposals for Chile Research Council (2020)
- Undergraduate program evaluator of the new undergraduate program BSc in Environmental Science, Sultan Qaboos University, Oman (2016)

- MSc Thesis evaluator, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, South Africa (2014)

Προσκεκλημένες Διαλέξεις/Σεμινάρια

PhD course: Modern geostatistics for groundwater bodies characterization 18-22 of November 2024, PhD Programme in Environmental and Infrastructure Engineering, Department of Civil and Environmental Engineering, Politecnico di Milano

Solicited talk on " Fusion of geostatistics and machine learning under a stochastic approach for the spatial analysis of groundwater level variations". Hydrological Sciences Division (HS), Hydroinformatics Session, ‘’ Advances in stochastic analysis, modelling, simulation and prediction for hydrological and water-related processes”, EGU 2024

Invited workshop/Seminar, GEOSTAT2018, "Spatial analysis and applications in geological, mining and environmental problems", Wroclaw University of Science and Technology, Poland, 22 – 25 January 2018. (http://geostat2018.pwr.edu.pl/)

Invited Lecture on "Applied Geostatistics, Hydroinformatics for hydrology: geostatistical modelling". Hydrological Sciences Division (HS), Hydroinformatics Session, EGU, 27 of April 2017. (http://meetingorganizer.copernicus.org/EGU2017/session/25340).

Symposium in the area of uncertainty analysis and geostatistical applications in water resources and environmental science, "Space-time geostatistical modelling of aquifer level in conjunction with simulation methods for uncertainty estimation" 28/10/2016 UNESCO-IHE, Delft, Netherlands.

Guest Lecture under Erasmus+ staff mobility action "Geostatistics in water resources management" 10/02/2016, UNESCO-IHE, Delft, Netherlands.

Μέλος επιστημονικών επιτροπών και οργανωτικών επιτροπών διεθνών συνεδρίων

President of geoEnvia geostatistics association 2024-2026

Chair of Hydroinformatics, EGU General Union, 2022-2026

Organizer of the 16th International Conference on Geostatistics for Environmental Applications, Chania, Greece, 8-11, June 2027

Organizer of the 15th International Conference on Geostatistics for Environmental Applications, Chania, Greece, 19-21 June 2024

Member of the scientific committee of the Spatial Statistics 2023: Climate and the Environment 19 – 22 July 2023 | University of Colorado Boulder, USA

Member of the scientific committee of the 13 th and 14th International Conference on Geostatistics for Environmental Applications, Parma, Italy, 2021,2022

Convener of the sessions at EGU General Assembly Conference, Vienna:

- Geostatistics and Uncertainty, 2025
- Hydroinformatics for Mineral Resources applications, 2023
- Advanced Geostatistics for Water, Earth and Environmental Sciences (2020 & 2021)
- Spatio-temporal and/or geostatistical analysis of hydrological events, extremes, and related hazards (2015-2020)
- Innovation and new challenges in sharing research results and knowledge of soil and water resources: experiences on strategic thinking, technologies and collaborative work (2017)
- Instrumented Catchments and Demonstration Areas: the scientific and social impact of research through experiments and modelling about water and soil (2015)

Member of the scientific committee of Spatial Statistics conference: Towards Spatial Data Science 10 – 13 July 2019 | Sitges, Spain