

## Curriculum Vitae

First name: Dionisios  
Surname: Panagiotaras

Present address: Department of Mechanical Engineering,  
Technological Educational Institute (TEI) of Western  
Greece, M. Alexandrou 1, 263 34 Patras, Greece.  
Tel.: 0030 2610-369 299

Mobile: 0030 6946 128 697

E-mail: [sakpanag@teiwes.gr](mailto:sakpanag@teiwes.gr) [dionisios.panagiotaras@gmail.com](mailto:dionisios.panagiotaras@gmail.com)

Web pages: [http://www.researchgate.net/profile/Dionisios\\_Panagiotaras](http://www.researchgate.net/profile/Dionisios_Panagiotaras)  
<http://teipat.academia.edu/DionisiosPanagiotaras>



### **Education**

**PhD in Geology:** November 2008. Department of Geology, University of Patras, Greece.

**BSc in Chemistry:** April 1994. Department of Chemistry, University of Ioannina, Greece.

### **Work experience**

February 2009 – present. Faculty member at the Department of Mechanical Engineering, Technological Educational Institute of Western Greece, teaching in undergraduate and postgraduate levels.

2004 - 2008. PhD candidate at the Department of Geology, University of Patras, Greece, and Teaching Assistant at the Department of Mechanical Engineering, Technological Educational Institute of Western Greece.

2002 – 2004. Chemistry teacher in high school education center Komvos and teaching assistant at the Department of Mechanical Engineering, Technological Educational Institute of Western Greece.

1995 – 2002. Research associate in EU funded projects and as teaching assistant at the Department of Geology, University of Patras, Greece.

### **Academic Activities**

#### *Undergraduate Lectureship; Modules:*

1. Principles of Geochemistry [Autumn semester, years 1998-2002]
2. Applied Geochemistry [Spring semester, years 1998-2002, 2012]
3. Inorganic Chemistry [Autumn semester, years 2002-2004 and 2009-2016]
4. Environmental Technology [Spring semester, years 2010, 2015, 2016]

#### *Postgraduate Lectureship; Modules:*

1. Sustainability of processes and products [Autumn semester, years 2013-2016]
2. Biomass energy systems [Autumn semester, years 2014-2016]

*Supervision of Dissertations*  
Undergraduate level

Thirty (30) undergraduate dissertations at the Department of Mechanical Engineering Technological Educational Institute (TEI) of Western Greece [years 2009-2015]. Names:

Athanaskos Patapios, Alexandropoulos George, Stamatis Alexandros, Theodoropoulos Antonios, Arvanity Panagiota, Velves Konstantinos, Nikolaou Vlasis, Drakos Dimitrios, Berlemis Christos, Mayrogiannis Thomas, Arvanitelis George, Karvounis Charalabos, Fragou Korina, Koutsoukos Vasilios, Stamelos Konstantinos, Psiouris Nikolaos, Gianniba Eystathia, Ganna Georgia, Komninos Dionisis, Kavakliotis Konstantinos, Kollia Evangelia, Botzoli Dimitra, Thanasioulas Panagiotis, Sotiropoulou Katerina, Tsixritzis George, Floris Savas, Sfetsos Stylianos, Tzimikou Christina, Xatzis Gerasimos, Xatzistratis Christos.

Postgraduate level

*Department of Mechanical Engineering, Technological Educational Institute (TEI) of Western Greece*

- Two (6) postgraduate dissertations completed at the Department of Mechanical Engineering, Technological Educational Institute (TEI) of Western Greece [year 2015-2016]. Names: Nikolaos Karalis, Lamprini Karakosta, Nikolaos Diamantopoulos, Sofia Mitroulia, Gerasimos Kavalieratos, Stelios Zygomas.

**EU funded research projects**

1. 2013 – November 2015. IndrAQ: Multidisciplinary study of air-quality with emphasis indoor. European Union (European Social Fund–ESF) and National Strategic Reference Framework (NSRF)-Research Funding Program: THALES Investing in knowledge society through the European Social Fund. *Role: Member of the proposal writing team. Research Associate.*
2. 2012 – September 2014. EFFICONS: Development of innovative nanotechnology-based sustainable solutions for energy efficient buildings. FP7 LEAD ERA Action. Department of Mechanical Engineering, Technological Educational Institute of Western Greece. *Role: Member of the proposal writing team. Research Associate.*
3. 2012 – October 2014. INDOOR ECOPAVING: Development and manufacturing of a new innovative nanotechnology-based decontaminant construction material for indoor building. FP7 LEAD ERA Action. Department of Mechanical Engineering, Technological Educational Institute of Western Greece. *Role: Member of the proposal writing team. Research Associate.*
4. 2001 - 2004. Biotechnologies for the Deep. European Union- EVK3-CT2000-00042-BIODEEP. Department of Geology, University of Patras, Greece. *Role: Research Associate.*
5. 1998 - 2001. High resolution temporal and spatial study of the Benthic biology and geochemistry of a north-eastern Atlantic Abyssal Locality. European Union-MAS3-CT95-0018. Department of Geology, University of Patras, Greece. *Role: Research Associate.*

