CURRICULUM VITAE

Full name: **Stefanos Mourdikoudis**
Date of birth: 24/03/1978
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UNIVERSITY EDUCATION - RESEARCH:

Sep '09 - Sep '11:	Post-doctoral researcher at LCC-CNRS, Toulouse, within the project 'Preface' : Study of the effects of lightnings at the aircrafts, research on the design and proposal of novel candidate materials for an improved protection against lightning.
2005-2009:	PhD on the synthesis and assembly of various systems of magnetic nanoparticles (Physics Department, Aristotle University of Thessaloniki). Thesis defended in March 2009.
2001-2003:	Master of Science in 'Physics & Technology of Materials', Physics Dept., A.U.Th.
1995-2001:	Diploma on Chemical Engineering, Aristotle University of Thessaloniki.

SELECTED PARTICIPATIONS IN WORKSHOPS-CONFERENCES:

September 2006:	Oral presentation in the 4th Workshop of 'Syntorbmag' Network (Synthesis and Orbital Magnetism of Core-Shell Nanoparticles), Thessaloniki: 'Structural and magnetic characterization of FeCo nanoparticles'.
June 2007:	Oral presentation in the 6th Panhellenic Conference on Chemical Engineering, Athens: 'Co-based nanoparticles – Synthesis, properties and perspectives'.
September 2007:	Oral presentation in EUROMAT'07, Nuremberg: 'Control of structural and magnetic characteristics of FePt@Fe_3O_4 core-shell nanoparticles'.
June 2008:	Oral presentation in the 1st IC4N (International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems), Neos Marmaras, Halkidiki, Greece: 'Influence of synthesis conditions on structural and magnetic properties of CoPt nanostructures'.
July 2008:	Poster presentation in the NN'08 (5th International Conference on Nanosciences & Nanotechnologies), Thessaloniki: 'Towards the study of Mn-Pt nanoparticles prepared by various chemical routes'.
September 2008:	Oral presentation in the 24th Panhellenic Conference on Solid State Physics and Materials Science, Heraklion, Greece: 'Controlling the crystal structure of Ni nanoparticles by the use of alkylamines'.
	I have been also a co-author in other Conference Proceedings, which were presented as oral or poster presentations in other greek or international conferences (Patras, Rome, Dublin etc.)

TECHNICAL AND THEORETICAL EXPERIENCE ACQUIRED DURING MY PhD WORK:

Setup of an experimental device for production of nanoparticles (Three-neck flask, condenser, inert conditions secured with argon flow). Synthesis and formation of self-assembling colloids

of several magnetic nanoparticles systems.
Magnetic measurements with VSM (Vibrating Sample Magnetometer).
Annealing of bimetallic nanoparticles in an oven with inert (Ar) or reducing atmosphere (95% Ar/ 5% H_2).
Drying and redispersion of magnetic nanoparticles in various organic solvents or water.
Limited practical experience in the use of a TEM microscope and a FTIR spectrometer.
Analysis of the experimental results obtained by techniques as XRD, TEM, HRTEM, FTIR, XPS, VSM, SQUID, SEM-EDX, Manganometry.
Contribution to the drafting of papers for submission in peer-reviewed Journals as the first author or co-author.

PUBLICATIONS IN PEER-REVIEWED JOURNALS:

1) 'Size-induced effects in wet-chemically synthesized $CoPt_3$ nanoparticles', S. Mourdikoudis, K. Simeonidis, K. Gloystein, M. Angelakeris, C. Dendrinou-Samara, F. Tuna, O. Kalogirou, *J. Nanosci. Nanotechno.*, accepted manuscript.
2) 'The effect of composition and structural ordering on the magnetism of FePt nanoparticles', O. Kalogirou, M. Angelakeris, C. Dendrinou-Samara, S. Mourdikoudis, K. Simeonidis, K. Gloystein, A. Vilalta-Clemente, I. Tsiaoussis, *J. Nanosci. Nanotechno.*, accepted manuscript.
3) 'Effects of various chemical synthetic routes on structural and magnetic features of Mn-Pt bimetallic nanoparticles', S. Mourdikoudis, A. Shavel, B. Rodriguez-Gonzalez, C. Serra, K. Simeonidis, M. Angelakeris, C. Dendrinou-Samara, O. Kalogirou, *Polyhedron*, in press.
4) 'Tailoring the morphology of Co_xPt_{1-x} magnetic nanostructures', S. Mourdikoudis, K. Simeonidis, K. Gloystein, M. Angelakeris, C. Dendrinou-Samara, I. Tsiaoussis, O. Kalogirou, *J. Magn. Magn. Mater.*, 321, 3120 (2009).
5) 'Controlling the crystal structure of Ni nanoparticles by the use of alkylamines', S. Mourdikoudis, K. Simeonidis, A. Vilalta-Clemente, F. Tuna, I. Tsiaoussis, M. Angelakeris, C. Dendrinou-Samara, O. Kalogirou, *J. Magn. Magn. Mater.,* 321, 2723 (2009).
6) 'Impact of synthesis parameters on structural and magnetic characteristics of Co-based nanoparticles', S. Mourdikoudis, K. Simeonidis, I. Tsiaoussis, C. Dendrinou-Samara, M. Angelakeris, O. Kalogirou, *J. Nanopart. Res.,* 11, 1477 (2009).
7) 'Thermal treatment effects in the self-assembly of FePt nanoparticle arrays', K. Simeonidis, S. Mourdikoudis, I. Tsiaoussis, C. Dendrinou-Samara, M. Angelakeris, O. Kalogirou, *J. Magn. Magn. Mater.,* 320, 2665 (2008).
8) 'Structural and magnetic features of heterogeneously nucleated Fe-oxide nanoparticles', K. Simeonidis, S. Mourdikoudis, I. Tsiaoussis, M. Angelakeris, C. Dendrinou-Samara, O. Kalogirou, *J. Magn. Magn. Mater.,* 320, 1631 (2008). In ***TOP-25 'Hottest' Articles: January-March and April-June 2008, J. Magn. Magn. Mater.***
9) 'Effect of air exposure on structural and magnetic features of FeCo nanoparticles', S. Mourdikoudis, K. Simeonidis, M. Angelakeris, I. Tsiaoussis, O. Kalogirou, C. Desvaux, C. Amiens, B. Chaudret, *Mod. Phys. Lett. B*, 21, 1161 (2007).
10) 'Controlled synthesis and phase characterization of Fe-based nanoparticles obtained by thermal decomposition', K. Simeonidis, S. Mourdikoudis, M. Moulla, I. Tsiaoussis, C.

