

CURRICULUM VITAE

PERSONAL DATA

Name: Nikolaos Karousis
Date of Birth: October 14, 1971
Place of Birth: Athens, Greece
Marital Status: Single
Nationality: Greek
Work Address: National Hellenic Research Foundation, Theoretical and Physical Chemistry
Institute, 48 Vass. Constantinou Ave., Athens 116 35, Greece
Tel.: +30-210-7273822, Fax: +30-210-7273794
E-mail: nkarou@eie.gr

EDUCATION

Sept. 1990 – April 1995 B.Sc. Department of Chemistry, University of Ioannina, Greece
June 1995 – March 2003 Ph.D. Department of Chemistry, University of Ioannina, Greece.
Jul 2000 – Jan 2002. Break of PhD Research due to Greek army obligations.

PROFESSIONAL AND RESEARCH APPOINTMENTS

● **Jun. 1996 – Jul. 1998.**

University of Ioannina. Main Researcher. Greek General Secretariat of Research and Technology (GSRT), “*Synthesis and Structural Analysis of Anthramycin Analogues with Potent Anticancer Activity. Studies of Trihalomethylene Aromatic compounds’s Chemical Properties*”. Supervisor: Prof. G. Varvounis.

● **Oct. 1997 – Oct. 1999.**

University of Ioannina and Humboldt University of Berlin. Main Researcher, GSRT’s Greek-German Cooperation Project, “*Design, Synthesis, DNA Binding, and Biological Activity of Novel Heterocyclic Compounds as Potential Anticancer Agents. Comparative NMR and Molecular Modeling Study with the Antitumour Antibiotic Anthramycin*”. Supervisors: Prof G. Varvounis and Prof. J. Liebscher.

● **Nov. 2002 – Mar. 2004**

University of Ioannina. Associate Researcher. GSRT’s Project “*Herakleitos: Research Scholarships emphasized in Basic Research*” with the title “*Synthesis and reactions of pyrrolo[3,2-c][1]benzazepines, pyrrolo[1,2-c][1,3]benzodiazepines and pyrrolo[1,2-c][1,3,6]benzotriazocines from (2-aminophenyl)-(1H-pyrrol-2-yl)methanone and N-alkyl(or aryl)-1-(2-nitrophenyl)-1H-pyrrolo-2-carboxamides*” carrying out the “*Identification of organic compounds by Mass Spectrometry and GC-MS*”. Supervisor: Prof. G. Varvounis.

● **Mar. 2004 – Sep. 2005**

University of Ioannina. Postdoctoral Fellow. GSRT’s Project “*Pythagoras: Support of Research Groups in University*” with the title “*Synthesis of pyrroles derivatives, suitable for the synthesis of novel pyrrolobenzodiazocines which can be used as DNA alkylation agents*”. Supervisor: Prof. G. Varvounis.

● **Sept. 2006 – Aug. 2007**

National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, Athens. Postdoctoral Fellow, ΠΙABET, GSRT, “*Functionalized Fullerenes with Amino acids and Small Peptides Suitable for the Stabilization of Metal Nanoparticles*”. Supervisor: N. Tagmatarchis, Senior Researcher.

● **Sept. 2007 – Present**

National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, Athens. Postdoctoral Fellow, European Science Foundation (ESF) – **EURYI 2004 Award**, “*Functionalization of Carbon Nanotubes Encapsulating Novel Carbon-based Materials*”. Supervisor: N. Tagmatarchis, Senior Researcher.

DISTINCTIONS

● **Nov. 1997 – Dec. 1997 and Feb. 1998 – Mar. 1998**

Invited Visitor Scientist. Humboldt University of Berlin, Institute of Organic and Bioorganic Chemistry. Supervisor Prof. J. Liebscher.

