CURRICULUM VITAE

Surname and First Name: Triantis M. Theodoros
Marital Status: Married, (one child)
Military Service: 1996-1997 completed
Address: National Center for Scientific Research "Demokritos" (NCSR "D"), Institute of Nanoscience and Nanotechnology (INN), Laboratory of NANOMATERIAL-BASED CATALYTIC-PHOTOCATALYTIC PROCESSES AND ENVIRONMENTAL ANALYSIS, Neapoleos and Patriarchou Grigoriou, Agia Paraskevi, Attiki, 15341, Greece
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WORKING EXPERIENCE / POSITIONS

- **November 2014 – today: Scientific Personnel *(on a permanent basis)***
  National Center for Scientific Research "DEMOKRITOS" (NCSR "DEMOKRITOS"), Institute of Nanoscience and Nanotechnology (INN), Laboratory of Nanomaterial-based Catalytic-Photocatalytic Processes and Environmental Analysis, Athens, Greece. Research in the fields of photocatalysis and environmental analysis. Preparation and submission of research proposals, management of research projects (National-European level).

- **July 2014 – October 2014: Post-doctoral Research Associate, *INN, NCSR "DEMOKRITOS"***
  Post-doctoral Researcher in the frame of "CYANOWATER" research program entitled: "Cyanotoxins in fresh water. Advances in analysis, occurrence and treatment". Research topic title: "Photocatalytic Processes for the Degradation of Cyanotoxins in Water". Main research activities: (a) Photocatalytic degradation studies of selected cyanotoxins in water and elucidation of destruction mechanisms through identification of stable intermediate and final degradation products and (b) Development and validation of advanced analytical techniques (e.g. LC-MS/MS) for the determination of cyanotoxins in environmental samples.

- **June 2010 – June 2014: Collaborating Researcher, *INN, NCSR "DEMOKRITOS"***
  Research topic title: "Photochemistry focused on Photocatalysis and Analytical Applications". This position was equivalent to Researcher grade D with activities in various research fields, inter alia, in (a) photocatalytic degradation studies of toxic organic pollutants (e.g. cyanotoxins) and odor-causing compounds in water (Geosmin and 2-methylisoborneol), intermediates and mechanistic aspects (b) performance evaluation of photocatalytic materials for water purification, (c) Development of novel analytical methods for the determination of environmental pollutants (e.g. LC-MS/MS, GC-MS).

- **September 2009 – May 2010: Post-doctoral Research Associate, *Institute of Physical Chemistry (IPC), NCSR "DEMOKRITOS"***
  Post-doctoral Researcher in the frame of "Clean Water" research program entitled: "Water Detoxification using innovative vi-Nanocatalysts". Research in the field of photocatalysis using innovative visible light activated TiO_2 nanocatalysts. Comparative evaluation of the UV-visible and solar

light efficiency of the modified titania photocatalysts for water detoxification from cyanotoxins, Analysis and quantification of degradation products during the photcatalytic process.

- **July 2007 – today: Quality Manager,** ***Laboratory of Environmental Analysis, NCSR "DEMOKRITOS"***
  The Laboratory of Environmental Analysis in Demokritos has accredited according to ISO 17025 and includes in its accreditation scope the determination of pesticides, polycyclic aromatic hydrocarbons (PAHs) and cyanotoxins in water samples. Moreover, it is unique in Greece for the determination of Cyanotoxins in water. Main activities: Development and application of Quality Assurance Management Systems for testing laboratories according to ISO 17025; Analytical methods development and validation, to meet ISO 17025, EURACHEM, SANCO etc guidelines; Responsible Lab personnel for the communication with the Hellenic Accreditation System, the National Accreditation Body of Greece (ESYD).

- **March 2007: Visiting Researcher,** ***Department of Biochemistry and Pharmacy, Åbo Akademi University, Turku, Finland***
  Training in the analytical techniques of High Performance Liquid Chromatography coupled with Mass Spectrometry of triple stage tetrapole technology (HPLC-MS-MS) as well as in techniques concerning the treatment of water samples (Solid Phase Extraction, SPE) for quantitative determination cyanotoxins. Collaboration with Dr. J. Meriluoto.

- **April 2006 – June 2006: Visiting Researcher,** ***Radiation Laboratory, University of Notre Dame, Indiana, USA.***
  Training in Transient Absorption Techniques; Study of the photocatalytic degradation of textile azo dyes in the presence of nanostructured photocatalysts using femto and nanosecond laser flash photolysis. Collaboration with Prof. P. Kamat:

- **June 2005 – June 2009: Collaborating Researcher,** ***Catalytic – Photocatalytic Processes (Solar Energy – Environment) Laboratory, Institute of Physical Chemistry (IPC), NCSR "DEMOKRITOS"***
  Research topic title: "Catalytic – Photocatalytic Processes in Synthetic and Environmental Chemistry". This position was equivalent to Researcher grade D and was taken through a competitive and open recruitment process. Main research activities: (a) Research in the field of photocatalysis using polyoxometalates and TiO_2, Photocatalytic degradation studies of toxic organic pollutants, intermediates and mechanistic aspects, (b) synthesis and photocatalytic activity evaluation of new nanostructured catalysts, (c) Photoassisted synthesis of metal nanoparticles (d) Preparation and characterization of hybrid multilayer films based on polyoxometalates and polymers, and (e) Development of advanced analytical methods for the determination of trace organic pollutants in waters, food and environmental samples (e.g. cyanotoxins, pesticides, compounds that give odor or taste in water etc).

- **February 2003 – May 2005: Post-Doctoral Researcher, Luminescence Laboratory,** ***Institute of Physical Chemistry (IPC), NCSR "DEMOKRITOS"***
  Main activities of this Research were (a) the development and applications of novel luminescence techniques in analytical and bioanalytical assays, and (b) the antioxidant activity evaluation of natural products using chemiluminescence techniques. Part of these research activities performed in the frame of a twelve-month research fellowship (October 2003 – September 2004) awarded on the basis of individual research proposals by the Greek State Scholarships Foundation (I.K.Y. Greece).

- **September 1997 – May 1998: Military Service (Compulsory)**
  Hellenic Army – Ordnance Corps - General Chemical Army Laboratory, Piraeus, Greece. Chemical Engineer: Quality control of papers, leathers and fibers used by the Greek army.

EDUCATION

- **2002:** **PhD in Chemical Engineering**, School of Chemical Engineering, National Technical University of Athens (NTUA), Greece. Dissertation Title: "Study of the Photo- and Radiostoragechemiluminescence Method and Prospects for Application in Analytical Chemistry and Chemical Dosimetry".

- **1996:** **Diploma in Chemical Engineering**, School of Chemical Engineering, NTUA, Greece. Diploma Title: "Chemiluminescence of Azaaromatic Compounds. Prospects for Applications in Analytical Chemistry".

SEMINARS / SCHOOLS

- **2008:** Training in advanced analytical techniques of (a) High performance Liquid Chromatography (HPLC) combined with Tandem Mass Spectrometry (MS-MS) and (b) Solid Phase Extraction (SPE) methods in the *Department of Civil and Environmental Engineering, University of Cincinnati, Ohio, USA & US Environmental Protection Agency (EPA), Cincinnati, Ohio, USA (21-25/7/2008).*

- **2008:** Participation in a two day Workshop entitled: *"Metrology in Chemistry"*, organized by the Eurachem Education and Training Working Group, held in Athens, Greece, 19-20 May 2008. This workshop covered the most challenging technical details of the analytical process, including analytical methods validation, traceability of chemical measures, evaluation of measurement and method uncertainty, interpretation of results based on objective evidence and reporting results to the client.

- **2007:** Training course by the Thermo Scientific in *High Performance Liquid Chromatography (HPLC) and Tandem Mass Spectrometry techniques* as well as operation of the Thermo TSQ Quantum spectrometer, held in NCSR "DEMOKRITOS", 29 January – 1 February 2007.

- **2007:** Training course in *Quality Assurance Management Systems for the accreditation of testing laboratories according to the International standard ISO 17025* as well as training in internal inspection of quality assurance systems. The seminar organized by Q-PLAN S.A., a leader in the field of Quality and Environmental Management Systems in Greece, held in NCSR "DEMOKRITOS", 3-8 July 2007.

- **2006:** Participation in the NATO Advanced Study Institutes (ASI) School on *"New Organic Chemistry Reactions and Methodologies for Green Production"*, organized by the Inter University Consortium "Chemistry for the Environment" (INCA) and held in Lecce, Italy, 29 October– 10 November 2006. ASI are high-level tutorial courses intended to convey the latest developments in a subject to an advanced-level audience. During the 10 working days of the ASI School covered basic themes of Green Chemistry i.e Atom Economy, Industrial Processes, Alternative Solvents, New Feedstocks and Products, New Reactions, New Synthetic Methods as well as topics related to current research in Green Chemistry were addressed with the aim to familiarize the attendees with the strategies behind the planning and designing of efficient and "greener" synthetic routes.