Boubeta-Martinez, M. Angelakeris, C. Dendrinou-Samara, O. Kalogirou, *J. Magn. Magn. Mater.,* 316 e1 (2007). In ***TOP-25 'Hottest' Articles: July-September 2008, J. Magn. Magn. Mater.***

11) 'Annealing effect on the induced magnetism of platinum in FePt nanoparticles', F. Wilhelm, A. Rogalev, P. Poulopoulos, M. Angelakeris, I. Tsiaoussis, K. Simeonidis, S. Mourdikoudis, O. Kalogirou, *Mod. Phys. Lett. B*, 21, 1189 (2007).

12) 'Oxidation process of Fe nanoparticles', K. Simeonidis, S. Mourdikoudis, I. Tsiaoussis, N. Frangis, M. Angelakeris, O. Kalogirou, A. Delimitis, C. Dendrinou-Samara, *Mod. Phys. Lett. B*, 21, 1143 (2007).

RESEARCH STAYS IN OTHER INSTITUTES:

The nanoparticle systems that i studied during my PhD were synthesized mainly in the Chemistry Department in the Aristotle University of Thessaloniki. In principle, the characterization was carried out in the Physics Department, A.U.Th. However, I visited also some other institutes for experimental purposes:

January 2006: 1-month stay in the Laboratoire de Chimie de Coordination in Toulouse. Colleagues: C. Desvaux, C. Amiens, B. Chaudret.

March-May 2007: 3-month stay in the Department of Physical Chemistry, University of Vigo, Spain. Colleagues: A. Shavel, L. Liz-Marzan.

PREVIOUS DIPLOMA THESES COMPLETED:

November 2001: 'Measurement of the concentration of lead (Pb) in the dust of streets and schoolyards in the cities of Thessaloniki and Alexandroupoli', Department of Chemical Engineering, Aristotle University of Thessaloniki.

October 2003: 'Study of the crystallization of homopolymers PEN and PBN and of their copolymers – Evaluation of the degree of crystallization', Postgraduate course in 'Physics and technology of materials', Physics Dept., A.U.Th.

WORK EXPERIENCE:

During my Ph.D i was paid as a chemical engineer-Ph.D. Candidate by a Greek research program (PENED'03 667) funded mainly by the Greek Secretariat for Research and Technology. (3 years funding, 2005-2008).

Previous work experience includes:

July-September 1999: Practical experience in a food (salad) industry, Alexandroupoli.

July 2003-January 2004: Part-time work in the Greek telecommunication company 'OTE', Thessaloniki.

Feb 2004-July 2005: Service in the Greek Army (mandatory). During this period i was paid for one year as a non-permanent Officer of the Greek Army.

FOREIGN LANGUAGES:

English: Excellent level (Certificate of Proficiency in English, 1994)

French: Moderate level (Certificat de Langue Française, obtained in 1991)

COMPUTER SKILLS:

Windows XP, Microsoft Word, Origin, Internet, Imaging software etc.

REFERENCES:

◆ Orestis Kalogirou, Supervisor of my Ph.D Thesis and Associate Professor in the Physics Department, Aristotle Univ. of Thessaloniki (email: kalogiro@physics.auth.gr)

◆ Luis Liz-Marzan, Professor in the Department of Physical Chemistry, University of Vigo (e-mail: lmarzan@uvigo.es)

HOBBIES:

◘ Football, basketball, swimming, long walks, music, going for coffee, internet surfing