6. 1995 - 1999. Hydrothermal Fluxes and Biological Production in the Aegean. European Union- MAS3-CT95-0021. Department of Geology, University of Patras, Greece. *Role: Research Associate.*
7. 1994 - 1998. Geochemical Investigations of Hydrothermal Processes in the Hellenic Volcanic Island Arc. European Union-MAS2-CT94-0101. Department of Geology, University of Patras, Greece. *Role: Research Associate.*
8. 1993 - 1995. Hydrodynamics and Biogeochemical Fluxes in the straits of the Cretan Arc. European Union- MAS2-CT93-0059. Department of Geology, University of Patras, Greece. *Role: Research Associate.*

## Publications

### Research monographs and chapters in collective volumes

1. **D. Panagiotaras**, D. Papoulis, E. Stathatos (2015). Geochemistry of Arsenic and Toxic Response. Chapter 4, pages 79-109, in Arsenic Toxicity: Prevention and Treatment. Editor: Narayan Chakrabarty, CRC press, Taylor & Francis, publishers, 524 pp. ISBN: 9781482241969.
2. E. Stathatos, D.Papoulis, **D. Panagiotaras** (2014). Stabilized TiO<sub>2</sub> nanoparticles on clay minerals for air and water treatment. Chapter 18, pages 313-325, in Advanced Oxidation Technologies – Sustainable solutions for environmental treatments. Editors: M. Litter, R. Candal & J.M. Meichtry, CRC publications, 350. pp. ISBN: 9781138001275.
3. **D. Panagiotaras**, G. Panagopoulos, D. Papoulis, P. Avramidis (2012). Arsenic Geochemistry in Groundwater System, pages 27-38, in Geochemistry-Earth's System Processes. Editor: D. Panagiotaras, INTECH Publishers, 500 pp. ISBN: 978-953-51-0586-2.
4. D. Papoulis, **D. Panagiotaras**, G. Panagopoulos (2012). Arsenic: Environmental Impact Reduction Using Natural and Modified Adsorbents. Chapter 15, pages 289-304 in Arsenic: Sources, Environmental Impact, Toxicity and Human Health - A Medical Geology Perspective. Editor: Andrea Masotti, NOVA Publishers, 386 pp. ISBN: 978-1-62081-320-1.
5. G. Panagopoulos P. Giannoulopoulos and **D. Panagiotaras** (2011). Groundwater hydrochemistry of the volcanic aquifers of Limnos Island, Greece, 471-478, in Advances in the Research of Aquatic Environment. Editors: Lambrakis, Nicolaos, Stournaras, George, Katsanou, Konstantina, Vol. 2. Springer-Verlag Berlin Heidelberg Publisher, 512 pp. ISBN: 978-3-642-24075-1.
6. Book: Geochemistry-Earth's System Processes (2012). Editor, **Dionisios Panagiotaras**, INTECH Publishers, 500 pp. ISBN: 978-953-51-0586-2.

### Peer-reviewed journals

1. D. Nikolopoulos, E. Petraki, D. Cantzos, P. H. Yannakopoulos, **D. Panagiotaras**, C. Nomicos (2016). Fractal analysis of pre-seismic electromagnetic and radon precursors: A systematic approach. Accepted for publication in *Journal of Earth Science & Climatic Change*.
2. Bekiari, V., Panagopoulos, G., Papoulis, D., **Panagiotaras, D.**, (2016). Use of Halloysite Nanotubes to reduce ammonium concentration in water and wastewaters. Accepted for publication in *Materials Research Innovations*.

