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Personal

Date of Birth: January 25, 1967

Place of Birth: Artemon, Sifnos Island, Cyclades, Greece

Education

PhD: University of Ioannina (Dept of Physics), December 1995.

B. Sc: University of Athens (Dept of Physics), June 1990.

Dissertation:

“Study of the Paramagnetic Centers of Photosystem II of Higher Plants by EPR and Mössbauer Spectroscopic Techniques” carried out at the Institute of Materials Science, NCSR “Demokritos”

Professional Experience:

01/05- Research Scientist, Institute of Materials Science, NCSR “Demokritos”

01/04-1/05. Research Fellow, Institute of Materials Science, NCSR “Demokritos”

10/00-9/04. Visiting Assoc. Professor Dept of Biological Applications and Technology, University of Ioannina

12/99-9/00: Research Fellow Institute of Materials Science, NCSR “Demokritos”

10/97-12/99: Postdoctoral research fellow, Dept of Chemistry, Carnegie Mellon University, Pittsburgh, Pennsylvania, U.S.A. (supervisor Prof. Eckard Münck)

11/96-10/97: Research Fellow Institute of Materials Science, NCSR “Demokritos”

09/89-12/94: Graduate fellow, Research Fellow Institute of Materials Science, NCSR “Demokritos” (supervisor, Dr Vasili Petrouleas)

Publications in peer reviewed journals : 160

Chapters in collective volumes: 3

non self citations: ~5000 (ISI, Scopus)

h-index : 42 (Scopus, December 2021)

Research Interests

Molecular Magnetism, Low Dimensional Magnetism and Magnetism at the Nanoscale, Bioinorganic systems, Spin Based Quantum Computing, Electron Paramagnetic Resonance Spectroscopy, Mössbauer Spectroscopy, Cryogenics.

Experimental Techniques

- EPR spectrometers.
- Mössbauer spectrometers.
- Magnetic measurements

Recent Activities:

- Helium Liquefaction Unit of INN: Supervisor (2013-)
- International M.Sc. Program in Quantum Computing and Quantum Technologies, Democritus University of Thrace, NCSR Demokritos. Member of the coordination committee.

Teaching Experience

I. Dept of Biological Applications and Technology, University of Ioannina

1. Physics (2000-2004),
2. Physical Chemistry Laboratory (2000-2004)

II. Dept of Chemistry, University of Ioannina, Graduate Course "Bioinorganic Chemistry".

1. Topics on Molecular Magnetism (2002-)

III. Dept of Chemistry and Dept of Materials Science and Technology, University of Ioannina, Graduate Course "Chemistry and Technology of Materials"

1. Topics on Molecular Magnetism (2002-)

IV. National Technical University of Athens, School of Applied Physical and Mathematical Sciences
Graduate Course

1. EPR Spectroscopy (2005-).

PhD Theses:

Supervision of one PhD thesis, examiner in twelve PhD theses.

Master Theses

Supervision of one Master thesis, examiner in two Master theses

Domestic and International Collaborators

Prof. Y. Deligiannakis, Univ. Ioannina, Greece

Prof. S. P. Perlepes Univ. Patras, Greece

Prof. Pan. Kyritsis, Univ. Athens, Greece

Prof. M. Louloudi, Univ. Ioannina, Greece

Prof. R. G. Raptis, University of Puerto Rico, Puerto Rico, U.S.A.

Dr C. Duboc, CNRS, Grenoble, France

Prof. A. Tasiopoulos, Univ. Cyprus, Cyprus

Prof. P. Stavropoulos, Missouri Univ., U.S.A.

Prof. John McGrady, Univ. Oxford, UK

Dr D. Pantazis, Max Planck Institute, Mullheim, Germany.

