



## ► Resume: Dr. Maria-Christina Nika

**Postdoctoral researcher**

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### Education

**B.Sc. in Chemistry (2006-2011)**, National and Kapodistrian University of Athens, Grade: 7.27/10

**M.Sc. in Chemical Analysis & Quality Control (2011-2014)**, National and Kapodistrian University of Athens, Grade 9.43/10

**Ph.D. in Analytical Chemistry (2014-2017)**, National and Kapodistrian University of Athens

**Post-Doctoral research in Analytical Chemistry (2017-today)**, National and Kapodistrian University of Athens

**Marie-Curie postdoctoral fellow in Human Exposomics (2023-2025)**, Expo-Hum research group at IDAEA-CSIC

### Research Topics

**Undergraduate Thesis:** “Determination of pesticides residues in baby foods by liquid chromatography-tandem mass spectrometry”, Pesticide Residues Laboratory, General Chemical State Laboratory of Greece (2011).

**Master Thesis:** “Investigation of by-products’ formation of emerging pollutants during tertiary wastewater treatment’s process by mass spectrometric techniques”, Laboratory of Analytical Chemistry, Chemistry department, University of Athens, Greece (2012-2014).

**Ph.D. Thesis:** “Identification of transformation products of emerging pollutants during tertiary wastewater treatment process and during their disposal in the environment by mass spectrometric techniques”, Laboratory of Analytical Chemistry, Chemistry department, University of Athens, Greece (2014-2017).

**Post-doctoral Research:** Development and application of LC-ESI- and GC-APCI- HRMS target, suspect and non-target screening methodologies on emerging pollutants in environmental samples, Laboratory of Analytical Chemistry, Chemistry department, University of Athens, Greece (2017-2023).

**Marie-Curie Postdoctoral Fellowship:** EnviBrain “Characterization of Diffuse Glioma tumors’ chemical exposome and potential positive associations with environmental pollution through air particulate matter analysis and wastewater based epidemiology”, IDAEA-CSIC (2023-2025).

## Research Interests

### General research interests:

- Human Exposomics
- Environmental Chemistry (monitoring of priority pollutants and emerging contaminants in environmental samples)
- Wastewater tertiary treatment processes (chlorination, ozonation, UV-treatment), Identification of unknown compounds (suspect and non-target screening approaches)
- Application of suspect and non-target screening workflows for the identification of new compounds
- Method Development
- Reversed Phase Liquid Chromatography (RP-LC) and Hydrophilic interaction chromatography (HILIC)
- High Resolution Mass Spectrometry (HRMS)
- Trapped Ion Mobility Spectrometry (TIMS)
- Risk assessment
- High resolution mass spectra interpretation
- Advanced data treatment of HRMS data

### Projects:

- **2023-2025:** EnviBrain “Characterization of Diffuse Glioma tumors’ chemical exposome and potential positive associations with environmental pollution through air particulate matter analysis and wastewater based epidemiology” (HORIZON-MSCA-2022-PF-01, 101105240) **As Principal Investigator**
- **2023-2026:** nexus-MONARC “Capacity building nexus for monitoring water quality in multi-stressor areas: pilot study at the Hellenic volcanic arc” (HORIZON-WIDERA-2021-ACCESS-03, 101079156).
- **2022-2023:** EPISCOPE “Epidemiological Surveillance through Continuous Observation of Wastewater” (Ministry of Health)
- **02-12/2021:** Patterns of drug use and chemical exposure in Greece during COVID-19 pandemic using wastewater-based epidemiology (National Public Health Organization)
- **2020-2022:** DIAN.Y.A., Integrated on-site management of hospital wastewater (European Regional Development Fund of the EU and Greek national funds)
- **2020-2022:** Extended monitoring of emerging contaminants in landfill leachates of Greece: Occurrence, Fate and Risk assessment (State Scholarships Foundation (IKY)) **As Principal Investigator**
- **2019-2023:** **BIGDATA4RIVERS:** Improving the European Rivers Water Quality through Smart Water Management Policies (INTERREG EUROPE)
- **2020:** **NORMAN collaborative trial** (CT) on suspect and non-target screening (NTS) in biota (NORMAN Association)
- **2019-2020:** **JDS4**, Joint Danube Survey 4 (International Commission for the Protection of the Danube River, ICPDR)
- **2019-2020:** **EMBLAS-PLUS**, Improving Environmental Monitoring in the Black Sea – Selected measures (UNDP)
- **2018-2020:** Investigation of the occurrence of emerging contaminants in the **Athenian Water Reservoirs** (EYDAP S.A.)