3. **Panagiotaras D.**, Koulougliotis D., Nikolopoulos D., Kalarakis A.N., Yiannopoulos A.Ch., Pikios K. (2015). Biogeochemical Cycling of Nutrients and Thermodynamic Aspects. *Journal of Thermodynamics & Catalysis*, vol. 6: 144, 1-7.
4. **D. Panagiotaras**, D. Nikolopoulos (2015). Arsenic Occurrence and Fate in the Environment; A Geochemical Perspective. *Earth Science & Climatic Change*, vol. 6, issue 4:269, 1-9.
5. N. Diamantopoulos, **D. Panagiotaras**, D. Nikolopoulos (2015). A Comprehensive Review on the Biodiesel Production using Solid Acid Heterogeneous Catalysts. *Journal of Thermodynamics & Catalysis*, vol. 6, issue 2:143, 1-8.
6. D. Nikolopoulos, D. Koulougliotis, E. Vogiannis, E. Petraki, **D. Panagiotaras**, P. Yannakopoulos, S. Kottou (2015). Pilot Electromagnetic Field Measurements in Certain Areas in Greece. *Journal of Physical Chemistry & Biophysics*, vol. 5, issue 2:176, 1-11.
7. Kottou S., Nikolopoulos D., Yannakopoulos P., Vogiannis E., Petraki E., **Panagiotaras D.**, Koulougliotis D. (2015). Preliminary background indoor EMF measurements in Greece. *Physica Medica*, vol. 31, 808-816.
8. Ermioni Petraki, Dimitrios Nikolopoulos, **Dionisios Panagiotaras**, Demetrios Cantzos, Panayiotis Yannakopoulos, Constantinos Nomicos, John Stonham, (2015). Radon-222: A potential short-term earthquake precursor. *Journal of Earth Science & Climatic Change*, 6: 282, 1-7.
9. Avramidis, P., Iliopoulos, G., Kontopoulos, N., **Panagiotaras, D.**, Barouchas P., Nikolaou K., Papadopoulou, P., (2015). Depositional environments, sediment characteristics, palaeoecological analysis and environmental assessment of an internationally protected shallow Mediterranean lagoon, Gialova Lagoon – Navarino Bay, Greece. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, vol. 105, issue 03: 189-206, doi:10.1017/S1755691015000031
10. **D. Panagiotaras**, D. Nikolopoulos, E. Petraki, S. Kottou, D. Koulougliotis, P. Yannakopoulos, S. Kaplanis (2014). Comprehensive experience for Indoor Air Quality Assessment. A review on the determination of Volatile Organic Compounds (VOCs). *Journal of Physical Chemistry & Biophysics*. Vol. 4, issue 5: 159, 1-12.
11. D. Papoulis, E. Kordouli, P. Lampropoulou, A. Rapsomanakis, C. Kordulis, **D. Panagiotaras**, K. Theophylaktou, E. Stathatos, S. Komarneni (2014). Synthesis, Characterization and Photocatalytic Activities of Fly Ash-TiO<sub>2</sub> Nanocomposites for the Mineralization of Azo Dyes in Water. *Journal of Surfaces and Interfaces of Materials*, vol. 2, 261-266.
12. **D. Panagiotaras**, D. Papoulis, E. Stathatos (2014). Silver Modified TiO<sub>2</sub>/Halloysite Thin Films for Decomposition of Target Pollutants. *International Journal of Chemical, Nuclear, Metallurgical and Materials Engineering* Vol:8 No:9, 756-762.
13. Rapsomanikis, A., Papoulis, D., **Panagiotaras, D.**, Kaplani, E. Stathatos, E., (2014) Nanocrystalline TiO<sub>2</sub> and halloysite clay mineral composite films prepared by sol-gel method: Synergistic effect and the case of silver modification to the photocatalytic degradation of Basic Blue 41 azo dye in water. *Global NEST Journal* 16, 485-498.
14. **D. Panagiotaras**, D. Papoulis, E. Stathatos (2014). TiO<sub>2</sub>/clay minerals (palygorskite/halloysite) nanocomposite coatings for water disinfection.

International Journal of Environmental, Ecological, Geological and Mining Engineering, 8, 175-182.