LANGUAGES

Greek (mother tongue)
English (fluently)

AWARDS – SCHOLARSHIPS - ACHIEVEMENTS

Post-Graduate Awards

D. Thomaidis Bequest was awarded to T. Triantis for the publication of original papers in International Scientific Journals at years 1999, 2000, 2001 and 2002.

Greek National Scholarships Foundation Research Fellowship (October 2003 – September 2004)

Twelve-month post-doctoral fellowship granted on the basis of the individual research proposal: "Evaluation of the Antioxidant Activity of Fruits and Olive Oil Extracts using Chemiluminescence".

Outstanding achievements

- The paper with the title: "Investigations on the Antioxidant Activity of Fruit and Vegetable Aqueous Extracts on Superoxide Radical Anion using Chemiluminescence Techniques", Anal. Chim. Acta, 536 (2005) 101-105 featured in the Sciencedirect top 25 list of most downloaded articles and ranked 22nd on the top 25 for Analytica Chimica ACTA – April to June 2005.
- Best Poster Presentation Award for the work “Anion Doped Nanostructured Titania for Photacatalytic Decomposition of Cyanotoxins using Visible Light” presented by P. Falaras, V. Likodimos, A. G. Kontos, A. Hiskia, T.M. Triantis, M. Pelaez and D. D. Dionysiou, on the 11th Panhellenic Symposium of Catalysis, Athens, Greece, October 22-23, 2010.
- The paper with the title: "Development of an Integrated Laboratory System for the Monitoring of Cyanotoxins in Surface and Drinking Waters", Toxicon, 55(5) (2010) 979-989, featured in the Sciencedirect top 25 list of most downloaded articles and ranked 15th on the top 25 for the Journal Toxicon – April to June 2010.
- The paper with the title: "Destruction of Microcystins by Conventional and Advanced Oxidation Processes: A review", Separation and Purification Technology, 91 (2012) 3–17, featured in the Sciencedirect top 25 list of most downloaded articles and ranked 5th on the top 25 for the Journal Separation and Purification Technology – April to June 2012.

TEACHING / TUTORING EXPERIENCE

- **2014-2015** *Laboratory Associate:* Teaching of the laboratory course of “Chemical Technology” to the first year students of the Department of Mechanical Engineering, Piraeus University of Applied Sciences (T.E.I. of Piraeus).
- **2013-2014** *Academic Fellow:* Teaching of the following laboratory courses: (a) “Environmental Chemistry” (1st semester) and (b) “Quality Control and Technology of Construction Materials” (3nd semester) in the Department of Civil Engineering, Piraeus University of Applied Sciences (T.E.I. of Piraeus).
- **2012** *Examination Committee Member* of the diploma work of D. Papageorgiou at the Department of Mechanical Engineering of the Piraeus University of Applied Sciences (T.E.I. of Piraeus). Title of the Diploma Thesis: “Active and Passive Fire Protection of Buildings”,
- **2009-2013** *Laboratory Associate:* Autonomous teaching of the module ***“General Chemistry”*** to the first year students of the Department of Textiles Engineering and the module **“Environmental Chemistry”** to the first year students of the Department of Civil Engineering at the Piraeus University of Applied Sciences (T.E.I. of Piraeus).

- **2000-2013** *Laboratory Associate:* Teaching of various laboratory courses at different Departments of the Piraeus University of Applied Sciences (T.E.I. of Piraeus): *Department of Civil Engineering:* "Environmental Chemistry" (1st semester, 2009-2013), "Quality Control and Technology of Construction Materials" (3nd semester, 2011-2013) and "Chemical Technology" (1st semester, 2000-2008). *Department of Mechanical Engineering*: "Chemical Technology" (1st semester, 2000-2013). *Department of Textiles Engineering*: "Physical Chemistry (1st semester, 2010-2013).
- **1999-2003** *Teaching Assistant*: Teaching of the following laboratory courses: (a) "Physical Chemisrty III" (5th semester, 1999-2002) and (b) "Chemical Kinetics" (5th semester, 2002-2003) in the School of Chemical Engineering at the National Technical University of Athens (NTUA),
- **1998-2015** *Guidance and co-supervision of undergraduate and postgraduate students* in (a) Luminescence, Institute of Physical Chemistry, N.C.S.R. Demokritos: I. Dousgou, K. Tsaggaraki, Ch. Tzikis, A. Stellakis, I. Katsavou (Graduate Diploma Thesis) and (b) Laboratory of Nanomaterial-based Catalytic – Photocatalytic Processes and Environmental Analysis, INN, NCSR "Demokritos": Tsimeli A. (M.Sc. and PhD), Fotiou T. (M.Sc. and PhD), Anagnostou S. (Dipl. Thesis and M.Sc.), Chassiotou I. (M.Sc.), Alexakos G. (M.Sc.), Zervou S.-K. (M.Sc.), Tsokou A.(M.Sc.), Tzianos L.(M.Sc.) and Theodoropoulou S. (Post-Doctoral Research / Sep.2014 – today).

MAIN RESEARCH FIELDS

Research on:

A. **PHOTOCATALYSIS:** Advanced Oxidation Processes focused on photocatalysis using polyoxometalates and TiO_2, Photocatalytic degradation studies of toxic organic pollutants, intermediates and mechanistic aspects, photocatalytic activity evaluation of new nanostructured catalysts, Photoassisted synthesis of metal nanoparticles
B. **CHEMILUMINESCENCE**: Photo- and radiostorage chemiluminescence, design, synthesis and applications of novel luminescent compounds in the analytical and bioanalytical chemistry; Evaluation of natural products antioxidant activity using chemiluminescence and fluorescence techniques.
C. **ENVIRONMENTAL CHEMICAL ANALYSIS:** Development of advanced analytical methods for the determination of trace organic pollutants in waters, food and environmental samples (e.g. cyanotoxins, pesticides, compounds that give odor or taste in water etc). Analytical methods validation, to meet ISO 17025, EURACHEM, SANCO etc guidelines.

CURRENT RESEARCH INTERESTS

- Advanced Oxidation Processes (AOPs) for the degradation of organic pollutants and cyanotoxins in water. Elucidation of the reaction mechanisms and identification of reaction intermediates and final degradation products
- Preparation of new nanostructured TiO2-POM materials
- Immobilization of photocatalysts in optically active and/or inert substrates
- Photoassisted synthesis of POM stabilized metal nanoparticles
- Development of standardized procedures for performance evaluation of photocatalytic materials for water purification.
- Development of advanced analytical techniques for the determination of environmental pollutants (e.g. LC-MS/MS, GC-MS).

- Multi-class method development for the simultaneous determination of cyanotoxins in water, biomass, plant or fish tissue samples using SPE and LC/MS-MS.
- Development of advanced analytical method for the determination of odor-causing compounds (such as Geosmin and 2-methylisoborneol), possible markers for the presence of cyanotoxins in water by using SPME and GC/MS.

PEER REVIEWED ARTICLES IN SCIENTIFIC JOURNALS

(38) Fotiou T., **Triantis T. M.,** Kaloudis T., Hiskia A., *"Evaluation of the photocatalytic activity of TiO_2 based for catalysts on the degradation and mineralization of cyanobacterial toxins and water off-odor compounds under UV-A, solar and visible light"*, Chemical Engineering Journal, 261 (2015) 17-26.

(37) Fotiou T., **Triantis T. M.**, Kaloudis T., Hiskia A., *"Photocatalytic degradation of Cylindrospermopsin under UV-A, solar and visible light using TiO_2. Mineralization and intermediate products "*, Chemosphere, 119 (2015) S89-S94.

(36) Fotiou, T., **Triantis, T.M.**, Kaloudis, T., Papaconstantinou, E., Hiskia, A., *"Photocatalytic Degradation of Water Taste and Odor Compounds in the presence of Polyoxometalates and TiO_2: Intermediates and Degradation Pathways"*, Journal of Photochemistry and Photobiology A: Chemistry, 286 (2014) 1-9.

(35) Kaloudis, T., Zervou, S.-K., Tsimeli, K., **Triantis, T.M.**, Fotiou, T., Hiskia, *"Determination of microcystins and nodularin (cyanobacterial toxins) in water by LC-MS/MS. Monitoring of Lake Marathonas, a water reservoir of Athens, Greece"*, Journal of Hazardous Materials, 263 (2013) 105-115.

(34) T. Fotiou, **T.M. Triantis**, T. Kaloudis, L.M. Pastrana-Martínez, V. Likodimos, P. Falaras, A.M.T. Silva, A. Hiskia, *"Photocatalytic Degradation of Cyanobacterial Metabolites in Water under UV-A and Solar Light using a Nanostructured Photocatalyst based on Reduced Graphene Oxide-TiO2 Composite"*, Industrial & Engineering Chemistry Research, 52(39) (2013) 13991-14000.

(33) V.K. Sharma, **T.M. Triantis**, M.G. Antoniou, X. He, M. Pelaez, C. Han, W. Song, K.E. O'Shea, A.A. de la Cruz, T. Kaloudis, A. Hiskia, D.D. Dionysiou, *"Destruction of microcystins by conventional and advanced oxidation processes: A review"*, Separation and Purification Technology, 91 (2012) 3–17.

