

Dr. Konstantinos V. Kakavas – Assistant Professor of Environmental, analytical Chemistry and human health

Education

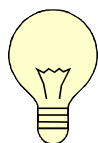
B.Sc. in Chemistry, Aristotelian University of Thessaloniki, Greece

Specialization in Oenology, Aristotelian University of Thessaloniki, Greece

Ph.D. in Human Biochemistry, University of Thessaly, Greece

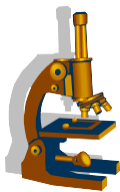
Research experience, Organic chemistry, Osaka Japan

Assistant Professor (full faculty member) at University of Thessaly, Greece



Research Field of Interest

1. Environmental and analytical Chemistry
2. Public health
3. Genetics
4. Biotechnology and microbiology
5. Chromatographic techniques (HPLC and GC)
6. Essential oils



Teaching

Undergraduate:

Chemistry, Environmental chemistry, Water quality and processing, Environmental hygiene, Biochemistry

Graduate:

- Environmental Chemistry and human health
- Environmental pollution
- Separation Methods - Gas Chromatography mass spectrometry
- Quality Assurance in Analytical Laboratories and Accreditation



Papers

1. **Kakavas V. Konstantinos**. Sensitivity and applications of the PCR Single-Strand Conformation Polymorphism method. **PCR Molecular Biology Reports**, DOI10.1007/s11033-021-06349-2. [link](#)
2. Sotiriou S., Satra M., Vamvakopoulou D., Soufoudis C., Simou A., Sidiropoulos A., **Kakavas K.** Garas A. Skentou H. Vamvakopoulos N. Maternal serum pregnancy-associated plasma protein-A concentration at 11-14 weeks of gestation and preeclampsia risk of women with common congenital anatomic uterine abnormalities. **The Journal of Obstetrics and Gynecology research**. April 15th 2021. [link](#)
3. Chavenetidou Marina, **Kakavas V. Konstantinos** and Birbilis Dimitrios. «Shrinkage and swelling of Greek chestnut wood (Castanea sativa Mill.) in relation to extractives presence». **Materials Science & Engineering**. Scopus Indexed. <http://www.icema.org/>
4. **Konstantinos V. Kakavas** Quality characteristics of Quercus Macedonica, Castanea sativa Mill. vs Quercus Alba in order to produce an innovative balsamic vinegar product. **Carpathian Journal of food science and technology** 2020 12(4), 91-97. [link](#).
5. Marina Chavenetidou, Dimitris Birbilis and **Konstantinos V Kakavas**. Environmental effects on Chestnut wood (Castanea sativa Mill.) treated with different surface coatings. 2019 the 6th **International Conference on Mechanical Engineering. Materials Science**

and Civil Engineering. April 2019 (Scopus Indexed). [Materials Science and Civil Engineering 2019](#)

6. **Konstantinos V Kakavas**, Marina Chavenetidou and Dimitris Birbilis. Chemical Properties of Greek Stump Chestnut (*Castanea sativa* Mill.). **Natural Products Chemistry & Research**.2018, 6:4 DOI: 10.4172/2329-6836.1000331. [link](#)
7. Dimitris Birbilis, **Konstantinos Kakavas** and Marina Chavenetidou. Ring shake occurrence related to growth parameters and prediction model for its presence before felling. **Eur. J. Wood Prod**, 2018. DOI 10.1007/s00107-017-1258-8. [Eur. J. Wood Prod, 2018. Springer.](#)
8. **Konstantinos Kakavas**, Marina Chavenetidou and Dimitris Birbilis. Effect of ring shakes on mechanical properties of chestnut wood from a Greek coppice forest. **The Forestry Chronicle**. 2018, Vol. 94, No 1 - [The Forestry Chronicle 2018, Vol. 94, No1](#) .
9. T. Tsioukas, D. Birbilis, S. Karastergiou, **K. Kakavas**. «Determining the bending and tensile strength of impregnated with rapeseed oil European beech (*Fagus sylvatica*) wood joints glued with PVAc and PU». **Journal of International Scientific Publications. Materials, Methods & Technologies** ISSN 1314-7269, Volume 9, 2015. Research project: ARXIMEDES III. [link](#)
10. **Konstantinos V. Kakavas**, D. Birbilis, T. Tsioukas. «Determining the tensile strength and other properties of European Beech (*Fagus Sylvatica*) wood impregnated with rapeseed oil». **Journal of International Scientific Publications. Materials, Methods & Technologies** ISSN 1314-7269, 2015. [link](#)
11. **Kakavas V. Konstantinos**, Plageras P, Vlachos A, Papaioannou B.A, Noulas A. «PCR-SSCP: a method for the molecular analysis of genetic diseases. An overview». **Molecular Biotechnology**. [Humana Press, IF 1,859-2005]. Review, 2008 Feb; 38(2): 155-63. (Published February 2008) [Humana Press, 2008, 38\(2\): 155-63](#)
12. **Kakavas V. Konstantinos**, Noulas A., Chalkias C., Hatzichristodoulou C., Georgiou I., Georgatsou E. & Bonanou S. «Identification of the Four Commonest β -Globin Gene Mutations in Greek β -Thalassaemic Patients and Carriers by Non-Radioactive PCR-SSCP: Advantages and Limitations of the Method». **Journal of Clinical Laboratory Analysis**. (2006) 20 (1): 1-7[Wiley Scientific Publications, IF 0,842-2005]. (Published) [Wiley Scientific Publications \(2006\) 20 \(1\): 1-7.](#)