15. D. Papoulis, S. Komarneni, **D. Panagiotaras** (2014). Geochemistry of halloysite-7Å formation from plagioclase in trachyandesite rocks from Limnos island, Greece. *Clay Minerals*, vol. 49, 75-89.
16. D. Papoulis, S. Komarneni, **D. Panagiotaras**, E. Stathatos, K. C. Christoforidis, M. Fernández-García, H. Li, Yin Shu, T. Sato, H. Katsuki (2014). Three-phase nanocomposites of two nanoclays and TiO<sub>2</sub>: Synthesis, characterization and photocatalytic activities. *Applied Catalysis B: Environmental*, vol. 147, 526-533.
17. Avramidis, P., Iliopoulos, G., **Panagiotaras, D.**, Papoulis, D., Lambropoulou, P., Kontopoulos, N., Siavalas, G., Christianis, K. (2014). Tracking Mid-to Late Holocene depositional environments applying sedimentological, palaeontological and geochemical proxies of the Amvrakikos coastal lagoon sediments, Western Greece Mediterranean Sea. *Quaternary International*, vol. 332, 19-36.
18. E. Petraki, D. Nikolopoulos, A. Fotopoulos, **D. Panagiotaras**, G. Koulouras, A. Zisos, C. Nomicos, A. Louizi, J. Stonham, (2013). Self-organised critical features in soil radon and MHz electromagnetic disturbances: Results from environmental monitoring in Greece. *Applied Radiation and Isotopes*, vol. 72, 39–53.
19. E. Petraki, D. Nikolopoulos, A. Fotopoulos, **D. Panagiotaras**, C. Nomicos, P. Yannakopoulos, S. Kottou, A. Zisos, A. Louizi, J. Stonham (2013). Long-range memory patterns in variations of environmental radon in soil. *Analytical Methods*, vol. 5, 4010-4020.
20. D. Papoulis, S. Komarneni, **D. Panagiotaras**, E. Stathatos, D. Toli, K. C. Christoforidis, M. Fernández-García, H. Li, Shu Yin, T. Sato, H. Katsuki (2013). Halloysite-TiO<sub>2</sub> nanocomposites: synthesis, characterization and photocatalytic activity. *Applied Catalysis B: Environmental*, vol. 132-133, 416-422.
21. G. Panagopoulos, **D. Panagiotaras**, P. Giannoulopoulos (2013). Groundwater Quality Assessment of the Limnos Island Volcanic Aquifers, Greece. *Water Environment Research*, Volume 85, Number 5, pp. 422-433.
22. Papoulis D., Komarneni S., **Panagiotaras D.**, Nikolopoulou A., Huihui L., Yin S., Sato T., Katsuki H. (2013) Palygorskite-TiO<sub>2</sub> nanocomposites: Part 1. Synthesis and Characterization. *Applied Clay Science*, vol. 83-84, 191-197.
23. Papoulis D., Komarneni, S., **Panagiotaras D.**, Nikolopoulou A., Christoforidis, K.C., Fernandez-Garcia, M., Huihui Li, Y. Shu, S. Tsugio (2013). Palygorskite-TiO<sub>2</sub> nanocomposites: Part 2. Photocatalytic activities in decomposing air and organic pollutants. *Applied Clay Science*, vol. 83-84, 198-202.
24. E. Stathatos, D. Papoulis, C.A. Aggelopoulos, **D. Panagiotaras**, A. Nikolopoulou (2012). TiO<sub>2</sub>/palygorskite composite nanocrystalline films prepared by surfactant templating route: Synergistic effect to the photocatalytic degradation of an azo-dye in water. *Journal of Hazardous Materials*, vol. 211–212, 68-76.
25. **Panagiotaras, D.**, Papoulis, D., Kontopoulos N., Avramidis, P. (2012). Geochemical processes and sedimentological characteristics of Holocene lagoon deposits, Alikes Lagoon Zakynthos island, Western Greece. *Geological Journal*, issue 4, vol. 47, 372–387.
26. Nikolopoulos D., Petraki E., Marousaki A., Potirakis S., Koulouras G., Nomicos C., **Panagiotaras D.**, Stonham J., Louizi A. (2012). Environmental monitoring of radon in soil during a very seismically active period occurred in South West Greece. *Journal of Environmental Monitoring*, vol. 14, 564-578.
27. G. Panagopoulos and **D. Panagiotaras** (2011). Understanding the extent of geochemical and hydrochemical processes in coastal karst aquifers through ion

- chemistry and multivariate statistical analysis. *Fresenius Environmental Bulletin* (FEB), vol. 20, no 12a, 3270-3285.
28. I. A. Vasiliadou, D. Papoulis, C.V. Chrysikopoulos, **D. Panagiotaras**, E. Karakosta, M. Fardis, and G. Papavassiliou (2011). Attachment of Pseudomonas putida on different structured kaolinite minerals: A combined ATR-FTIR and  $^{1}\text{H}$  NMR study. *Colloids and Surfaces B: Biointerfaces*, vol. 84, 354–359.
  29. Papoulis D., Komarneni, S., Nikolopoulou A., Tsolis-Katagas P., **D. Panagiotaras**, D. Kacandes H.G., Peilin Zhang, Shu Yin and Tsugio Sato (2010). Palygorskite- and Halloysite-TiO<sub>2</sub> nanocomposites: Synthesis and photocatalytic activity. *Applied Clay Science* vol. 50 (1), 118–124.
  30. E. Karakosta, G. Diamantopoulos, M. Katsiotis, M. Fardis, G. Papavassiliou, M. Protopapas, **D. Panagiotaras** (2010). In Situ Monitoring of Cement Gel Growth Dynamics. The Use of a Miniaturized Permanent Halbach Magnet for Precise  $^{1}\text{H}$  NMR Studies. *Industrial & Engineering Chemistry Research*, vol. 49 (2), 613-622.
  31. A. Nikolopoulou, D. Papoulis, S. Komarneni, P. Tsolis-Katagas, **D. Panagiotaras**, G.H. Kacandes, P. Zhang, S. Yin and T. Sato (2009). Solvothermal Preparation of TiO<sub>2</sub> / Saponite Nanocomposites and Photocatalytic Activity. *Applied Clay Science*, vol. 46, 363–368.
  32. S. Varnavas, **D. Panagiotaras**, G. Wolf, (2001). Biogeochemical processes at the sediment-water interface in a North Eastern Atlantic abyssal locality [Porcupine Abyssal Plain]. *Progress in Oceanography*, 50, 223-243.
  33. Varnavas, S. P., **D. Panagiotaras**, D., Megalovasilis, P., Dando, P., Alliani, S., Meloni, R. (2000). Compositional Characterization of Suspended Particulate Matter in Hellenic Volcanic Arc Hydrothermal Centres. *Phys. Chem. Earth (B)*, vol. 25, no. 1, 9-18.