- **2018-2022: LIFE APEX**, Systematic use of contaminant data from apex predators and their prey in chemicals management, LIFE17 ENV/SK/000355 (European Union)
- **2018-2020: Monitoring of Asopos river basin**: Assessment of pollution/contamination and qualitative/ quantitative investigation of contamination levels and possible sources of pollution (Region of Attica)
- **2016-2018: EMBLAS II**, EU/UNDP Project: Improving environmental monitoring in the Black Sea. Analysis of water framework priority substances and screening of black sea specific pollutants in water biota and sediment samples obtained during the National Pilot Monitoring Studies and Joint Open Sea Surveys and risk assessment of identified pollutants (UNDP)
- **2014-2015: TREMEPOL Project**, ARISTEIA, Ministry of Education: Transformation Products of Emerging Pollutants in the aquatic environment (Ministry of Education)
- **2014-2015: Thalix**: Investigation of organic micropollutants' fate in wastewater treatment and study of their behavior during wastewater disposal to the aquatic environment (Ministry of Education)

### Publications in scientific peer-reviewed journals

1. Wiebke Dürig, Sofia Lindblad, Oksana Golovko, Georgios Gkotsis, Reza Aalizadeh, **Maria-Christina Nika**, Nikolaos Thomaidis, Nikiforos A. Alygizakis, Merle Plassmann, Peter Haglund, Qiuguo Fu, Juliane Hollender, Jade Chaker, Arthur David, Uwe Kunkel, André Macherius, Lidia Belova, Giulia Poma, Hugues Preud'Homme, Catherine Munsch, Yann Aminot, Carsten Jaeger, Jan Lisek, Martin Hansen, Katrin Vorkamp, Linyan Zhu, Francesca Cappelli, Claudio Roscioli, Sara Valsecchi, Renzo Bagnati, Belén González, Ailette Prieto, Olatz Zuloaga, Ruben Gil-Solsona, Pablo Gago-Ferrero, Sara Rodriguez-Mozaz, Hélène Budzinski, Marie-Helene Devier, Georg Dierkes, Lise Boulard, Griet Jacobs, Stefan Voorspoels, Heinz Rüdell, Lutz Ahrens, "What is in the fish? Collaborative trial in suspect and non-target screening of organic micropollutants using LC- and GC-HRMS", *Environment International*, **2023**, 181,108288 (<https://doi.org/10.1016/j.envint.2023.108288>).
2. Elisa García-Gómez, Georgios Gkotsis, **Maria-Christina Nika**, Ida M. Hassellöv, Kent Salo, Anna Lunde Hermansson, Erik Ytreberg, Nikolaos S. Thomaidis, Meritxell Gros, Mira Petrović, "Characterization of scrubber water discharges from ships using comprehensive suspect screening strategies based on GC-APCI-HRMS", *Chemosphere*, **2023**, 343,140296 (<https://doi.org/10.1016/j.chemosphere.2023.140296>).
3. Margariti, Antigoni, Vasiliki D. Papakonstantinou, George M. Stamatakis, Constantinos A. Demopoulos, Christina Machalia, Evangelia Emmanouilidou, Gregor Schnakenburg, **Maria-Christina Nika**, Nikolaos S. Thomaidis, and Athanassios I. Philippopoulos. 2023. "First-Row Transition Metal Complexes Incorporating the 2-(2'-pyridyl)quinoxaline Ligand (pqx), as Potent Inflammatory Mediators: Cytotoxic Properties and Biological Activities against the Platelet-Activating Factor (PAF) and Thrombin", *Molecules*, **2023**, 28, 19: 6899. <https://doi.org/10.3390/molecules28196899>).
4. Dimitrios Diamantis, Antonios D. Tsailanis, Christina Papaemmanouil, **Maria-Christina Nika**, Zoi Kanaki, Simona Golic Grdadolnik, Andrej Babic, Eleftherios Paraskevas Tzacos, Isabelle Fournier, Michel Salzet, Prem Prakash Kushwaha, Nikolaos S. Thomaidis, Theodoros Rampias, Eswar Shankar, Serdar Karakurt, Sanjay Gupta & Andreas G. Tzacos, "Development of a novel apigenin prodrug programmed for alkaline-phosphatase instructed self-inhibition to combat cancer", *Journal of Biomolecular Structure and Dynamics*, **2023**, (<https://doi.org/10.1080/07391102.2023.2247083>).
5. Obaid A. Alharbi, Edward Jarvis, Aikaterini Galani, Nikolaos S. Thomaidis, **Maria-Christina Nika**, Deborah V. Chapman, "Assessment of selected pharmaceuticals in Riyadh wastewater treatment plants, Saudi Arabia: Mass loadings, seasonal variations, removal efficiency and environmental risk", *Science of The Total Environment*, **2023**, 882, 163284 (<https://doi.org/10.1016/j.scitotenv.2023.163284>).
6. Olga S. Arvaniti, Georgios Gkotsis, **Maria-Christina Nika**, Stelios Gyparakis, Thrassyvoulos Manios, Nikolaos S. Thomaidis, Michalis S. Fountoulakis, and Athanasios S.