13. **Kakavas V. Konstantinos**, Noulas A., Kanakis I., Bonanou S., Karamanos N. «Identification of the commonest cystic fibrosis transmembrane regulator gene $\Delta F508$ mutation: evaluation of PCR-single strand conformational polymorphism and polyacrylamide gel electrophoresis». **Biomedical Chromatography** 2006 Oct; 20(10):1120-5 [Wiley Scientific Publications, IF 1,218 – 2005]. (Published October 2006). [Wiley Scientific Publications 2006 Oct; 20\(10\):1120-5](#)
14. Papaioannou A, Rigas N, Rigas G, Paliatsos A.G, Nastos P.T, Plageras P, Roupaz, **Kakavas K.V** and Dovriki E. «Multivariate statistical interpretation of soil quality data in the context of public health». **Fresenius Environmental Bulletin** 2009, 18, 204-212. (Accepted-October 2008). [Parlar scientific 2009, 18, 204-212](#)
15. Papaioannou B.A, Plageras P, Dovriki E, Minas A, Krikelis V, Nastos PTh, **Kakavas V.K** and Paliatsos A. «Groundwater's quality and location of productive activities in the region of Thessaly (Greece)». **Desalination** (2007) 213: 209-217, [Elsevier, IF 0,995-2005]. (Accepted May 27 2006). [Desalination \(2007\) 213: 209-217](#)
16. Papaioannou A, **Kakavas V.K**, Dovriki E., Plageras P, Karamanis I, Papas M, Noulas A., Minas A., Krikelis V., Paliatsos A.«Quality control of groundwater of region Thessaly». **Fresenius Environmental Bulletin** (15/9/2006) 15(9a): 1015-1022, [Parlar Scientific Publications, IF 0,509 – 2005]. (Published September 2006). [Parlar Scientific Publications 15\(9a\): 1015-1022.](#)
17. Nastos P.T, Papaioannou A, Paliatsos A.G, **Kakavas V.K**, Plageras P and Dovriki E. «Wet deposition in two Greek sites: Larissa and Athens» **Fresenius Environmental Bulletin**. Accepted June 12 2008. Vol 17/No 10a/2008 – pages 1648-1654 [Parlar Scientific Publications, IF 0,509 – 2005]. Vol 17/No 10a/2008 – pages 1648-1654. [Parlar Scientific Publications Vol 17/No 10a/2008 – p. 1648-1654](#)
18. **Konstantinos V. Kakavas**, Iosifidis Stavros. Simultaneous determination of organic acids in wines aged in oak wood (*Quercus spp*) barrels by HPLC. **American Association for science and technology**, 2:6, 2015 ISSN 2375-3803.
19. A. Papaioannou, P. Plageras, G. Karamanis, **K. Kakavas** and A. Noulas. “Reference Values on Serum Biochemical Parameters of Greek Individuals”. **Clinica Chimica Acta** 2005, 355, S375.
20. **Kakavas K.**, Αγναντής Χ, Λαχανά Ε, Μακρή Α, «Διερεύνηση της στάσης των σπουδαστών του ΤΕΙ Λάρισσας απέναντι στην αιμοδοσία και οι παράγοντες που επηρέασαν τη διαμόρφωσή της». **Ιατρική** 2009.

Patents

21. D. Angelousis, **K. Kakavas**. Smoked Greek mark spirit with different wood types. **Patent GR 20160100303/1009166 December 2017.**

Conference Papers

22. **K. Kakavas**, M. Chavenetidou, D. Birbilis. Moisture adsorption and swelling rate of sweet chestnut wood (*Castanea sativa* Mill) from Greek origin. **Environmental Management, Engineering, Planning and Economics (CEMEPE 2021) and SECOTOX Conference.** Thessaloniki Greece. Accepted April 2021, In print.
23. Papaioannou A, Plageras P, Dovriki E, **Kakavas K**, Nastos P.Th. & Paliatsos A.G. «Quality Control of Drinking Water and Public Health». **WSEAS Transactions on environmental development** ISSN 1790-5079(2006). June 2006, 6(2): 845-850. (Συμπεριλαμβάνεται στις βάσεις δεδομένων BIOSIS, COMPENDEX, EMBASE, ECONLIT, FLUIDEX, GEOBASE, INSPECT, OCEANBASE, NAVIGATOR). (Accepted- June 26 2006).
24. Sergis D., **Kakavas V. Konstantinos**, Birbilis D., Chavenetidou M. Promising, alternative and innovative wood surface sealing with emery dust - first conclusions. **13^o Paint Symposium. National Metsovio Polytechnic. Greece.** March 2018.