#### **Peer reviewed conference proceedings**

1. Katsaros D., Iliopoulos G., **Panagiotaras D.**, Kontopoulos N., Avramidis P., (2015). Geochemical and Sedimentological Assessment of the Prokopos Coastal Lagoon Sediments, Mediterranean Sea, Western Greece. 15th International Multidisciplinary Scientific GeoConference (SGEM), vol. II (Ecology and Environmental Protection Section) 249-256 pp. 16 – 25 June 2015, Albena, Bulgaria.
2. G. Panagopoulos, D. Papoulis, M. Zamparas, V. Bekiari, **D. Panagiotaras** (2015). Use of clay minerals to reduce ammonium concentration in groundwater. 9th EWRA World Congress, Istanbul, Turkey, 10-13 June 2015.
3. **D. Panagiotaras**, E. Kaplani, E. Stathatos, D. Papoulis (2014). Self-cleaning properties of TiO<sub>2</sub>/palygorskite and TiO<sub>2</sub>/halloysite nanocomposite coatings. AIP Conference Proceedings vol. 1618, issue 1, 362-365 pp. 10th International Conference of Computational Methods in Sciences and Engineering-ICCMSE, 04-07 April, Metropolitan Hotel, Athens, Greece.
4. E. Kaplani, S. Kaplanis, **D. Panagiotaras**, E. Stathatos (2014). Optical Properties of ITO nanocoatings for Photovoltaic and Energy Building Applications. AIP Conference Proceedings vol. 1618, issue 1, 348-350 pp. 10th International Conference of Computational Methods in Sciences and Engineering-ICCMSE, 04-07 April, Metropolitan Hotel, Athens, Greece.
5. **D. Panagiotaras**, D. Nikolopoulos, D. Koulougliotis, E. Petraki, I. Zisos, E. Vogiannis, S. Kaplanis, A. Yiannopoulos, A. Bakalis, A. Zisos (2013). Indoor Air Quality Assessment: Review on the topic of VOCs. ERA-8th International Conference for International Synergy in Energy, Environment, Tourism and

- contribution of Information Technology in Science, Economy, Society and Education. pp. 91-101. ISSN-1791-1133. 23-25 September, Technological Education Institute of Piraeus, Greece.
6. D. Papoulis, S. Komarneni, D. Toli, **D. Panagiotaras**, S. Bakalis (2013). Synthesis and Characterization of Four New Halloysite - TiO<sub>2</sub> Nanocomposites. 13th Congress of the Geological Society of Greece (G.S.G.), vol. XLVII, no.1, pages 407-415. Chania, 5-8 September, Crete, Greece.
  7. **D. Panagiotaras**, (2012). Nanotechnology-based decontaminant materials. 2nd International Conference, Advances in Engineering and Management, ADEM 2012. ISBN 978-606-510-899-8. 8 pages.
  8. P. Avramidis, **D. Panagiotaras**, P. Lampropoulou, D. Papoulis, N. Kontopoulos (2012). Sedimentological and Geochemical characteristics of Holocene lagoonal deposits, Amvrakikos gulf, western Greece. 12th International Multidisciplinary Scientific GeoConference and EXPO (SGEM), Modern Management of Mine Producing, Geology and Environmental Protection, vol. 3, 979-986.
  9. D. Papoulis, S. Komarneni, **D. Panagiotaras**, A. Nikolopoulou, Li Huihui, Yin Shu, Tsugio Sato, Katsuki, H (2012). Halloysite – TiO<sub>2</sub> nanocomposites. Synthesis and characterization. 12th International Multidisciplinary Scientific GeoConference and EXPO (SGEM), Modern Management of Mine Producing, Geology and Environmental Protection, vol. 3, 459-466.
  10. G. Panagopoulos, P. Giannoulopoulos, **D. Panagiotaras** (2011). Groundwater hydrochemistry of the volcanic aquifers of Limnos Island, Greece. 9th International Hydrogeological Congress, volume B, 471-486.
  11. Avramidis P., **Panagiotaras D.**, Papoulis D., Kontopoulos N., (2010). Sedimentological and Geochemical characterization of Holocene Sediments, from Alikes Lagoon, Zakynthos Island, Western Greece. Bulletin of the Geological Society of Greece. 12th International Congress, 19-22 May, University of Patras, Greece. XLIII No2, 558-567.
  12. A. Nikolopoulou, D. Papoulis, P. Tsolis-Katagas, **D. Panagiotaras**, G.H Kacandes (2009). Solvothermal Preparation and Characterization of TiO<sub>2</sub> Pillared Saponite. 9th International Multidisciplinary Scientific Geoconference (SGEM 2009). Conference Proceeding, vol. II, pages 175-182.
  13. Varnavas, S.P., **Panagiotaras, D.**, Megalovasilis, P.S. (1998). Chemical Characteristics of a Submarine Hydrothermal System offshore Kos island, on the Hellenic Volcanic Arc. Internationale Pour L'Exploration Scientifique de la mer Mediterranee, 35th CIESM Congress, Dubrovnik (Croatie), vol. 35(1), pp. 104-105.
  14. Robinson, C., Ziebis W., Muller, S., Eichstaedt, K., Dando, P., Linke, P., Varnavas, S., Megalovasilis, P. and **Panagiotaras, D.** (1997). In Situ Investigations of Shallow Water Hydrothermal Vent Systems, Palaeochori bay, Milos, Aegean Sea. 4th Underwater Science Symposium, SUT. International Symposium held in Newcastle U.K. 19/20 November, pp. 85- 100.
  15. Varnavas, S.P., Megalovasilis, P.S., and **Panagiotaras, D.** (1997). Spatial and Time compositional variability of Suspended Particulate Matter in Patraikos Bay, Greece. 5th Conference on Environmental Science and Technology. (Lesvos Greece). Vol.B. pp. 309-317.