- Stasinakis, "Study on the Occurrence of Artificial Sweeteners, Parabens, and Other Emerging Contaminants in Hospital Wastewater Using LC-QToF-MS Target Screening Approach", *Water*, **2023**, 15, 5: 936 (<https://doi.org/10.3390/w15050936>).
7. Paola Movalli, Koos Biesmeijer, Georgios Gkotsis, Nikiforos Alygizakis, **Maria-Christina Nika**, Konstantinos Vasilatos, Marios Kostakis, Nikolaos S. Thomaidis, Peter Oswald, Martina Oswaldova, Jaroslav Slobodnik, Natalia Glowacka, Joos C.E.W. Hooijmeijer, Ruth A. Howison, Rene W.R.J. Dekker, Nic van den Brink, Theunis Piersma, "High resolution mass spectrometric suspect screening, wide-scope target analysis of emerging contaminants and determination of legacy pollutants in adult black-tailed godwit *Limosa limosa limosa* in the Netherlands – A pilot study", *Chemosphere*, **2023**, 321, 138145, (<https://doi.org/10.1016/j.chemosphere.2023.138145>).
  8. Kelsey Ng, Nikiforos Alygizakis, **Maria-Christina Nika**, Aikaterini Galani, Peter Oswald, Martina Oswaldova, Luboš Čirka, Uwe Kunkel, André Macherius, Manfred Sengl, Giulio Mariani, Simona Tavazzi, Helle Skejo, Bernd M. Gawlik, Nikolaos S. Thomaidis, Jaroslav Slobodnik, "Wide-scope target screening characterization of legacy and emerging contaminants in the Danube River Basin by liquid and gas chromatography coupled with high-resolution mass spectrometry", *Water Research*, **2023**, 230, 119539 (<https://doi.org/10.1016/j.watres.2022.119539>).
  9. **Maria-Christina Nika**, Nikiforos Alygizakis, Olga S. Arvaniti, Nikolaos S. Thomaidis, "Non-target screening of emerging contaminants in landfills: A review, *Current Opinion in Environmental Science & Health*, **2023**, 32, 100430 (<https://doi.org/10.1016/j.coesh.2022.100430>).
  10. Olga S. Arvaniti, Evangelia S. Arvaniti, Stelios Gyparakis, Ioannis Sabathianakis, Evangelos Karagiannis, Evangelos Pettas, Georgios Gkotsis, **Maria-Christina Nika**, Nikolaos S. Thomaidis, Thrassyvoulos Manios, Michalis S. Fountoulakis, Athanasios S. Stasinakis, "Occurrence of pharmaceuticals in the wastewater of a Greek hospital: combining consumption data collection and LC-QTOF-MS analysis", *Science of the Total Environment*, **2023**, 858, 160153 (<https://doi.org/10.1016/j.scitotenv.2022.160153>).