(32) **T. M. Triantis**, T. Fotiou, T. Kaloudis, A. Kontos, P. Falaras, D.D. Dionysiou, M. Pelaez, A. Hiskia, *"Photocatalytic Degradation and Mineralization of Microcystin-LR under UV-A, Solar and Visible Light using Nanostructured Nitrogen Doped TiO_2"*, Journal of Hazardous Materials, 211-212 (2012) 196-202.

(31) X. He, M. Pelaez, C. Williams, J.A. Westrick, K.E. O'Shea, A. Hiskia, **T. Triantis**, T. Kaloudis, A.A. de la Cruz, D.D. Dionysiou, *"Efficient Removal of Microcystin-LR by UV-C/H_2O_2 in Synthetic and Natural Water Samples"*, Water Research, 46(5) (2012) 1501-1510.

(30) C. Leodopoulos, D. Doulia, K. Gimouhopoulos, **T.M. Triantis**, *"Single and simultaneous adsorption of methyl orange and humic acid onto bentonite"*, Applied Clay Science 70 (2012) 84-90.

(29) V. Halouzka, P. Jakubec, C. Gregor, D. Jancik, K. Papadopoulos, **T. Triantis**, J. Hrbac, *"Silver-Nafion coated cylindrical carbon fiber microelectrode for amperometric monitoring of hydrogen peroxide heterogeneous catalytic decomposition"*, Chem. Eng. J., 165(3) (2010) 813-818.

(28) S. Antonaraki, **T.M. Triantis**, E. Papaconstantinou, A. Hiskia, *"Photocatalytic degradation of lindane by polyoxometalates: Intermediates and mechanistic aspects"*, Catal. Today, 151(1-2) (2010) 119-124.

(27) **T. Triantis,** K. Tsimeli, T. Kaloudis, N. Thanassoulias, E. Lytras, A. Hiskia, *"Development of an integrated laboratory system for the monitoring of cyanotoxins in surface and drinking waters",* Toxicon, 55(5) (2010) 979-989.

(26) **T. Triantis**, A. Troupis, E. Gkika, G. Alexakos, N. Boukos, E. Papaconstantinou, A. Hiskia, *"Photocatalytic Synthesis of Se Nanoparticles using Polyoxometalates"*, Catal. Today, 144(1-2) (2009) 2-6.

(25) Troupis, **T.M. Triantis**, E. Gkika, A. Hiskia, E. Papaconstantinou, *"Photocatalytic Reductive-Oxidative Degradation of Acid Orange-7 by Polyoxometallates"*, Appl. Catal. B – Environ., 86(1-2) (2009) 98-107.

(24) Troupis, **T. Triantis**, A. Hiskia, E. Papaconstantinou, *"Rate-redox-controlled Size-selective Synthesis of Silver Nanoparticles Using Polyoxometalates"*, Eur. J. Inorg. Chem., 36 (2008) 5579-5586.

(23) K. Tsimeli, **T.M. Triantis**, D. Dimotikali, A. Hiskia, *"Development of a rapid and sensitive method for the simultaneous determination of 1,2-dibromoethane, 1,4-dichlorobenzene and naphthalene residues in honey using HS-SPME coupled with GC-MS"*, Anal. Chim. Acta, 617 (1-2) (2008) 64-71.

(22) **T.M. Triantis**, K. Papadopoulos, E. Yannakopoulou, D. Dimotikali, J. Hrbáč, R. Zbořil, *"Sensitized chemiluminescence of luminol catalyzed by colloidal dispersions of nanometer-sized ferric oxides"*, Chem. Eng. J., 144(3) (2008) 483-488.

(21) **T. M. Triantis**, A. Troupis, I. Chassiotou, E. Papaconstantinou, A. Hiskia, " Photochromic and *Photocatalytic Inorganic-Organic Multilayer Films based on Polyoxometalates and Poly(ethylenimine)"*, J. Adv. Oxid. Technol., 11(2) (2008) 231-237.

(20) P. Kormali, A. Troupis, **T. Triantis**, A. Hiskia, E. Papaconstantinou, *"Photocatalysis by Polyoxometalates and TiO2. A comparative study"*, Catal. Today, 124 (2007) 149-155.

(19) **T.M. Triantis**, E. Yannakopoulou, A. Nikokavoura, D. Dimotikali, K. Papadopoulos,, *"Chemiluminescent studies on the antioxidant activity of amino acids"*, Anal. Chim. Acta, 591(1) (2007) 106-111.

(18) J. Hrbac, V. Halouzka, R. Zboril, K. Papadopoulos, **T. Triantis**, *"Carbon Electrodes Modified by Nanoscopic Iron(III) Oxides to Assemble Chemical Sensors for the Hydrogen Peroxide Amperometric Detection"*, Electroanalysis, 19 (17) (2007) 1850-1854, Electroanalysis, 19 (17) (2007) 1850-1854.

(17) Hiskia A., **Triantis T.,** Papaconstantinou E., *"Photocatalysis with polyoxometallates as a new advanced oxidation process for the destruction of pesticides in aquatic systems",* Quaderno GRIFA (Proceedings of the International Summer School "Pesticide-Environment – 2007"), 26 (2007) 916-929, online.

(16) Troupis, E. Gkika, **T. Triantis**, A. Hiskia, E. Papaconstantinou, *"Photocatalytic Reductive Destruction of Azo Dyes by Polyoxometallates: Naphthol Blue black"*, J. Photochem. Photobiol. A: Chem., 188 (2-3) (2007) 272-278.

(15) P. Kormali, **T. Triantis**, D. Dimotikali, A. Hiskia, E. Papaconstantinou, *"On the photooxidative behavior of TiO2 and PW12O403-: OH radicals versus holes"*, Appl. Catal. B – Environ., 68(3-4) (2006) 139-146.

(14) Agiamarnioti, **T. Triantis**, K. Papadopoulos, A. Scorilas, *"10-(2-Biotinyloxyethyl)-9-acridone: A novel fluorescent label for (strept)avidin–biotin based assays"*, J. Photochem. Photobiol. A: Chem., 181(1) (2006) 126-131.

(13) Agiamarnioti, **T. Triantis**, D. Dimotikali, K. Papadopoulos, *"Synthesis and fluorescent properties of novel biotinylated labels. Prospects for application in bioanalytical detections"*, J. Photochem. Photobiol. A: Chem., 172 (2005) 215-221.

(12) **T. Triantis**, A. Stelakis, D. Dimotikali, K. Papadopoulos, *"Investigations on the antioxidant activity of fruit and vegetable aqueous extracts on superoxide radical anion using chemiluminescence techniques"*, Anal. Chim. Acta, 536 (2005) 101-105.

(11) K. Agiamarnioti, **T. Triantis**, K. Papadopoulos, D. Dimotikali, *"Synthesis and chemiluminescent properties of novel biotinylated acridinium esters"*, Acta Chim. Slov., 51 (2004) 67-76.

(10) **T. Triantis**, K. Papadopoulos, A. Stellakis, D. Dimotikali, *"Studies on the antioxidant activity of aqueous extracts of olive oils and seed oils using chemiluminescence"*, Chem. Phys. Lipids, 130 (2004) 57(abstract).

(9) K. Papadopoulos, **T. Triantis**, E. Yannakopoulou, A. Nikokavoura, D. Dimotikali, *"Comparative studies on the antioxidant activity of aqueous extracts of olive oils and seed oils using chemiluminescence"*, Anal. Chim. Acta, 494 (2003) 41-47.

(8) K. Papadopoulos, **T. Triantis**, K. Tsagaraki, D. Dimotikali, N. Iftimie, A. Meghea, *"Studies on Photostoragechemiluminescence of aromatic ketones with reactive oxygen species. Prospects for analytical applications"*, J. Photochem. Photobiol. A: Chem., 152 (2002) 11-16.

(7) K. Papadopoulos, **T. Triantis**, C.H. Tzikis, A. Nikokavoura, D. Dimotikali, *"Investigations of the adulteration of extra virgin olive oils with seed oils using their weak chemiluminescence"*, Anal. Chim. Acta, 464 (2002) 135-140.

(6) K. Papadopoulos, **T. Triantis**, D. Dimotikali, J. Nikokavouras, *" Photo-,radio- and sonostoragechemiluminescence of buckminsterfullerene "*, J. Photochem. Photobiol. A: Chem. 143 (2001) 93-97.

(5) K. Papadopoulos, **T. Triantis**, D. Dimotikali, J. Nikokavouras, *"Evaluation of Food Antioxidant activity by Photostoragechemiluminescence"*, Anal. Chim. Acta, 433 (2001) 263-268.

(4) K. Papadopoulos, **T. Triantis**, D. Dimotikali, J. Nikokavouras, *"Radiostorage- and Photostoragechemiluminescence : Analytical Prospects"*, Anal. Chim. Acta, 423 (2000) 239-245.