#### **International conferences - Abstracts**

1. D. Papoulis, E.Kourta, M. Kornaros, A. Rapsomanikis, **D. Panagiotaras**, E. Stathatos (2015). Antimicrobial activity of Ag-Treated clay-based

- nanocomposites. EuroClay International Scientific Conference, 5th - 10th July, Edinburgh, Scotland, U.K.
2. D. Papoulis, S. Komarneni, **D. Panagiotaras**, E. Stathatos, D. Toli, Huihui Li, Shu Yin, Tsugio Sato, Hiroaki Katsuki (2014). Synthesis, characterization and photocatalytic activities of Halloysite–TiO<sub>2</sub> nanocomposites. XV International Clay Conference. 07-11 July, Rio de Janeiro – Brazil.
  3. D. Papoulis, A.-Eleni (Eleana) Kordouli, P. Lampropoulou, A. Rapsomanikis, C. Kordulis, **D. Panagiotaras**, Elias Stathatos, Sridhar Komarneni (2014). Synthesis, characterization and photocatalytic activities of fly ash-TiO<sub>2</sub> nanocomposites in mineralization of azo dyes in water. International Conference on Atmospheric Dust (DUST 2014). Castellanaeta Marina, (TA), 1-6 June, Italy, page 320.
  4. D. Papoulis, S. Komarneni, **D. Panagiotaras** (2014). Fibrous and tubular clay-based nanocomposites for photocatalysis: possibilities and limitations. International Conference on Atmospheric Dust (DUST 2014). Castellanaeta Marina, (TA), 1-6 June, Italy, page, 319.
  5. D. Papoulis, S. Komarneni, D. Toli, **D. Panagiotaras**, S. Bakalis (2013). Synthesis and Characterization of Halloysite - TiO<sub>2</sub> Nanocomposites. 13th Congress of the Geological Society of Greece (G.S.G.). Chania, 5-8 September, Crete, Greece.
  6. P. Avramidis, **D. Panagiotaras**, D. Papoulis & N. Kontopoulos (2011). Geochemical processes and sedimentological characteristics of Holocene lagoon deposits, Alikes Lagoon Zakynthos island, Western Greece. Abstract book p. 143. 28th International Association of Sedimentologists (IAS) Meeting of Sedimentology. 5th – 8th July, Zaragoza, Spain.
  7. A. Nikolopoulou, D. Papoulis, S. Komarneni, P. Tsolis-Katagas, **D. Panagiotaras**, G..H Kacandes, P. Zhang, S. Yin and T. Sato, H. Katsuki (2011). Palygorskite-TiO<sub>2</sub> nanocomposites: Synthesis and photocatalytic activity in decomposing NO<sub>x</sub> gas. European Clay Conference, 26 June-1 July, Antalya, Turkey.
  8. A. Vasiliadou, D. Papoulis, C.V. Chrysikopoulos, **D. Panagiotaras**, E. Karakosta, M. Fardis and G. Papavassiliou, (2011). A combined ATR-FTIR and NMR study of *Pseudomonas putida* sorption onto different kaolinite minerals. EGU, European Geoscience Union General Assembly 2011 Vienna, Austria, HS8.1.7 EGU2011-1038-2, 03 – 08 April, 2011.
  9. Papoulis, D., Komarneni, S. and **Panagiotaras, D.**, (2010). Progressive Stages of hydrothermal alteration of plagioclase to halloysite from Limnos island, Greece. Trilateral Meeting on Clays 06-11/06/2010, Spain, p.151.
  10. Papoulis, D., Komarneni, S Nikolopoulou A., Tsolis-Katagas P., **Panagiotaras D.**, Kacandes H.G., Zhang, P., Yin, S., Sato, T. and Katsuki, H. (2010). Halloysite-TiO<sub>2</sub> and Palygorskite-TiO<sub>2</sub> nanocomposites: synthesis and photocatalytic activity in decomposing air pollutants. Acta Mineralogica-Petrographica, abstract series (special selection), vol.6 p. 89. 5th Mid-European Clay Conference. 25-29 August, Budapest Hungary.
  11. I. A. Vasiliadou, D. Papoulis, C. Chrysikopoulos, **D. Panagiotaras**, E. Karakosta, M. Fardis, G. Papavassiliou (2010). Sorption of *Pseudomonas putida* onto differently structured kaolinite minerals. (Abstract); American Geophysical Union (AGU) Meetings. 13–17 December, San Francisco, California, USA. H51F-0957; AGU2010-950835.
  12. Varnavas S.P., C. Corselli, **D. Panagiotaras**, E. Malinverno, G.J. de Lange, J. Thomson, A. Tselepidis (2002). Evolution of environmental conditions in eastern

Mediterranean anoxic basins. Second International Conference on "Oceanography of the Eastern Mediterranean and Black Sea - October 14-18 2002, Ankara. Turkey.