  11. Georgios Gkotsis, **Maria-Christina Nika**, Antonia I. Athanasopoulou, Konstantinos Vasilatos, Nikiforos Alygizakis, Martin Boschert, Raphaela Osterauer, Kai-Achim Höpker and Nikolaos S. Thomaidis, "Advanced throughput analytical strategies for the comprehensive HRMS screening of organic micropollutants in eggs of different bird species", *Chemosphere*, **2023**, 312, 137092 (<https://doi.org/10.1016/j.chemosphere.2022.137092>).
  12. Georgios Gkotsis, **Maria-Christina Nika**, Varvara Nikolopoulou, Nikiforos Alygizakis, Erasmia Bizani, Reza Aalizadeh, Alexander Badry, Elizabeth Chadwick, Alessandra Cincinelli, Daniela Claßen, Sara Danielsson, René Dekker, Guy Duke, Wiebke Drost, Natalia Glowacka, Bernd Göckener, Hugh A.H. Jansman, Monika Juergens, Burkhard Knopf, Jan Koschorreck, Oliver Krone, Tania Martellini, Paola Movalli, Sara Persson, Elaine D. Potter, Simon Rohner, Anna Roos, Emily O' Rourke, Ursula Siebert, Gabriele Treu, Nico W. van den Brink, Lee A. Walker, Rosie Williams, Jaroslav Slobodnik, Nikolaos S. Thomaidis, "Assessment of contaminants of emerging concern in European apex predators and their prey by LC-QToF MS wide-scope target analysis", *Environment International*, **2022**, 170, 107623 (<https://doi.org/10.1016/j.envint.2022.107623>).
  13. Alexander Badry, Heinz Rüdell, Bernd Göckener, **Maria-Christina Nika**, Nikiforos Alygizakis, Georgios Gkotsis, Nikolaos S. Thomaidis, Gabriele Treu, Rene W.R.J. Dekker, Paola Movalli, Lee A. Walker, Elaine D. Potter, Alessandra Cincinelli, Tania Martellini, Guy Duke, Jaroslav Slobodnik, Jan Koschorreck, "Making use of apex predator sample collections: an integrated workflow for quality assured sample processing, analysis and digital sample freezing of archived samples", *Chemosphere*, **2022**, 309, 136603 (<https://doi.org/10.1016/j.chemosphere.2022.136603>).
  14. Paola Movalli, Jan Koschorreck, Gabriele Treu, Jaroslav Slobodnik, Nikiforos Alygizakis, Andreas Androulakakis, Alexander Badry, Emanuel Baltag, Fausto Barbagli, Kevin Bauer, Koos Biesmeijer, Enrico Borgo, Alessandra Cincinelli, Daniela Claßen, Sara Danielsson, René W. R. J. Dekker, Rune Dietz, Marcel Eens, Silvia Espín, Igor