(3) K. Papadopoulos, **T. Triantis**, D. Dimotikali, J. Nikokavouras, *"Radiochemiluminescence of Carboxyquinolines"*, J. Photochem. Photobiol. A: Chem. 131 (2000) 55-60.

(2) K. Papadopoulos, **T. Triantis**, D. Dimotikali, J. Nikokavouras, *"Photo- and radiochemiluminescence: reductive chemiluminescence of lucigenin by photo- or radiooxygenated amines and amides"*, J. Photochem. Photobiol. A: Chem. , 124 (1999) 85-90.

(1) K. Papadopoulos, J. Schizas, J. Nikokavouras, **T. Triantis**, D. Dimotikali, *"Azaaromatics in light energy storage systems"*, Chimica Chronika, New Series, 26 (1997) 298. (abstract).

- ***According to ISI, Web of Science, Scopus and Scholar.google.com the above publications have been cited 464 times until February 2015, excluding self-citations (h index = 14)***

BOOK CHAPTERS

(3) M.G. Antoniou, M.A. Pelaez, W. Song, K. O'Shea, L. Ho, G. Newcombe, M.R. Teixeira, A.A. de La Cruz, **T.M. Triantis**, T. Kaloudis, A. Hiskia, R. Balasubramanian, S. Pavagadhi, C. Han, V. Sharma, M. Dixon, X. He, D.D. Dionysiou, *"Practices that Prevent the Formation of Cyanobacterial Blooms in Water Resources and remove Cyanotoxins during Physical Treatment of Drinking Water*" in S. Ahuja (Ed.), *"Comprehensive Water Quality and Purification" , Elsevier, Waltham, 2014, Pg. 173-195.*

(2) A. Hiskia , **T.M. Triantis**, M.G. Antoniou, A.A. de la Cruz , K. O'Shea , W. Song , T. Fotiou, T. Kaloudis , X. He, J. Andersen, D.D. Dionysiou, *"Transformation Products of Hazardous Cyanobacterial Metabolites in Water"*, in L. Nollet, D. Lambropoulou (Eds), *"*Transformation Products of Emerging Contaminants in the Environment: Analysis, Processes, Occurrence, Effects and Risks*"*, John Wiley & Sons, Ltd., West Sussex, England, ISBN: 978-1-118-33959-6, *2014, Ch. 23, pp 687-711*

(1) M. Pelaez, M.G. Antoniou, D.D. Dionysiou, A.A. de la Cruz, K. Tsimeli, **T. Triantis**, A. Hiskia, T. Kaloudis, C. Williams, M. Aubel, A. Chapman, A. Foss, U. Khan, K.E. O'Shea, J. Westrick, *"Sources and Occurrence of Cyanotoxins Worldwide"* in D.F. Kassinos, K. Bester, K. Kümmerer (Eds), *"Xenobiotics in the Urban Water Cycle : Mass Flows, Environmental Processes, Mitigation and Treatment Strategies (Environmental Pollution Series, Vol. 16) "*, Springer-Verlag New York, LLC, 2010, pg. 101-127, online version.

LECTURE NOTES

(3) **T. Triantis**, "Activated sludge process", Lecture Notes of the graduate course "Environmental Chemistry", Piraeus University of Applied Sciences (T.E.I. of Piraeus), 2010.

(2) **T. Triantis**, E. Fountoukidis, *"Photometric method for the determination of BOD_5 in wastewaters* ", Lecture Notes of the graduate course "Environmental Chemistry", Piraeus University of Applied Sciences (T.E.I. of Piraeus), 2009.

(1) **T. Triantis**, E. Fountoukidis, *"Photometric method for the determination of COD in wastewaters*", Lecture Notes of the graduate course "Environmental Chemistry", Piraeus University of Applied Sciences (T.E.I. of Piraeus), 2009.

STANDARD OPERATIONAL PROCEDURES (SOPs)

The following standard operational procedures for the analysis of cyanotoxins in water samples have been included in the ***"Handbook of Cyanobacteria Monitoring and Cyanotoxin Analysis"*** edited by J. Meriluoto, L. Spoof & G. Codd and will be published by John Wiley & Sons, Ltd. at the end of 2015.

(9) T.M. Triantis, T. Kaloudis, A. Hiskia, "Determination of Microcystins and Nodularin in filtered and drinking water by LC-MS/MS".

(8) T. Kaloudis, T.M. Triantis, A. Hiskia, "Quantitative screening of Microcystins and Nodularins in water samples with commercially available ELISA kits".

(7) T. Kaloudis, T.M. Triantis, A. Hiskia, "Quantitative screening of Microcystins and Nodularins in water samples with commercially available PPIA kits".

(6) T.M. Triantis, T. Kaloudis, A. Hiskia, "Solid phase extraction of Microcystins and Nodularin from drinking water".

(5) T.M. Triantis, T. Kaloudis, A. Hiskia, "Determination of anatoxin-a in filtered and drinking water by LC-MS/MS".

(4) T.M. Triantis, T. Kaloudis, A. Hiskia, "Solid phase extraction of cylindrospermopsin from filtered and drinking water".

(3) T.M. Triantis, T. Kaloudis, A. Hiskia, "Determination of cylindrospermopsin in filtered and drinking water by LC-MS/MS".

(2) T. Kaloudis, T.M. Triantis, A. Hiskia, "Determination of geosmin and 2-methylisoborneol in water by HS-SPME-GC/MS".

(1) T. Kaloudis, T.M. Triantis, A. Hiskia, "Basic Validation Protocol for the Analysis of Cyanotoxins in Environmental Samples".

EDITORIAL ACTIVITY

(1) Co-Editor in the Book entitled: **"Water treatment for purification from cyanobacteria and cyanotoxins"**, A. Hiskia, D. Dionysiou, A. Antoniou, T. Kaloudis, T. Triantis (Eds), John Wiley & Sons, Ltd., (expected publication date: end of 2015).

REVIEWER FOR SCIENTIFIC JOURNALS

- *Journal of Photochemistry and Photobiology A: Chemistry*
- *Catalysis Today*
- *Chemistry European Journal*
- *Advanced Functional Materials*
- *Advanced Materials*
- *ChemPhysChem*
- *ChemSusChem*
- *Industrial and Engineering Chemical Research*
- *Environmental Science & Technology*
- Inorganica Chimica Acta
- Journal of Hazardous Materials
- International Journal of Photoenergy

LECTURES GIVEN IN CONFERENCES, SEMINARS AND MEETINGS

- "Advanced oxidation processes for water purification", *Editorial meeting in the frame of COST Action ES1105 "CYANOCOST", 18-21 February 2015, Seville, Spain.*
- "Analytical methods in environmental analysis – Accreditation according to ISO17025", *Workshop on "Theoretical and practical training in SPE-LC-MS/MS analytical methods of Environmental Analysis Laboratory", NCSR "DEMOKRITOS", 20-21 Nov. & 1 Dec. 2014, Athens, Greece.*
- "CyanoWater: From the analysis of cyanotoxins to advanced water treatment and purification", *Cyanowater Workshop, NCSR "D", 5 May 2014, Athens, Greece.*
- "Water Treatment for Purification from Cyanobacteria and Cyanotoxins", *Editorial meeting in the frame of COST Action ES1105 "CYANOCOST", 10-11 April 2014, Budapest, Hungary.*
- "Standardization of photocatalytic materials for water purification", *Technical Committee (TC) & Working Group Meetings of the European Committee for Standardization CEN386 / "Photocatalysis"/ WG3 "Water Purification", 18-20 March 2014, Athens, Greece.*
- "Determination of Microcystins and Nodularin in filtered and drinking water by LC-MS/MS", *Editorial meeting in the frame of COST Action ES1105 "CYANOCOST", 12-15 November 2013, Sofia, Bulgaria.*
- "Method validation guidelines for the analysis of cyanotoxins", *Editorial meeting in the frame of COST Action ES1105 "CYANOCOST", 20-21 March 2013, Athens, Greece.*

- "Inorganic-Organic multilayer films based on polyoxometalates and poly(ethylenimine)", *Physical and Engineering Sciences* (*PESC) workshop on Polyoxometalate-based Nanoscale Devices, Newcastle upon Tyne, UK, 1-3 August 2010*.
- "Photocatalytic properties of polyoxometalates. Contribution to green chemistry", *NATO-ASI Summer School on Green Chemistry, Lecce – Otranto (Italy), 29 October- 10 November 2006.*
- "Photo- and radiostorage chemiluminescence – A new and sensitive technique with prospects for applications in analytical chemistry and chemical dosimetry", *Institute of Physical Chemistry, NCSR "DEMOKRITOS", Greece, April 2005.*

CONFERENCE PROCEEDINGS

(19) **T. Triantis**, T. Fotiou, T. Kaloudis, N.G. Moustakas, A.G. Kontos, P. Falaras, M. Pelaez, D. Dionysiou, A. Hiskia, *"Photocatalytic degradation of taste and odour compounds in water using visible light–activated TiO_2 nanomaterials"*, 2nd Dissemination Workshop of the Nano4water Cluster "Recent Advances in Nanotechnology-based Water Purification Methods", 24-25 April 2012, Chalkidiki, Greece, pg. 109-113.