13. Varnavas, S. P., Halbach, P., Halbach, M., **Panagiotaras, D.**, Rahders, E., and Hubner, A. (1999). Characterization of Hydrothermal Fields and Hydrothermal Evolution in the Hellenic Volcanic Arc. International Conference. Oceanography of the Eastern Mediterranean and the Black Sea. 23-26 February, Athens Greece, p. 315.
14. Varnavas, S.P., Halbach, P., Dando, P., Megalovasilis, P.S., **Panagiotaras, D.**, and Rahders, E. (1997). Geochemical hydrothermal processes in relation to tectonics in the hellenic volcanic arc, forearc basins and trenches. International Conference. Progress in Oceanography of the Mediterranean Sea, European Commission, Mast Programme. pp. 267-269. Rome, 17-19 November.
15. Varnavas, S.P., Dando, P., Megalovasilis, P.S., Robinson, C., **Panagiotaras, D.** and Hooper, L. (1997b). The influence of hydrothermal fluxes on Biogeochemical processes in Paleochori Bay, Milos hydrothermal field, on the Hellenic Volcanic Arc. News Letter, European Geophysical Society General Assembly, Vienna 20-25 March. Number 62, Annales Geophysicae.
16. Linke, S.P., Megalovasilis, P., **Panagiotaras, D.** (1997). "In Situ Investigations of Shallow Water Hydrothermal Vent Systems, Paleochori Bay, Milos, Milos, Aegean Sea." Fourth Underwater Science Symposium: proceedings of an international symposium held in Newcastle upon Tyne, UK, 19/20 November 1997. Society for Underwater Technology, 1997.

### National conferences - Abstracts

1. D. Papoulis, **D. Panagiotaras**, E. Stathatos (2013). Synthesis, Characterization and Photocatalytic Properties of porous Palygorskite-TiO<sub>2</sub> Nanocomposites. 4rd Conference on Materials Development for Environmental Uses, 28-30 June, University of Patras, Patras, Greece.
2. D. Papoulis, S. Komarneni, **D. Panagiotaras**, E. Stathatos, Hiroaki Katsuki (2012). Synthesis and Characterization of Halloysite-TiO<sub>2</sub> Nanocomposites. 3rd Conference on Materials Development for Environmental Uses, 22-23 June, University of Patras, Patras, Greece.
3. E. Stathatos, D. Papoulis, C. A. Aggelopoulos, **D. Panagiotaras**, A. Nikolopoulou (2011). Highly porous TiO<sub>2</sub>/Palygorskite nanocrystalline films prepared by surfactant templating route: Synergistic effect to the photocatalytic degradation of an azo dye in water. 2nd Conference on Materials Development for Environmental Uses, 7-8 July, University of Patras, Patras, Greece.
4. E. Karakosta, G. Diamantopoulos, M. S. Katsiotis, M. Fardis, **D. Panagiotaras** and G. Papavassiliou (2009). In Situ Monitoring of Cement Gel Growth Dynamics. The Use of a Miniaturized Permanent Halbach Magnet for Precise 1H NMR Studies. 4th Greek Conference in Porous Materials. October 22-23, University of Patras Greece.

### Reports

1. Kaplanis S., Kakavas P., **Panagiotaras D.**, and 9 others (2012 and 2013 annual progress reports). First and Second Annual Reports of the project EFFICONS (see above) EU-European Regional Development Fund and National Resources (NSRF 2007-2013).

2. Stathatos E., Kaplanis S., **Panagiotaras D.**, and 3 others (2012, 2013 annual progress reports and final report). First, Second Annual Reports and Final Report of the project INDOOR ECOPAVING (see above) EU-European Regional Development Fund and National Resources (NSRF 2007-2013).

### **Invited presentations to international conferences and international advanced schools**

2016. The Fate of Pollutants in Soils and Sediments. June 2, 2016. Rudjer Bošković Institute, Bijenička, Zagreb Croatia. Division for Marine and Environmental Research.
2015. Environmental Applications of clays and clay minerals. Lecture. August 10, University of Brunei Darussalam, Department of Physical and Geological Sciences.
2014. Assessing solid digestate properties for soil fertilization: The fate of pollutants in soils and sediments. Lecture. Summer School, University of Cassino, 3-4 July, Cassino, Italy.
2012. Keynote lecture: Nanotechnology-based decontaminant materials. 2nd International Conference, Advances in Engineering and Management, ADEM 2012. 13-14 December 2012, University of Craiova, Drobeta Turnu Severin, Romania.
2012. Environmental applications of clay-based nanocomposites. Winter School “Renewable Energy Systems and Green Nanotechnologies for a Clean Environment”. 15 December 2012. University of Craiova, Dept. of Engineering and Management of Technological Systems, Drobeta Turnu Severin, Romania.