- Eulaers, Sylke Frahnert, Tibor I. Fuiz, Antonio J. García-Fernández, Jérôme Fuchs, Georgios Gkotsis, Natalia Glowacka, Pilar Gómez-Ramírez, Marco Grotti, Peter A. Hosner, Ulf Johansson, Veerle L. B. Jaspers, Dimitris Koureas, Oliver Krone, Eero Kubin, Christine Lefevre, Madis Leivits, Sabrina Lo Brutto, Ricardo Jorge Lopes, Rui Lourenço, Petros Lymberakis, Knut Madslie, Tania Martellini, Rafael Mateo, **Maria-Christina Nika**, Dan Osborn, Peter Oswald, Olivier Pauwels, M Glória Pereira, Francesco Pezzo, Pablo Sánchez-Virosta, Nermina Sarajlić, Richard F. Shore, Francisco Soler, Christian Sonne, Nikolaos Thomaidis, Till Töpfer, Risto Väinölä, Nico van den Brink, Al Vrezec, Lee Walker, Stephan Weigl, Chris Wernham, Friederike Woog, Irene Zorrilla, Guy Duke, “The role of natural science collections in the biomonitoring of environmental contaminants in apex predators in support of the EU’s zero pollution ambition”, *Environmental Sciences Europe*, **2022**, 34, 88 (<https://doi.org/10.1186/s12302-022-00670-8>).
15. Vasiliki G. Beretsou, **Maria-Christina Nika**, Kyriakos Manoli, Costas Michael, Qian Sui, Lian Lundy, D. Michael Revitt, Nikolaos S. Thomaidis and Despo Fatta-Kassinou “Multiclass target analysis of contaminants of emerging concern including transformation products, soil bioavailability assessment and retrospective screening as tools to evaluate risks associated with reclaimed water reuse” *Science of The Total Environment*, **2022**, 158391, (<https://doi.org/10.1016/j.scitotenv.2022.158391>).
16. Alexander Badry, Jaroslav Slobonik, Nikiforos Alygizakis, Dirk Bunke, Alessandra Cincinelli, Daniela Classen, Rene W. R. J. Dekker, Guy Duke, Valeria Dulio, Bernd Göckener, Georgios Gkotsis, Georg Hanke, Morten Jartun, Paola Movalli, **Maria-Christina Nika**, Heinz Rüdell, Nikolaos S. Thomaidis, Jose V. Tarazona, Victoria Tornero, Gabriele Treu, Katrin Vorkamp, Lee A. Walker, Jan Koschorreck “Using environmental monitoring data from apex predators for chemicals management: towards harmonised sampling and processing of archived wildlife samples to increase the regulatory uptake of monitoring data in chemicals management”, *Environmental Sciences Europe*, **2022**, 34, 81 (<https://doi.org/10.1186/s12302-022-00664-6>).
17. Gabriele Treu, Jaroslav Slobonik, Nikiforos Alygizakis, Alexander Badry, Dirk Bunke, Alessandra Cincinelli, Daniela Classen, Rene W. R. J. Dekker, Bernd Göckener, Georgios Gkotsis, Georg Hanke, Guy Duke, Morten Jartun, Paola Movalli, **Maria-Christina Nika**, Heinz Rüdell, Jose V. Tarazona, Nikolaos S. Thomaidis, Victoria Tornero, Katrin Vorkamp, Lee A. Walker, Jan Koschorreck, Valeria Dulio, “Using environmental monitoring data from apex predators for chemicals management: towards better use of monitoring data from apex predators in support of prioritisation and risk assessment of chemicals in Europe”, *Environmental Sciences Europe*, **2022**, 34, 82 (<https://doi.org/10.1186/s12302-022-00664-6>).
18. Kosmas Lalas, Olga S. Arvaniti, Eirini Zkeri, **Maria-Christina Nika**, Nikolaos S. Thomaidis, Dionissios Mantzavinou, Athanasios S. Stasinakis, Zacharias Frontistis “Thermally activated persulfate oxidation of ampicillin: Kinetics, transformation products and ecotoxicity”, *Science of The Total Environment*, **2022**, 157378, (<https://doi.org/10.1016/j.scitotenv.2022.157378>).
19. Varvara Nikolopoulou, Reza Aalizadeh, **Maria-Christina Nika**, Nikolaos S. Thomaidis “TrendProbe: Time Profile Analysis of Emerging Contaminants by LC-HRMS Non-target Screening and Deep Learning Convolutional Neural Network”, *Journal of Hazardous Materials*, **2022**, 428, 128194 (<https://doi.org/10.1016/j.jhazmat.2021.128194>). Impact Factor: 10.588
20. Anthoula Chatzimpaloglou, Christophoros Christophoridis, **Maria-Christina Nika**, Reza Aalizadeh, Ilias Fountoulakis, Nikolaos S. Thomaidis, Alkiviadis F. Bais, Konstantinos Fytianos “Degradation of antineoplastic drug etoposide in aqueous environment by photolysis and photocatalysis. Identification of transformation products and toxicity assessment”, *Chemical Engineering Journal*, **2021**, 431, 133969 (<https://doi.org/10.1016/j.cej.2021.133969>).
21. Ruben Gil-Solsona, **Maria-Christina Nika**, Mariona Bustamante, Cristina M. Villanueva, Maria Foraster, Marta Cosin-Tomás, Nikiforos Alygizakis, Maria Dolores Gómez-Roig, Elisa