● **Jul. 2007 – Aug. 2007**

Invited Visitor Scientist. University of London, The School of Pharmacy, Department of Pharmaceutics, Centre for Drug Delivery Research. Supervisor Prof. K. Kostarelos,

LANGUAGES

- *Greek*
- *English*

ACADEMIC & PROFESSIONAL ACTIVITIES

Sep 2005 – June 2006 Part Time Teacher of Chemistry Lessons in Technical Occupational School
Sep 1995 – Jan 2000 Laboratory Assistant to chemistry students, in Organic Chemistry Labs.
Apr 1995 – present Association of Greek Chemists

PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. A. Kimbaris, **N. Karousis**, J. Cobb, G. Varvounis, “An unusual Truce-Smiles Rearrangement of 1- $\{[1-(2\text{-Nitrophenyl})\text{-}1\text{H}\text{-}2\text{-pyrrolyl}]\text{sulfanyl}\}$ acetone into (2-Nitrophenyl)(1H-2-pyrrolyl sulfonyl)methane”, XVIIIth European Colloquium on Heterocyclic Chemistry, October 4th-7th, **1998**, Rouen, France. A-114.
2. D. Belekos, **N. Karousis**, A. Kimbaris, G. Rotas, T. Liaskopoulos, S. Skoulika, P. Supsana, P. Tsoungas, G. Varvounis, “The Synthesis of Nitrogen Heterocycles from Pyrroles and Naphthols”, The Third Jordanian International Conference of Chemistry, 22–26 April, **2002**, Yarmouk University, Irbid, IL18.
3. **N. Karousis**, A. Kimbaris, K. Koriatopoulou, G. Rotas, G. Tsakonas, G. Varvounis, “The Synthesis of 6,11-Dihydro-5h-pyrrolo[1,2-c][1,3]benzodiazepines, Pyrrolo[2,1-c][1,4]benzo diazocin-6(5h)-Ones And 1,5,10,11-Tetrahydro-4h-Pyrrolo[2,3-c] [1,6]Benzodiazocin -4-ones

with Potential Biological Interest”, 2nd Eurasian Meeting on Heterocyclic Chemistry, “Heterocycles in Organic and Combinatorial Chemistry”, September 14–17, **2002**, Novgorod the Great, Russia, IL10.

4. **N. Karousis**, A. Kimbaris, K. Koriatopoulou, G. Rotas, S. Skoulika, G. Tsakonas, G. Varvounis, “Novel Routes to Pyrrole Containing Heterocycles”, 9th International Conference on Pure and Applied Heterocyclic Chemistry, December 11–14, **2004**, Sharm El-Sheikh, Egypt, KA-15, p. 25.
5. **N. Karousis**, K. Koriatopoulou, G. Rotas, S. Skoulika, G. Tsakonas, P. Tsoungas, G. Varvounis, “Versatile Syntheses of Novel Polycyclic Heterocycles Derived from 1-, 2- or 3-substituted Pyrroles and 2-hydroxy naphthaldehyde” 9th National Conference on “Bioactive Heterocycles and Drug Discovery Paradigm”, January 8–10, **2005**, Rajkot, Gujarat, India, IL-16, p. 59.
6. **N. Karousis**, K. Koriatopoulou, G. Tsakonas, K. Papavasileiou, T. Tzima, V. Melissas, A. Geronikaki, G. Varvounis, “Studies towards the synthesis of novel pyrrolobenzodiazocine ring system” 20th International Congress of Heterocyclic Chemistry, July 31 –August 5, **2005**, Palermo, Italy, 1-PO81, p. 268.
7. T. Liaskopoulos, **N. Karousis**, S. Skoulika, A. Tsipis, P. Tsoungas, G. Varvounis, “Oxidation of 2-hydroxynaphthaldehyde hydrazones with NBS”, 20th International Congress of Heterocyclic Chemistry, July 31 –August 5, **2005**, Palermo, Italy, 4-PO94, p. 533.
8. **N. Karousis**, G. -E. Tsotsou, N. Ragoussis, N. Tagmatarchis, “Palladium Nanoparticles onto Carbon Nanotubes: Synthesis, Characterization and Catalytic Activity”, *9th Greece-Cyprus Chemistry Conference*, Larnaka, Cyprus, **2007**.
9. **N. Karousis**, K. Kostarelos, N. Tagmatarchis “Water Soluble Functionalized Carbon Nanotubes as Drug Delivery Systems”, *4th International Workshop on Nanosciences & Nanotechnologies - NN07*, Thessaloniki, Greece, **2007**.
10. **N. Karousis**, G. -E. Tsotsou, N. Ragoussis, N. Tagmatarchis, “Catalytic Activity of Surfactant-Solubilized Carbon Nanotubes Decorated with Palladium Nanoparticles”, *18th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides*, Berlin, Germany, **2007**.
11. **N. Karousis**, T. Ichihashi, M. Yudasaka, S. Iijima, N. Tagmatarchis, “Decoration of Carbon Nanohorns with Palladium and Platinum Nanoparticles”, *ChemOnTubes 2008 International Meeting on the Chemistry of Nanotubes: Science and Applications*, Zaragoza, Spain, **2008**.