(18) **T.M. Triantis**, T. Fotiou, T. Kaloudis, N.G. Moustakas, A.G. Kontos, P. Falaras, D.D. Dionysiou, M. Pelaez, A. Hiskia, *"Photocatalytic degradation and mineralization of microcystin-LR under UV-A, solar and visible light using nanostructured nitrogen doped TiO_2"*, 2nd Dissemination Workshop of the Nano4water Cluster "Recent Advances in Nanotechnology-based Water Purification Methods", 24-25 April 2012, Chalkidiki, Greece, pg. 114-119.

(17) T. Kaloudis, **T. Triantis**, I. Dimitrakopoulos, T. Fotiou, S. Zervou, M. Grammmenou, E. Lytras, F. Miskaki, A. Hiskia, *"Metrological problems and proposed solutions to cyanotoxins determinations in environmental samples"* 4th National Conference on Metrology, 3-4 February, Athens, 2012.

(16) A. Hiskia, **T.M. Triantis**, T. Fotiou, T. Kaloudis, P. Falaras, D.D. Dionysiou, *"Photocatalytic decomposition of Microcystin-LR in natural and drinking water using nanostructured TiO_2 materials"*, 6th European Meeting on Solar Chemistry & Photocatalysis: Environmental Applications(SPEA6), *June 13-16, Prague, Czech Republic, 2010, pg.201-202.*

(15) A. Troupis, **T. Triantis**, G. Alexakos, E. Papaconstantinou, A. Hiskia, *"Environmentally Friendly Synthesis of Nanoparticles Using Polyoxometalates"*, 3rd Conference on Green Chemistry & Sustainable Development", *Thessaloniki, Greece, September 25-27, 2009.*

(14) S. Antonaraki, **T. Triantis**, E. Papaconstantinou, A. Hiskia, *"Photocatalytic Degradation of Lindane by Polyoxometalates"*, 2rd European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP-2), *Nicosia, Cyprus, 9-11 September 2009.*

(13) K. Tsimeli, **T. Triantis**, A. Hiskia, T. Kaloudis, *"Determination of cyanotoxins in drinking and surface water by LC-MS/MS"*, Food Chemistry – Food and Environment, Scientific Conference, Eugenidou Foundation, Athens, Greece, February 13-14, 2009.

(12) K. Tsimeli, **T. Triantis**, T. Kaloudis, A. Hiskia, *"Development of a new method for the determination of microcystins and nodularin in surface and drinking water by LC-MS/MS"*, 5th European Conference on Pesticides and Related Organic Micropollutants in the Environment – 11th Symposium on Chemistry and Fate of Modern Pesticides, *Marseille, France, 22-25 October, 2008, pg 29, Conference CD pg. 78-82.*

(11) T. Kaloudis, K. Tsimeli, **T. Triantis**, N. Thanasoulias, L.. Kousouris, E. Lytras, P. Tzoumerkas, A. Hiskia, *"Development of an integrated laboratory system for the monitoring of cyanotoxins in surface and drinking waters"*, 5th European Conference on Pesticides and Related Organic Micropollutants in the Environment – 11th Symposium on Chemistry and Fate of Modern Pesticides, *Marseille, France, 22-25 October, 2008, pg 40, Conference CD pg. 111-116.*

(10) A. Hiskia, **T. Triantis**, E. Papaconstantinou, "Photocatalysis by polyoxometalates. A new advanced oxidation process for the destruction of pesticides in aquatic systems", 3rd Environmental Conference of Macedonia, Thessaloniki, Greece, March 14-17, 2008, *Conference CD 8 pages.*.

(9) **T. Triantis**, E. Papaconstantinou, A. Hiskia, "Photocatalytic oxidation of organic compounds in the presence of polyoxometalates", 2nd Panhellenic Symposium Green Chemistry and Sustainable Development, *8-10 March 2007, Patras, Greece, Abstract CD, 10 pages*.

(8) K. Agiamarnioti, **T. Triantis**, N. Ferderigos, K. Papadopoulos, *"Development of novel fluorescent label. Study of the behavior when binding to (strept)avidin"*, 2nd International Exergy, Energy and Environment Symposium (IEEES2), *Kos, Greece, 3-7 July 2005, Symposium CD, 5 pages*.

(7) E. Tegou, V. Constantinidou, M. Bratakos, **T. Triantis**, K. Papadopoulos, *"Comparative studies on the total pro- and antioxidant activities of edible oils using chemiluminescence"*, 3rd Aegean Analytical Chemistry Days, *Phlihnitos, Lesvos, Greece, September 29 – October 3, 2002, p. 83-85.*

(6) K. Papadopoulos, **T. Triantis**, D. Dimotikali and J. Nikokavouras, *"Photo- and Radiostoragechemiluminescence of Buckminsterfullerene C_{60}''*, 12th Romanian International Conference on Chemistry and Chemical Engineering*, Bucharest, Romania, 13-15 September 2001, Vol. I, p.137-141.*

(5) **T. Triantis,** D. Dimotikali, K. Papadopoulos and J. Nikokavouras, *"Photostorage chemiluminescence: Analytical Prospects"*, 3rd Panhellenic Scientific Conference of Chemical Engineering, Athens, May 31-June 2, 2001, pg. 169-172.

(4) K. Papadopoulos, **T. Triantis**, D. Dimotikali and J. Nikokavouras, *"Antioxidant activity evaluation of food additives by photostorage chemiluminescence method"* 18th Panhellenic Chemistry Conference, Athens, 10-13 March 2001, pg. 212- 215.

(3) K. Papadopoulos, S. Spartalis, **T. Triantis**, D. Dimotikali and J. Nikokavouras, *''Chemiluminescence in Interfaces of immiscible liquids''*, 6th Chemistry Conference of Greece and Cyprus, Rhodes, 2-5 September 1999, pg. 395-399.

(2) K. Papadopoulos, J. Nikokavouras, **T. Triantis** and D. Dimotikali, *''Reductive Chemiluminescence of lucigenin with Radiooxygenated Amides and Amines'',* 6th Chemistry Conference of Greece and Cyprus, Rhodes, 2-5 September 1999, pg. 400 -404.

(1) K. Papadopoulos, I. Schizas, **T. Triantis**, D. Dimotikali and J. Nikokavouras, *"Azaaromatic compounds in light storage systems''*, 16o Panhellenic Chemistry Conference, Athens, 4-8 December 1995, Vol. B., pg. 880-883.

CONFERENCE ABSTRACTS

(49) A. Hiskia, T. Fotiou, **T. Triantis**, T. Kaloudis, *"Evaluation of the photocatalytic activity of TiO2 based catalysts on the degradation and mineralization of cyanobacterial toxins and water off-odor compounds under UV-A, solar and visible light",* 3rd European Symposium on Photocatalysis JEP 2013, Portoroz, Slovenia, September 25 - 27, 2013.

(48) T. Fotiou, **T. Triantis**, T. Kaloudis, A. Hiskia, *"Photocatalytic degradation of Cylindrospermopsin under UV-A, solar and visible light in the presence of TiO2 based nanomaterials*", 13th International Conference on Environmental Science and Technology CEST2013, Athens, Greece, September 5 - 7, 2013.

(47) S.K. Zervou, **T. Triantis**, T. Kaloudis, A. Hiskia, *"Optimization of Solid Phase Extraction (SPE) and LC-ESI-MS/MS for the Determination of Cyclic Peptide Cyanotoxins (CPCs) in Water",* 8th International Conference of Instrumental Methods of Analysis - Modern Trends and Applications (IMA 2013), Thessaliniki, Greece, 15 - 19 September, 2013, pg. 81.

(46) Anastasia Hiskia, Theodora Fotiou, **Theodoros Triantis** and Triantafyllos Kaloudis, *"Recent advances towards water purification from cyanotoxins and taste & odor compounds using photocatalysis with TiO2 and polyoxometalates",* 14th EuCheMS International Conference on Chemistry and the Environment (ICCE 2013) - Satellite Event "Cyanobacteria and Cyanotoxins in Aquatic Environments", Barcelona, Spain, June 25 - 28, 2013.

(45) Theodora Fotiou, Anastasia Hiskia, **Theodoros Triantis**, Triantafyllos Kaloudis , Adrian M.T. Silva and Polycarpos Falaras , *"Photocatalytic Degradation of Cyanobacterial Metabolites in Water using Reduced Graphene Oxide-TiO_2 Composite*", 14th EuCheMS International Conference on Chemistry and the Environment (ICCE 2013) - Satellite Event "Cyanobacteria and Cyanotoxins in Aquatic Environments", Barcelona, Spain, June 25 - 28, 2013.