- Llurba-Olive, Jordi Sunyer, Nikolaos S. Thomaidis, Payam Dadvand, Pablo Gago-Ferrero “The potential of sewage sludge to predict and evaluate the human’s chemical exposome”, *Environmental Science & Technology Letters*, **2021**, 8, 12, 1077-1084 (<https://doi.org/10.1021/acs.estlett.1c00848>).
22. Alexander Badry, Gabriele Treu, Georgios Gkotsis, **Maria-Christina Nika**, Nikiforos Alygizakis, Nikolaos S. Thomaidis, Christian C. Voigt, Oliver Krone “Ecological and spatial variations of legacy and emerging contaminants in white-tailed sea eagles from Germany: Implications for prioritisation and future risk management”, *Environment International*, **2022**, 158, 106934 (<https://doi.org/10.1016/j.envint.2021.106934>).
  23. Varvara Nikolopoulou, Nikiforos A. Alygizakis, **Maria-Christina Nika**, Martina Oswaldova, Peter Oswald, Marios Kostakis, Anastasia Koupa, Jaroslav Slobodnik, Nikolaos S. Thomaidis “Screening of legacy and emerging substances in surface water, sediment, biota and groundwater samples in the Siverskyi Donets River Basin employing wide-scope target and suspect screening”, *Science of The Total Environment*, **2022**, 805, 150253 (<https://doi.org/10.1016/j.scitotenv.2021.150253>).
  24. Alexandra Ioannidi, Olga S. Arvaniti, **Maria-Christina Nika**, Reza Aalizadeh, Nikolaos S. Thomaidis, Dionissios Mantzavinos, Zacharias Frontistis “Removal of drug losartan in environmental aquatic matrices by heat activated persulfate: kinetics, transformation products and synergistic effects”, *Chemosphere*, **2022**, 287, 131952 (<https://doi.org/10.1016/j.chemosphere.2021.131952>).
  25. Andreas Androulakakis, Nikiforos Alygizakis, Georgios Gkotsis, **Maria-Christina Nika**, Varvara Nikolopoulou, Erasmia Bizani, Alexander Badry, Elizabeth Chadwick, Alessandra Cincinelli, Daniela Claßen, Sara Danielsson, Rene W.R.J. Dekker, Guy Duke, Natalia Glowacka, Hugh A.H. Jansman, Burkhard Knopf, Oliver Krone, Tania Martellini, Paola Movalli, Sara Persson, Anna Roos, Emily O'Rourke, Heinz Rüdell, Ursula Siebert, Gabriele Treu, Nico W. van den Brink, Lee Anthony Walker, Jaroslav Slobodnik, Nikolaos S. Thomaidis “Determination of 56 per- and polyfluoroalkyl substances in top predators and their prey from Northern Europe by LC-MS/MS”, *Chemosphere*, **2022**, 287, 131775. (<https://doi.org/10.1016/j.chemosphere.2021.131775>).
  26. **Maria-Christina Nika**, Reza Aalizadeh, Nikolaos S. Thomaidis “Non-target trend analysis for the identification of transformation products during ozonation experiments of citalopram and four of its biodegradation products”, *Journal of Hazardous Materials*, **2021**, 419, 126401 (<https://doi.org/10.1016/j.jhazmat.2021.126401>).
  27. Ana Miralles-Marco, Miaomiao Wang, June- Soo Park, Georgia Gatidou, **Maria-Christina Nika**, Samantha Bialorucki, Olga-Ioanna Kalantzi, Nikolaos S. Thomaidis, Athanasios S. Stasinakis, Myrto Petreas, “Sample stability in inter-laboratory studies: Exploring integrity of targeted PFASs in extracted wastewater samples during transport and storage stages”, *Chemosphere*, **2021**, 282, 131065 (<https://doi.org/10.1016/j.chemosphere.2021.131065>).
  28. Juliet Kinyua, Aikaterini K. Psoma, Nikolaos I. Rousis, **Maria-Christina Nika**, Adrian Covaci, Alexander L.N. van Nuijs, Nikolaos S. Thomaidis “Investigation of Biotransformation Products of p-Methoxymethylamphetamine and Dihydromephedrone in Wastewater by High-Resolution Mass Spectrometry”, *Metabolites*, **2021**, 11, 66 (<https://doi.org/10.3390/metabo11020066>).
  29. Tryfon Kekes, **Maria-Christina Nika**, Fotios Tsopelas, Nikolaos S. Thomaidis, Constantina Tzia, “Use of  $\delta$ -manganese dioxide for the removal of acetaminophen from aquatic environment: Kinetic - thermodynamic analysis and transformation products identification”, *Journal of Environmental Chemical Engineering*, **2020**, 104565 ([doi.org/10.1016/j.jece.2020.104565](https://doi.org/10.1016/j.jece.2020.104565)).
  30. Olga S. Arvaniti, Zacharias Frontistis, **Maria-Christina Nika**, Reza Aalizadeh, Nikolaos S. Thomaidis, Dionissios Mantzavinos, “Sonochemical degradation of trimethoprim in water matrices: Effect of operating conditions, identification of transformation products and toxicity assessment”, *Ultrasonics Sonochemistry*, **2020**, 67, 105139 (<https://doi.org/10.1016/j.ultsonch.2020.105139>).
  31. Konstantina S. Diamanti, Nikiforos A. Alygizakis, **Maria-Christina Nika**, Martina Oswaldova, Peter Oswald, Nikolaos S. Thomaidis & Jaroslav Slobodnik, “Assessment of the chemical