25. D. Birbilis, S. Karastergiou, S. Adamopoulos, **K. Kakavas**, T. Tsioukas. «Wood impregnated with hot rape oil and surface treated with turpentine» **25th International Scientific Conference “New Materials and Technologies in the Function of Wooden Products”**, October 2014, Zagreb, Croatia. Research project: ARXIMEDES III.
26. Karastergiou, S., Adamopoulos, S., **Kakavas, K.** Properties of black pine (*Pinus nigra* Arn.) wood treated with hot rape oil. **5th RCCWS International Symposium “Wood Structure, Properties and Quality – 2014”**, Mytisch, Russia, September 22–25, 2014.
27. Birbilis D., Karastergiou S., **Kakavas K.**, Tsioukas Th., Kakaras I. Mechanical strength of *Pinus nigra* wood joints impregnated with rapeseed oil. **17th Greek Forestry Conference. Kefalonia Greece 2015.**
28. **Kakavas Konstantinos**, Tsiptas Dimitrios, Doulis Andreas. Near non-destructive DNA barcoding methodology of archaeological wood species identification with RADP-PCR technology from two excavation sites in Greece. **12th ICOM-CC Wet Organic Archaeological Materials (WOAM)** Instabul Turkey, March 2013.
29. **Konstantinos V. Kakavas**, Dimirtios Birbilis, Dimitrios Tsiptas. Simultaneous determination of organic acids in wines aged in oak wood (*Quercus spp*) barrels by HPLC. **16^o Annual Meeting of Prosilva Europe, Thessaloniki Greece 2013.**
30. Papaioannou B.A, Plageras P, **Kakavas K.**, Dovriki E, Nastos P.Th., Minas A., Krikelis V., and Paliatsos A.G. «Monitoring and control the quality of drinking water, the necessary action for the protection of public health». **Proceedings of the 2006 IASME/WSEAS International Conference on Energy, Environment Ecosystems & Sustainable development**, Athens, Greece, July 26-2006 (pp336-341) ISSN 1790-5079. (Published - Accepted- 26/6/2006).
31. Papaioannou A, **Kakavas K.**, Plageras P, Minas A, Roupa Z, Nastos P.Th. & Paliatsos A.G. «Multivariate Statistical Interpretation of Physical, Chemical and Microbiological Variables of Potable Water in the Context of Public Health». **5th WSEAS Int. Conf. on environment, Ecosystems and development.** Tenerife, Spain, December 2007, (pp347-352). (Συμπεριλαμβάνεται στις βάσεις δεδομένων BIOSIS, COMPENDEX, EMBASE, ECONLIT, FLUIDEX, GEOBASE, INSPECT, OCEANBASE). (Accepted- December 2007).

32. Papaioannou A, **Kakavas V.K.**, Plageras P, Dovriki E, Minas A, Noulas A. and Paliatsos A.G «Quality control of soils and groundwater of region Thessaly (Greece)». **8th International Conference on Protection and restoration of the environment**. Chania, Greece, July 2006.
33. Papaioannou A, Plageras P., Nastos P.Th, Paliatsos A.G, Dovriki E., Roupa Z., **Kakavas V.K.** and I. Papas. «Multivariate statistical interpretation of soil physical and chemical data in the context of public health». **Proceedings of International Conference on Environment Management, Engineering Planning and Economics (CEMEPE)**. Skiathos, Greece, June 24-28, 2007. Pages 2667-2672. Editors: A. Kungolos, K. Aravosis, A. Karagiannidis, P. Samaras.
34. Papaioannou A, Plageras P, **Kakavas V.K.**, Karamanis G, Labronikou M, Dovriki E., Noulas A. «Quality control of ground water of region Thessaly». **13^o Environmental Pollution and its impact on Life in the Mediterranean region (MAESAP)**, Thessaloniki, Greece 2005, Abstracts page 115.
35. Plageras P., Todorova A., Bogdanova N., Kremensky I., Horst J., Dworniczak B., Papaioannou A., Minas A., **Kakavas K.**, Anifantis G., Krikelis V. And Noulas A. «MLPA analysis for deletions/duplications detection in Bulgarian DMD/BMD patients. **59th Greek Conference of Biochemistry and Molecular Biology**.
36. Papaioannou A., **Kakavas V.K.**, Dovriki E., Nastos P.Th., Plageras P., Minas A., Kella S. and Paliatsos A.G.«Quatity control of soils and groundwater of region Thessaly». **8th International Conference on Protection and restoration of the environment**. Chania, Greece, July 2006.

Contact

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