(44) Triantafyllos Kaloudis, Anastasia Hiskia, Sevasti-Kiriaki Zervou, KaterinaTsimeli and **Theodoros Triantis**, *"Monitoring of Microcystins in Lake Marathonas, a Water Reservoir of Athens, Greece"*, 14th EuCheMS International Conference on Chemistry and the Environment (ICCE 2013) - Satellite Event "Cyanobacteria and Cyanotoxins in Aquatic Environments", Barcelona, Spain, June 25 - 28, 2013.

(43) Anastasia Hiskia, Lampros Tzianos, **Theodoros Triantis,** "Photocatalytic synthesis of silver nanoparticles in the presence of polyoxometalates", 1st European Conference on Polyoxometalate Chemistry for Molecular Nanoscience, May 16th-19th 2013 - Puerto Santiago, Tenerife, Spain

(42) Theodora Fotiou, **Theodoros M. Triantis**, Triantafyllos Kaloudis, Elias Papaconstantinou, Anastasia Hiskia, *"Water purification from organic pollutants and off-odor compounds using UV-vis light in the presence of polyoxometalates"*, 245th ACS National Meeting & Exposition, New Orleans, LA, United States, April 7-11, 2013, Pages: ENVR-48

(41) S.K. Zervou, T. Kaloudis, **T. Triantis**, P. Miskaki, A. Hiskia *"Trace-level determination of 8 priority pesticides in water using solid phase extraction, liquid chromatography - tandem mass spectrometry (LC-MS/MS)"*, AACD 8th Aegean Analytical Chemistry Days, 16 - 20 September, 2012, Izmir, Turkey

(40) Anastasia Hiskia, **Theodoros Triantis**, Theodora Fotiou, Triantafyllos Kaloudis, Elias Papaconstantinou, *"Recent developments towards water purification from organic pollutants and taste & odor compounds using Polyoxometalates",* Frontiers in Metal Oxide Cluster Science-FMOCS, Lanzarote, Spain, November 18-22, 2012.

(39) Theodora Fotiou, **Theodoros M. Triantis**, Triantafyllos Kaloudis, Anastasia Hiskia, Elias Papaconstantinou, *"Photocatalytic Degradation of Taste and Odour Compounds using Polyoxomatalates: Comparison with TiO2"*, Frontiers in Metal Oxide Cluster Science-FMOCS, Lanzarote, Spain, November 18-22, 2012.

(38) A. Hiskia, **T. Triantis**, T. Fotiou, T. Kaloudis, N. Moustakas, A.G. Kontos, P. Falaras,M. Pelaez, D. Dionysiou, *"Photocatalytic Degradation of Taste and Odour Compounds in Water Using Visible Light–Activated TiO_2 Nanomaterials", 7th European Meeting o Solar Chemistry and Photocatalysis: Environmental*

Applications (SPEA 7), 17-20 June 2012, Porto, Portugal, pg. 98.

(37) N. Moustakas, A. Kontos, T. Fotiou, F. Katsaros, V. Likodimos, **T. Triantis,** A. Hiskia, D.D. Dionysiou, P. Falaras, *"Tuning sol-gel growth of nitrogen doped TiO_2 for microcystin-LR degradation undr visible light"*, 3rd International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems (3rd IC4N – 2011), Crete, Greece, June 26-30, 2011.

(36) A. Hiskia, **T. Triantis**, T. Fotiou, T. Kaloudis, P. Falaras, D. Dionysiou, "Photocatalytic degradation of microcystin-LR using visible light–activated nanostructured TiO_2 materials", 4ο Περιβαλλοντικό Συνέδριο Μακεδονίας", Θεσσαλονίκη, 18-20 Μαρτίου 2011.

(35) P. Falaras, V. Likodimos, A. Kontos, A. Hiskia, **T. Triantis**, D. Dionysiou, M. Pelaez, *"Nanostructured Titania modified with anions for the photocatalytic degradation of cyanotoxins with visible light"*, 11ο Hellenic Symposium on Catalysis, Athens, Greece, October 22-23, 2010.

(34) T. Kaloudis, **T. Triantis**, I. Dimitrakopoulos, P. Kakleas, A. Hiskia, *"Optimization and robust design of analytical methods with the use of response surfsce and orthogonal array (Taguchi) experimental designs"*, 7th Aegean Analytical Chemistry Days, Lesvos, Greece, 29 September – 3 October, 2010.

(33) T. Kaloudis, N. Thanasoulias, **T. Triantis**, K. Tsimeli, A. Hiskia, *"Development and validation of a cost effective analytical protocol for the monitoring of microcystins in water. Application in the lake marathonas"*, 7th Aegean Analytical Chemistry Days, Lesvos, Greece, 29 September – 3 October, 2010.

(32) A. Hiskia, **T. Triantis**, T. Fotiou, T. Kaloudis, A. Kontos, P. Falaras, D. Dionysiou, *"Analytical techniques for the elucidation of the mechanism of photocatalytic degradation of microcystin-LR in water using visible light – activated nanostructured TiO2 materials"*, 7th Aegean Analytical Chemistry Days, Lesvos, Greece, 29 September – 3 October, 2010.

(31) K. Tsimeli, **T. Triantis**, T. Kaloudis, A. Hiskia, *"Development of a New Analytical Method for the High Sensitivity Analysis of EU 8 Priority Pollutant PAHs in Surface and Drinking Water by LC-APPI-MS/MS",* 6th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications-IMA,4-8 October, Athens, Greece, 2009.

(30) **T. Triantis**, G. Alexakos, N. Boukos, E. Papaconstantinou, A. Hiskia, "*Size controlled synthesis and photocatalytic properties of Se nanoparticles"*, International Polyoxometalate Symposium, Jacobs University, Bremen, Germany, 28 July – 1 August, 2009.

(29) K. Papadopoulos, **T. Triantis**, E. Yannakopoulou, N. Menegas, D. Dimotikali, "Direct chemiluminescence determination of hydroquinidine in pharmaceutical formulation using oxidation reaction of sodium dithionite with cerium oxide nanoparticles", 6th International Conference on Nanosciences & Nanotechnologies, *Thessaloniki, Greece, July 13-15, 2009, pg 218.*

(28) K. Tsimeli, **T. Triantis,** T. Kaloudis. A. Hiskia, *"Determination of cynotoxins in surface and drinking water of Athens by LC-MS/MS",* 3rd International Conference of Water Science and Technology, Integrated Water Resources Management with Emphasis on Climate Change Adaptation, *AQUA 2008, Athens Hellas, 16-19 October, 2008*

(27) T. Kaloudis, N. Thanasoulias, L. Kousouris, E. Lytras, P. Tzoumerkas, **T. Triantis**, K. Tsimeli, A. Hiskia, *"Laboratory Analysis of Cyanotoxins in Surface and Drinking Waters using ELISA, PPIA, HPLC/PDA AND LC-MS/MS",* 3rd International Conference of Water Science and Technology, Integrated Water Resources Management with Emphasis on Climate Change Adaptation, *AQUA 2008, Athens Hellas, 16-19 October, 2008.*

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(25) D. Dimotikali, K. Papadopoulos, E. Yannakopoulou, **T. Triantis**, D. Christodouleas, J. Hrbac, R. Zboril, *"Evaluation of antioxidant activities of organic compounds using chemiluminescence catalyzed by ferric oxide nanoparticles"*, 5th International Conference on Nanosciences & Nanotechnologies, *Thessaloniki, Greece, July 14-16, 2008, pg 239.*

(24) K. Papadopoulos, E. Yannakopoulou, **T. Triantis**, D. Christodouleas, T. Yannakopoulou, C. Trapalis, D. Dimotikali, *"Applications of colloidal solutions of nanosized ferric oxides in chemiluminescence reactions"*, 1st International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems, *Halkidiki, Greece, June 16-18, 2008, pg 263.*

(23) K. Tsimeli, **T.M. Triantis**, D. Dimotikali, A. Hiskia, *"Development of a rapid and sensitive method for the simultaneous determination of 1,2-Dibromoethane, 1,4-Dichlorobenzene and Naphthalene residues in honey using HS-SPME coupled with GC-MS"*, 3rd International Symposium on Recent Advances in Food Analysis, *Prague, Czech Republic, November 7-9, 2007, pg. 155.*

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(21) E. Gkika, A. Troupis, **T. Triantis**, E. Scoullos, E. Dasenakis, A. Hiskia, E. Papaconstantinou, *"Photocatalytic decomposition of a typical azo dye, metanil yellow by the use of polyoxometallates"*, 41st IUPAC World Chemistry Congress - Chemistry Protecting Health, Natural Environment and Cultural Heritage, *Torino (Italy), August 5-11, 2007.*

(20) K. Agiamarnioti, **T. Triantis**, E. Giannakopoulou, K. Papadopoulos, *"Novel biotinylated fluorescent Labels. Studies on the effect of spacer moieties upon binding to Strept(avidin)"*, 2nd Greek Symposium "Organic Synthesis, from Chemistry to Biology, Medicine and Materials Science ", University of Athens, 19-21 April 2007, p. 155.