pollution status of the Dniester River Basin by wide-scope target and suspect screening using mass spectrometric techniques”, *Analytical and Bioanalytical Chemistry*, **2020**, 412, 4893–4907 (doi: 10.1007/s00216-020-02648-y).

- 32. Maria-Christina Nika**, Konstantina Ntaiou, Konstantinos Elytis, Vasiliki. S. Thomaidi, Georgia Gatidou, Olga I. Kalantzi, Nikolaos S. Thomaidis, Athanasios S. Stasinakis, “Wide-scope target analysis of emerging contaminants in landfill leachates and risk assessment using Risk Quotient methodology”, *Journal of Hazardous Materials*, **2020**, 394, 122493 (https://doi.org/10.1016/j.jhazmat.2020.122493).
- 33.** Paola Anna Movalli, Guy Duke, Gloria Ramello, Rene Dekker, Al Vrezec, Richard Shore, Antonio Garcia-Fernandez, Chris Wernham, Oliver Krone, Nikiforos Alygizakis, Alexander Badry, Fausto Barbagli, Koos Biesmeijer, Giovanni Boano, Alex Bond, Yael Choresch, Jan Bolding Christensen, Alessandra Cincinelli, Sara Danielsson, Andreia Dias, Rune Dietz, Gloria Dos Santos Pereira, Marcel Eens, Silvia Espin, Igor Eulaers, Sylke Frahnert, Giorgios Gkotsis, Natalia Glowacka, Pilar Gomez-Ramirez, Marco Grotti, Michel Guiraud, Peter Hosner, Ulf Johansson, Veerle Jaspers, Pepijn Kamminga, Jan Koschorreck, Burkhard Knopf, Eero Kubin, Sabrina LoBrutto, Rui Lourenco, Tania Martellini, Emma Martinez-Lopez, Rafael Mateo, Maria-Christina Nika, Varvara Nikolopoulou, Dan Osborn, Olivier Pauwels, Marco Pavia, Christiane Quaisser, Heinz Ruedel, Pablo Sanchez-Virosta, Jaroslav Slobodnik, Christian Sonne, Nikolaos Thomaidis, Fuiz Tibor, Till Toepfer, Gabriele Treu, Risto Vainola, Jari Valkama, Steven Van der Mije, Didier Vangeluwe, Ben Warren, Friederike Woog “Progress on bringing together raptor collections in Europe for contaminant research and monitoring in relation to chemicals regulation” *Environmental Science and Pollution Research*, Trend Editorial, **2019**, (https://doi.org/10.1007/s11356-019-05340-6).
- 34.** Reza Aalizadeh, Maria-Christina Nika, Nikolaos S. Thomaidis “Development and Application of Retention Time Prediction Models in the Suspect and Non-target Screening of Emerging Contaminants” *Journal of Hazardous Materials*, **2019**, 363, 277-285 (https://doi.org/10.1016/j.jhazmat.2018.09.047).
- 35.** Eleni Mila, Maria-Christina Nika, Nikolaos S. Thomaidis “Identification of first and second generation ozonation transformation products of niflumic acid by LC-QToF-MS” *Journal of Hazardous Materials*, **2019**, 365, 804-812 (https://doi.org/10.1016/j.jhazmat.2018.11.046).
- 36. Maria-Christina Nika**, Anna A. Bletsou, Elena Koumaki, Constantinos Noutsopoulos, Daniel Mamais, Athanasios S. Stasinakis, Nikolaos S. Thomaidis “Chlorination of benzothiazoles and benzotriazoles and transformation products identification by LC-HR-MS/MS” *Journal of Hazardous Materials*, **2016**, 323 (doi:10.1016/j.jhazmat.2016.03.035).
- 37.** Christophoros Christophoridis, Maria-Christina Nika, Reza Aalizadeh, Nikolaos S. Thomaidis “Ozonation of ranitidine: effect of experimental parameters and identification of transformation products” *Science of The Total Environment*, **2016**, 557-558 (doi:10.1016/j.scitotenv.2016.03.026).
- 38.** Elena Koumaki, Daniel Mamais, Constantinos Noutsopoulos, Maria-Christina Nika, Anna A. Bletsou, Nikolaos S. Thomaidis, Alexander Eftaxiasa, Georgia Stratogianni “Degradation of emerging contaminants from water under natural sunlight: The effect of season, pH, humic acids and nitrate and identification of photodegradation by-products” *Chemosphere*, **2015**, 138 (doi:10.1016/j.chemosphere.2015.07.033).
- 39.** Constantinos Noutsopoulos, Elena Koumaki, Daniel Mamais, Maria-Christina Nika, Anna A. Bletsou, Nikolaos S. Thomaidis “Removal of endocrine disruptors and non-steroidal anti-inflammatory drugs through wastewater chlorination: the effect of pH, total suspended solids and humic acids and identification of degradation by-products” *Chemosphere*, **2015**, 119 Supplement, (doi: 10.1016/j.chemosphere.2014.04.107).

### Publications in scientific book chapters

Konstantinos Vasilatos, Maria-Christina Nika, Georgios Gkotsis, Nikolaos S. Thomaidis “Artificial sweeteners”, in “Analytical Methods for Environmental Contaminants of Emerging

Concern” by Núria Fontanals and Rosa Maria Marcé (editors), Wiley, **2022**, 151-186 (Online ISBN: 9781119763895, DOI: 10.1002/9781119763895.ch5).