### **Analytical techniques**

I am experienced in the use of the following analytical techniques: Atomic Absorption Spectroscopy (AAS), High Performance Liquid Chromatography (HPLC), X-Ray diffraction (XRD), Scanning electron microscopy (SEM), Attenuated total reflection using Fourier transform infrared spectroscopy (ATR-FTIR), UV-Vis spectroscopy, N<sub>2</sub> specific surface area (SSA) analysis by BET, Total Organic Carbon (TOC) analysis in liquid and solid samples, Fluorescence-Luminescence spectroscopy.

I am experienced in the synthesis and characterization of nanocomposites (e.g. modified clay minerals). I have analysed water (sea and freshwater) and solid samples (rocks, sediments and suspended particulate matter), for both major and trace elements. I have experience in the digestion of geo-materials for their analysis. I have used geo-statistical methods such as R-type factor analysis and discrimination analysis.

### **Participation in research expeditions as a scientific member**

- 9 October-4 Nov. 1996. Research Vessel Meteor, Cruise 36 Leg 6. Project: High resolution temporal and spatial study of the Benthic biology and geochemistry of a N-E Atlantic Abyssal Locality. EU-MAS3-CT95-0018.
- 23 July-22 August 1998. Research Vessel Meteor, Cruise 42 Leg 2. Project: same as above.

## **Committees and conference organization**

1. Member of the Management Committee of the *CA COST ACTION CA15217: “Ocean Governance for Sustainability - Challenges, Options and the Role of Science”*. May 2016-present.
2. Member of the Management Committee of the *Earth System Science and Environmental Management - ESSEM COST Action ES1302: “European Network on Ecological Functions of Trace Metals in Anaerobic Biotechnologies”*. February 2014-present.
3. Member of the Management Committee of the *Earth System Science and Environmental Management - ESSEM COST Action ES1306: “Connecting European connectivity research”*. February 2014-present.
4. Member of the Scientific Committee: 2<sup>nd</sup> International Conference, Advances in Engineering and Management, ADEM 2012. 13-14 December 2012, University of Craiova, Drobeta Turnu Severin, Romania.
5. Member of the Editorial Board of the International Journal of Water Sciences. INTECH publishers. June 2012-present.

## **Leadership in industrial innovation**

1. EFFICONS: Development of innovative nanotechnology-based sustainable solutions for energy efficient buildings. FP7 LEAD ERA Action. Industrial partners: ACCIONA Infrastructures S.A – Madrid, Spain; Asociados Arquitectos SL – Navarre, Spain; TRIAINA S.A – Patras, Greece.
2. INDOOR ECOPAVING: Development and manufacturing of a new innovative nanotechnology-based decontaminant construction material for indoor building. FP7 LEAD ERA Action. Industrial partners: Pavimentos de Tudela, S.L – Navarre, Spain; ERGOGENESIS A.T.E – Pyrgos, Greece.

## **Reviewer of Scientific Journals**

1. Chemical Geology (Elsevier),
2. Science of the Total Environment (Elsevier),
3. Palaeogeography, Palaeoclimatology, Palaeoecology (Elsevier),
4. Heliyon (Elsevier),
5. Catalysis Today (Elsevier),
6. Chinese Chemical Letters (Elsevier),
7. Physica B: Condensed Matter (Elsevier),
8. Arabian Journal of Chemistry (Elsevier),
9. Journal of Industrial and Engineering Chemistry (Elsevier),
10. Surface and Coatings Technology (Elsevier),
11. Sustainable Chemistry & Engineering (American Chemical Society - ACS),
12. Environmental Monitoring and Assessment (Springer),
13. International Journal of Environmental Analytical Chemistry (Taylor and Francis).
14. Sustainability (MDPI),
15. Journal of Advanced Oxidation Technologies (Science & Technology Network, Inc.),
16. International Journal of Water Sciences (INTECH publishers),
17. International Journal of Photoenergy (Hindawi Publishing Corporation),

18. Chemical Industry and Chemical Engineering Quarterly (Association of Chemical Engineers Belgrade, Serbia),
19. Bulgarian Chemical Communications (V. Beschko).

### **Project Evaluator**

1. 2016 – Today: European Cooperation in Science and Technology Association. External Expert for the remote evaluation of proposals.
2. 2015 – Today: Project evaluator for the National Center of Science and Technology Evaluation, Ministry of Education and Science, Astana, Republic of Kazakhstan.

### **Information Computer Technology Skills and Certificates**

Word Processing; Spread Sheets; Internet Services; Presentations; Data Base; General Use of PC and File Management. Origin, SPSS.

1. European Computer Driving License: Certificate Code: EL100062921DP
2. ICT Hellas Information Computer Technology: Certificate Code: GRINT00C000272.
3. Certificate in English. Cambridge University, United Kingdom. Earned on December 1987.