(19) D. Christodouleas, K. Papadopoulos, **T. Triantis**, A.C. Calokerinos, *"Measurement of total antioxidant activity of olive oils by using chemiluminescence techniques",* 5th Aegean Analytical Chemistry Days, International Conference, Thessaloniki*, Greece, 5–8 October, 2006, p. 104.*

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(17) P. Kormali, **T. Triantis**, D. Dimotikali, A. Hiskia, E. Papaconstantinou, *"Photocatalysis by Polyoxometalate $PW_{12}O_{40}^{3-}$ and TiO_2. A Comparative Study"*, First European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP-1), *Chania, Greece, 7-9 September 2006, pg. 44.*

(16) K. Agiamarnioti, O. Lanitou, D. Dimotikali, **T. Triantis**, E. Yannakopoulou, K. Papadopoulos, *"A novel fluorescent label for (Strept)avidin-biotin based bioassays",* 3rd International Conference on Oxidative Stress in Skin Medicine and Biology, *Andros, Greece, 21-24 September, 2006, pg. 100-101.*

(15) E. Gkika, A. Troupis, **T. Triantis**, E. Dasenakis, A. Hiskia, E. Papaconstantinou, *"Photocatalytic reduction of a typical azo dye, metanyl yellow by the use of polyoxometalates"*, 16th International Conference on Photochemical Conversion and Storage of Solar Energy, *Uppsala, Sweden, July 2-7, 2006, pg. W5-P-6.*

(14) I. Chassiotou, A. Troupis, **T. Triantis**, A. Hiskia, E. Papaconstantinou, *"Photochromic inorganic-organic multilayer films based on polyoxometalate and polyethylimine"*, 16th International Conference on Photochemical Conversion and Storage of Solar Energy, *Uppsala, Sweden, July 2-7, 2006, pg. W5-P-49.*

(13) O. Lanitou, D. Dimotikali, K. Agiamarnioti, **T. Triantis**, K. Papadopoulos, R. Saicic, *"Asymmetric synthesis of α-amino acids using novel chiral functionalized inorganic catalysts"*, The Sixth European Meeting on Environmental Chemistry, *Belgrade, Serbia and Montenegro, December 6-10, 2005, pg. 48.*

(12) O. Lanitou, D. Dimotikali, K. Papadopoulos, E. Giannakopoulou, **T. Triantis**, *"Catalytic asymmetric epoxidation of enols in two phase system"*, 8th Chemistry Conference of Greece and Cyprus, Thessaloniki, Greece, 10-13 December 2004, pg. 44.

(11) K. Agiamarnioti, N. Ferderigos, K. Papadopoulos, **T. Triantis**, *"Synthesis and fluorescent properties of novel biotinylated labels"*, 1st Greek Symposium "Organic Synthesis, from Chemistry to Biology, Medicine and Materials Science", University of Athens, 4-6 November 2004, pp. 138.

(10) K. Papadopoulos, K. Agiamarnioti, **T. Triantis**, D. Dimotikali, *"Synthesis and luminescent properties of biotinylated acridinium amides. New detection reagents for immunoassay applications''*, 4nd International Conference of the Chemical Societies of the South-Eastern European Countries*, Belgrade, Serbia and Montenegro, 18-21 July 2004, Vol. I, pg. 212.*

(9) D. Dimotikali, K. Agiamarnioti, **T. Triantis**, K. Papadopoulos, *"Synthesis and chemiluminescent properties of novel biotinylated acridinium esters",* 13th International Symposium Spectroscopy in Theory and Practice, *Nova Gorica, Slovenia, 27 – 30 August 2003, pg. 82.*

(8) D. Dimotikali, N. Farmakis, K. Agiamarnioti, **T. Triantis**, K. Papadopoulos, *"Comparative studies on the total antioxidant activity of fruit and vegetable aqueous extracts using chemiluminescence"*, 13th International Symposium Spectroscopy in Theory and Practice*, Nova Gorica, Slovenia, 27 – 30 August 2003, pg. 81.*

(7) K. Papadopoulos, **T. Triantis**, K. Tsagaraki, D. Dimotikali, N. Iftimie and A. Meghea, *"Studies on the photostoragechemiluminescence of aromatic ketones with reactive oxygen species''*, 3nd International Conference of the Chemical Societies of the South-Eastern European Countries*, Bucharest, Romania, 22-25 September 2002, Vol. II, pg.77.*

(6) **T. Triantis**, K. Papadopoulos, Ch. Tzikis, A. Nikokavoura and D. Dimotikali, *"Evaluation of the adulteration of extra virgin olive oils with seed oils using chemiluminescence"*, 4th Mediterranean Basin Conference on Analytical Chemistry, *Portorož, Slovenia, 15-20 September 2002, pg. B27*.

(5) K. Papadopoulos, **T. Triantis**, D. Dimotikali and J. Nikokavouras, *"Evaluation of Food Antioxidant activity by Photostoragechemiluminescence''*, 1st Black Sea Basin Conference on Analytical Chemistry*, Odessa, Ukraine, 11-15 September 2001, Vol. I, pg.45.*

(4) **T. Triantis**, K. Papadopoulos, D. Dimotikali and J. Nikokavouras, *"Chemiluminescence of Photo- and Radiolysed quinolones"*, 2nd Panhellenic Conference "Postgraduate Studies in Science", NCSR 'DEMOKRITOS", Agia Paraskevi, Attiki, 30 June – 1 July 2000, pg.23

(3) K. Papadopoulos, **T. Triantis**, D. Dimotikali and J. Nikokavouras, " *Radiochemiluminescence of*

Carboxyquinolines'', 2nd International Conference of the Chemical Societies of the South-Eastern European Countries*, Halkidiki, Greece, 6-9 June 2000, Vol. I, pg. 395.*

(2) K. Papadopoulos, J. Nikokavouras, *T. Triantis* and D. Dimotikali, *"Chemiluminescence of lucigenin by radiooxygenated amines"*, 1st Panhellenic Conference "Postgraduate Studies in Science", NCSR 'DEMOKRITOS", Agia Paraskevi, Attiki, 25-26 June 1999, pg. 23.

(1) K. Papadopoulos, I. Schizas. D. Dimotikali, I. Lignos, **T. Triantis**, M. Stamatakis and J. Nikokavouras, *"Radiochemiluminescence. A new method for the chemical dosimetry of ionizing radiation"*, 2nd Symposium on Chemical Research and Industry, NCSR 'DEMOKRITOS", Agia Paraskevi, Attiki, 3-5 December 1997, pg. 82.

ORGANIZATION OF CONFERENCES / WORKSHOPS / MEETINGS

- **November 2014:** Co-Organizer and Trainer of a three-days training workshop *"Theoretical and practical training in SPE-LC-MS/MS analytical methods of Environmental Analysis Laboratory"*, organized in NCSR "DEMOKRITOS", 20-21 Nov. & 1 Dec. 2014 in the frame of a constant partnership with EYDAP SA, the Athens Water Supply and Sewerage Company on the development of novel analytical methods for the determination of emerging pollutants in water, transfer of know-how and expertise and training EYDAP's personnel.

- **May 2014:** Co-Organizer of a one-day workshop *"Cyanotoxins in Fresh Waters Advances in Analysis, Occurrence, Treatment"*, organized in NCSR "DEMOKRITOS", May 5th 2014, in the frame of "CYANOWATER" project funded by the Greek Ministry of Education & Religious Affairs and the European Commission in the frame of research program «ΑΡΙΣΤΕΙΑ» - EXECELLENCE.

- **March 2013:** Co-Organizer of a two-days Editorial meeting for the development of the *"Handbook of Cyanobacteria Monitoring and Cyanotoxin Analysis"* edited by J. Meriluoto, L. Spoof & G. Codd and will be published by John Wiley & Sons, Ltd. at the end of 2015. This meeting organized in the frame of the COST Action ES1105 "CYANOCOST", 20-21 March 2013, Athens, Greece and participated more than 30 authors from different European countries.

PARTICIPATION IN PROFESSIONAL INSTITUTIONS AND COMMITTIEES

Member of the Technical Chamber of Greece
Member of the Hellenic Mass Spectrometry Society (HMSS)

PARTICIPATION IN RESEARCH PROJECTS

- **2013-2015:** ***"Advanced materials and devices for energy collection and administration"***, Research Program "KRIPIS" financed by the Greek Ministry of Education and the European Commission. Participation as Researcher and Post-doctoral co-Advisor. Pre-submission role: Co-author. In the project frame, our research focused on the preparation of polyoxometalate-stabilised silver nanoparticles and their incorporation in high performing bulk heterojunction organic photovoltaics. Project Coordinator: Dr. D. Niarchos, INN, NCSR Demokritos. Funding: 883,200 €.
- **2012-2015:** ***"Cyanotoxins in fresh water. Advances in analysis, occurrence and treatment (CYANOWATER)"***, Research program «ΑΡΙΣΤΕΙΑ» - EXECELLENCE financed by the Greek Ministry of Education & Religious Affairs and the European Commission. *Participation as Post-doctoral Researcher. Pre-submission role: Key co-author.* CYANOWATER project aims in filling research gaps and

achieving breakthrough results in (a) Development of advanced analytical methods for emerging cyanotoxins (CTs) and for simultaneous analysis of different groups of CTs, (b) Identification of the toxin-producing cyanobacteria species in freshwater bodies and (c) Development of novel advanced oxidation processes based on photocatalysis of semiconducting metal oxides (TiO2, POM) for the detoxification of water contaminated with CTs. Principal Investigator: Dr A. Hiskia. Total funding: 315 M€.