**Overall citations: 800**

**h-index: 13**

**Source:** Google Scholar (<https://scholar.google.gr/citations?user=PSIdY3wAAAAJ&hl=el>), 19/11/2022

### Conferences Presentations (selected out of >65 oral and poster presentations)

- E-M. Tomou, K. Diamanti, E. Peppas, M.-C. Nika, G. Vourli, N. Maragou, N. S. Thomaidis, A. Trichopoulou, Detection of polyphenolic compound metabolites in human serum following consumption of herbal infusions: Analytical approach for mountain tea, Mediterranean Tradition & Modern Applications 2nd Annual Experiential Conference with American, International and Greek Scholars, 13-18/11/ 2023, Crete, Greece. (Poster)
- V.G. Beretsou, K. Manoli, **M.C. Nika**, E. Cytryn, N.S. Thomaidi, D. Fatta-Kassinou. “Identification Of Transformation products of antibiotics via suspect screening and evaluation of their antimicrobial activity for a deeper understanding of UV-based treatment processes” CIPOA2022 5th Iberoamerican Conference on Advanced Oxidation Technologies, 7-1/11/2022, Cusco, Peru. (Poster - Flash presentation)
- K. S. Diamanti, D. E. Damalas, G. Gkotsis, E. I. Panagopoulou, **M.C. Nika**, C. Baessmann, B. Galvin N. S. Thomaidis “Enhanced performance of a 4D wide-scope target screening methodology in environmental (bio)monitoring, utilizing LC-ESI-TIMS-QTOF and developing a CCS-aware database” ASMS2022, 05-09/06/2022, Minneapolis, USA. (Poster presentation)
- G. Gkotsis, **M.C. Nika**, N. Alygizakis, K. Vasilatos, A. Künitz, L. Cervin, S. Persson, A. Roos, A. Galatius, P. Oswald, F. Reif, M. Daehne, L. Westphal, S. Rohner, U. Siebert, I. Pawliczk, J. Slobodnik, N.S. Thomaidis “Advanced throughput analytical strategies for the comprehensive HRMS screening of organic micropollutants in marine mammals from the Baltic Sea” SETAC EU 2022 15-19/05/2022, Copenhagen, Denmark. (Poster presentation)
- E. Aleiferi, A. Galani, A. Gkogkou, **M.C. Nika**, A. Kontou., N. Alygizakis, N. S. Thomaidis “Wastewater-Based Epidemiology Monitoring of Drug Use and Chemical Exposure During COVID-19 in Athens, Greece, Utilising Wide-Scope LC-HRMS & LC-MS/MS Target Screening Analysis” SETAC EU 2022 15-19/05/2022, Copenhagen, Denmark. (Poster presentation)
- **M.C. Nika**, G. Gkotsis, . Vasilatos, A. Gkogkou, A. Stasinakis, N.S. Thomaidis “Investigating the impact of landfill leachates in groundwater quality through the monitoring of multiclass emerging contaminants by LC-HRMS” CEST 2021 01-04/09/2021, Athens, Greece. (Poster presentation)
- I.C. Iakovides, V.G. Beretsou, A. Christou, G. Gkotsis, **M.C. Nika**, N.S. Thomaidis, D. Fatta-Kassinou “Investigating the accumulation of 89 pharmaceutical compounds in the water-soil-plant continuum and the leaching potential using lysimeters irrigated with wastewater from a CAS and MBR system, under real-field conditions” CEST 2021 01-04/09/2021, Athens, Greece. (Oral presentation)

### Awards and Honors

- Marie Skłodowska-Curie Postdoctoral Fellowship, HORIZON-MSCA-2022-PF-01, Project No: 101105240, 2023-2025
- Poster Award, poster presentation at the 18<sup>th</sup> International Conference on Environmental Science and Technology, 2023
- Fellowship for postdoctoral studies in the context of “Reinforcement of Postdoctoral Researchers-2nd Cycle”(MIS-5033021), implemented by the State Scholarships Foundation, 2020-2022



- 2 Poster Awards, poster presentations at the 17<sup>th</sup> International Conference on Chemistry and the Environment, 2019
- Poster Award, poster presentation at the 11<sup>th</sup> Aegean Analytical Days, 2018
- Poster Award, poster presentation at the 5<sup>th</sup> EuCheMS Chemistry Congress, Turkish Chemical Society and European Association for Chemical and Molecular Sciences, 2014
- Scholarship for Ph.D. studies, A.G. Leventis Foundation, 2014-2017

### Professional Affiliations

- Member of the Editorial Board of the Open access Journal *Frontiers in Analytical Science*, as a Review Editor in Environmental Analysis, 2021-Present
- Member of the Cross-Working Group on CECs in the terrestrial environment, NORMAN Network, 2021-Present
- Member of the Cross-Working Group of Non-target Screening, NORMAN network, 2018-Present
- Association of Greek Chemists, 2012-Present
- Hellenic Mass Spectrometry Society, 2012-Present

### Contact information

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