LIST OF PUBLICATIONS

A. Peer-Reviewed International Journals

1. **N. Karousis**, J. Liebscher, G. Varvounis, “Synthesis of (E)-3-(1H-Pyrrol-3-yl)-2-propene Derivatives Using Organophosphorus Reagents”, *Synthesis* **2006**, No 9, 1494-1498.
2. **N. Karousis**, K. Koriatopoulou, G. Varvounis “Synthesis of 1-arylmethylpyrroles as useful intermediates for further chemical transformation”, *Arkivoc* **2008** (2), 124-133.
3. G. Pagona, **N. Karousis**, N. Tagmatarchis, “Aryl diazonium functionalization of carbon nanohorns”, *Carbon* **2008**, Vol. 46, 604-610.

4. **N. Karousis**, G-E Tsotsou, N Ragoussis, N Tagmatarchis “Catalytic Activity of Surfactant Solubilised Multi-Walled Carbon Nanotubes Decorated with Palladium Nanoparticles”, *Diamond and Related Materials* **2008**, <http://dx.doi.org/10.1016/j.diamond.2008.03.019>
5. G. Mountrichas, G. Pagona, G. Rotas, **N. Karousis**, S. Pispas, N. Tagmatarchis, “Methodologies for the Chemical Functionalization of Carbon Nanohorns”, *Journal of Nanostructured Polymers and Nanocomposites* **2008**, **In Press**
6. G. Pagona, G. Mountrichas, G. Rotas, **N. Karousis**, S. Pispas, N. Tagmatarchis, “Properties, Applications and Functionalization of Carbon Nanohorns”, *International Journal of Nanotechnology* **2008**, **In Press**
7. **N. Karousis**, H. Ali-Boucetta, K. Kostarelos, N. Tagmatarchis, “Aryl-Derivatized, Water Soluble Functionalized Carbon Nanotubes for Biomedical Applications”, *Materials Science and Engineering B* **2008**, **Accepted**.
8. J. Tumpane, **N. Karousis**, N. Tagmatarchis, B. Nordén, “Alignment of Carbon Nanotubes in Weak Magnetic Fields” *Angewandte Chemie International Edition*, **2008**, **Accepted**.
9. **N. Karousis**, G. –E. Tsotsou, F. Evangelista, P. Rudolf, N. Ragoussis, N. Tagmatarchis, “Carbon Nanotubes Decorated with Palladium Nanoparticles: Synthesis, Characterization and Catalytic Activity”, *The Journal of Physical Chemistry C*, **Submitted**.
10. **N. Karousis**, T. Ichihashi, M. Yudasaka, S. Iijima, N. Tagmatarchis, “Decoration of Carbon Nanohorns with Palladium and Platinum Nanoparticles”, *Journal of Nanoscience and Nanotechnology*, **Submitted**.

B. Book Chapters

1. G. Varvounis and **N. Karousis**, “Functions Containing Two Halogens and Two Other Heteroatom Substituents”, In *Comprehensive Organic Functional Group Transformations II (COFGT-II)*, A. R. Katritzky, R. J. K. Taylor, E. F. V. Scriven (eds.), Elsevier Oxford. **2005**, Vol. 6. p. 271-294.