- **2012-2015**: ***"Development of Advanced Oxidation Processes (AOPs) with the use of nanomaterials and sunlight, for the removal of various organic toxic micropollutants, endocrine disrupters and cyanotoxins from natural waters and sewages"***, Research Program "Thales" financed by the Greek Ministry of Education & Religious Affairs and the European Commission. *Participation as Researcher. Pre-submission role: co-author*. Project Coordinator: Prof. T. Albanis, Department of Chemistry, University of Ioannina. Group budget: 60 M€.

- **2012-2016:** ***"Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management",*** ESSEM COST Action ES1105 funded by COST – European Cooperation in Science and Technology. *Participation as Working Group member and Action manager.* The main objective of this network is to increase, disseminate and harmonize capabilities across Europe for the risk management of cyanobacteria and cyanotoxins in water bodies, by establishing strong and synergistic links between academia, authorities, industry and citizens. NCSR "D" has been selected by the Action's Management Committee as Action's Grant Holder.

- **2012-2016:** ***"Polyoxometalate Chemistry for Molecular Nanoscience" (PoCheMoN)",*** COST Action CM1203 funded by COST – European Cooperation in Science and Technology). *Participation as Management Committee(MC) member and Working Group (WG) member.* The main objective of PoCheMoN is to accelerate POM-based Molecular Nanoscience by creating a coherent network for world-leading education and research in POM chemistry.

- **2009-2012:** ***"Water Detoxification Using Innovative vi-Nanocatalysts (CLEAN WATER)",*** The project funded by European Union - Seventh Framework Programme, Theme [6–4] [Environment (including Climate Change) Nanosciences, Nanotechnologies, Materials and New Production Technologies – NMP], Grant agreement No 227017. *Participation as Post-doctoral Researcher. Pre-submission role: co-author.* Project Coordinator: Dr P. Falaras. Group budget: 110 M€.

- **2006-2008:** ***"Development of new biomagnetic nanomaterials for medical purposes",*** Project PEP funded by G.S.R.T, Greek Ministry of Development. *Participation as Reseracher. Pre-submission role: co-author*. Project Coordinator: Dr. E. Tsilibary. Group budget: 9.9 M€.

- **2006-2007:** ***"Development of an integrated system for the monitoring of cyanotoxins in surface and treated water using combination of advanced analytical techniques",*** Project PABET financed by the Greek Ministry of Development. *Participation as Reseracher.* Project Coordinators: L. Kousouris, Dr. A. Hiskia. Group budget: 27 M€.

- **2005-2008:** ***"Accreditation of the Environmental Analysis Laboratory",*** Project EPAN funded by Greek Ministry of Development, Operational Programme: "Antagonistikotita". *Participation as Reseracher and Laboratory Quality Manager*. The main objective of the project was the development of analytical methods for the determination of polycyclic aromatic hydrocarbons (PAHs) in drinking and surface waters, based on advanced instrumentation of mass spectrometry acquired in the frame of the project. In addition, a quality control system was established and the Laboratory was accredited for the above chemical test according to ISO17025 by the Hellenic Accreditation Body (ESYD). Project Coordinator: Dr. A. Hiskia. Total funding: 311.3 M€.

- **2006-2008:** ***"Sensitized chemiluminescence by using nanostructured iron oxides particles– Prospects for method application in analytical chemistry",*** Bilateral project between Greece and Czech Republic financed by G.S.R.T, Greek Ministry of Development. *Participation as Collaborating Reseracher.* Project Coordinator: Dr. K. Papadopoulos. Total funding: 11,7 M€.

- **2005-2006:** ***"Develomment of Methodology for Photocatlytic Degradation of Organic Pollutans Combining Spectoscopic & Alaytical",*** Project EPEAEK (PYTHAGORAS II) funded by Greek Ministry of National Education and Religious Affairs. *Participation as Post-doctoral Researcher. Pre-submission role: co-author.* The main project objective was the development and application of experimental protocols and electron paramagnetic resonance (EPR) and fluorescence techniques for the photocatalytic degradation of organic pollutants and pesticides. Project Coordinator: Associate. Prof. I. Deligiannakis, Department of Environmental & Natural Resources Management, University of Ionnina. Total funding: 85 M€.
- **2003-2006:** ***"Visible light induced degradation of textile dyes using tungstate catalysts"***. Joint Research and Technology Program with Prof. P. Kamat (Notre Dame university, Radiation Laboratory, USA) funded by G.S.R.T, Greek Ministry of Development). Basic objective of the project was the investigation of azodyes photocatalytic degradation in the presence of polyoxometalates catalysts. *Participation as Post-doctoral Researcher*. Project Coordinator: Dr. E. Papaconstantinou. Total funding: 59.8 M€.
- **2002-2006:** ***"Advanced functional materials",*** Research and Technology Program in the frame of Excellence in the Research Institutes funded by G.S.R.T, Greek Ministry of Development. *Participation as Post-doctoral Researcher*. Research on the synthesis of novel fluorescent and chemiluminescent labels and their application for the determination of selected biomolecules. Project Coordinators: Dr. K. Palaios, Dr. K. Papadopoulos. Group budget: 37 M€.
- **2003-2004:** ***"Evaluation of the antioxidant activity of fruits and olive oil extracts using chemiluminescence"***, Greek National Scholarships Foundation Research Fellowship. *Principal Investigator. Pre-submission role: Author.* Host Laboratory: Dr. K. Papadopoulos. Total Funding: 7.200 €.
- **2004-2006:** ***"Development of novel methods for the preparation of optically active amino acids and amino alcohols",*** Joint Research and Technology Program with Serbia funded by G.S.R.T, Greek Ministry of Development. *Participation as Post-doctoral Researcher*. Project Coordinator: Dr. K. Papadopoulos. Total funding: 12 M€.
- **2000-2002:** ***"Pro- and antioxidant effects in therapy - new methods for antioxidant evaluation",*** Joint Research and Technology Program with Romania funded by G.S.R.T, Greek Ministry of Development. Participation as PhD Candidate - Researcher. Project Coordinator: Dr. K. Papadopoulos. Total funding: 12 M€.
- **1999-2001:** ***"Radiochemiluminescence of azaaromatics and phthalhydrazides- prospects for analytical applications and radiation dosemeters",*** Research Project funded by the International Atomic Energy Agency. Participation as PhD Candidate - Researcher. Project Coordinator: Dr. K. Papadopoulos. Total funding: 12 M€.

EVALUATOR FOR RESEARCH PROGRAMS AND FUNDING AGENCIES

- **2008:** Reviewer - Evaluator of proposals funded by the Research Promotion Foundation of Cyprus (Invited).
- **2015:** Reviewer of proposals funded by the Greek Secretariat of Research and Technology (GSRT), Ministry of Education & Religious Affairs (Invited).

COLLABORATING RESEARCH GROUPS

- Prof. D. Dionysiou, Environmental Engineering and Science Program, School of Energy, Environmental, Biological, and Medical Engineering (SEEBME), University of Cincinnati, Cincinnati, Ohio, USA: *Advanced Oxidation processes / Remediation of Harmful Algal Blooms/cyanotoxins.*

- Dr. P. Falaras, Research Director, INN, National Centre of Scientific Research "Demokritos", Greece: *Photocatalysis / Photocatalysts structural characterization*

- Dr. P. Argitis, Research Director, INN, National Centre of Scientific Research "Demokritos", Greece: *Preparation and characterization of organic photovoltaics*

- Dr. N. Boukos, Research Director, INN, National Centre of Scientific Research "Demokritos", Greece: *SEM, TEM measurements*

- Dr. N. Ioanidis, INN, Scientific Personnel, National Centre of Scientific Research "Demokritos", Greece: *EPR measurments*

- Dr. K. Papadopoulos, Research Director, INN, National Centre of Scientific Research "Demokritos", Greece: *Analytical Chemistry Applications*

- Dr. S. Gkelis, School of Biology, Aristotle University of Thessaloniki, Greece: *Cyanobacteria / Cyanotoxins analysis*

- Dr. Triantafyllos Kaloudis, Organic Micropollutants Laboratory, Athens Water Supply and Sewerage Company (EYDAP SA), Greece: *Analytical Chemistry Applications*

- Prof. D. Dimotikali, School of Chemical Engineering, National Technical University of Athens, Greece: *Photocatalysis / Chemiluminescence*

- Prof. J. Meriluoto, Åbo Akademi University, Turku, Finland: *Cyanotoxins Analysis*