Talks in seminars, conferences and advanced schools

1. Ampere Summer School "Applications of Magnetic Resonance in Novel Materials", September 2000, Nafplion, Greece.
2. 1st North America-Greece-Cyprus Meeting on Paramagnetic Materials, 5-7 Μαΐου, 2005, Λευκωσία, Κύπρος.
3. 9th International Workshop on Electron Magnetic Resonance of Disorder Systems, June 8-15, 2005, Sofia, Bulgaria.
4. Grenoble High Magnetic Field Laboratory Users Meeting, 2nd July, 2005, Grenoble, France
5. "Current Trends in Nanoscopic and Mesoscopic Magnetism", 5-9 September 2006, Santorini, Greece.
6. "2nd North America Greece Cyprus Workshop on Paramagnetic Materials", 18-21 June 2007, Syros Island, Greece.
7. "XXIII Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης και Επιστήμης Υλικών", 24-26 Σεπτεμβρίου 2007, Αθήνα
8. International COST Meeting on Advanced Paramagnetic Resonance Methods in Molecular Biophysics, 4th Joint WG meeting and 5th MC meeting, 24-26 September 2008, Siena, Italy
9. "3rd North America Greece Cyprus Workshop on Paramagnetic Materials", 15-19 June 2009, Protaras, Cyprus.
10. International Conference on the Applications of the Mössbauer Effect, 19-24 July 2009, Vienna, Austria.
11. Third Workshop on Current Trends in Molecular and Nanoscale Magnetism, 21-25 June 2010, Orlando, Florida, U.S.A.
12. Invited seminar, Department of Chemistry, Univ. of Athens, 2 June 2011.
13. Fourth Workshop on Current Trends in Molecular and Nanoscale Magnetism, 10-14 June 2012, Ouranopolis, Chalkidiki, Greece.
14. 5th North America Greece Cyprus Workshop on Paramagnetic Materials", 22-26 May 2013, Limassol, Cyprus.
15. International Conference on the Applications of the Mössbauer Effect, 1-6 September 2013, Opatija, Croatia.
16. International Workshop "Dynamics in Soft Matter Probed by Advanced EPR Techniques", 5-9 May 2014, Luznica Manor, Zagerb, Croatia
17. Fifth Workshop on Current Trends in Molecular and Nanoscale Magnetism, 26-29 May 2014, Larnaca, Cyprus.
18. First scientific workshop of Cost Action ECOSTBio, 22-23 September 2014, Girona, Spain

19. Sixth Workshop on Current Trends in Molecular and Nanoscale Magnetism, 9-13 October 2016, Pylos, Greece.
20. Final scientific workshop of Cost Action ECOSTBio, 9-11 April 2018, Berlin, Germany.
21. "Spectroscopy days", May 9th, 2019, Institute of Nanoscience and Nanotechnology, NCSR Demokritos, Athens, Greece.
22. 4th Mediterranean Conference on the Applications of the Mössbauer Effect, May 27 - 31, 2018, Zadar Croatia.
23. 8th Workshop on Current Trends in Molecular and Nanoscale Magnetism, 27-31 May 2019, Rhodes, Greece.
24. 5th Mediterranean Conference on the Applications of the Mössbauer Effect, May 19 - 23, 2019, Montpellier, France.
25. "Spectroscopy days", May 20th, 2021, Institute of Nanoscience and Nanotechnology, NCSR Demokritos, Athens, Greece.
26. "1st Panhellenic Workshop on Inorganic Chemistry", 19-21 November, 2021, Patras, Greece.

Organization of International Meetings and Workshops

1. "Workshop on Current Trends in Nanoscopic and Mesoscopic Magnetism"
5-9 September 2006, Santorini, Greece
2. "2nd North America Greece Cyprus Workshop on Paramagnetic Materials"
18-21 June 2007, Syros, Greece.
3. "2nd Workshop on Current Trends in Nanoscopic and Mesoscopic Magnetism"
1-5 September 2008, Delphi, Greece.
4. "4th Workshop on Current Trends in Nanoscopic and Mesoscopic Magnetism"
11-14 June 2012, Ouranoupolis, Greece.
5. "EUROMAR 2013"
June 31- July 5, 2013, Herissonissos, Crete, Greece.
6. "5th North America Greece Cyprus Workshop on Paramagnetic Materials"
1 – 4 June 2015, Athens, Greece
7. "6th Workshop on Current Trends in Molecular and Nanoscale Magnetism"
9 – 13 October, 2016, Pylos, Greece
8. "8th North America Greece Cyprus Workshop on Paramagnetic Materials"
17-22 June 2018, Mystras, Greece.
9. "8th Workshop on Current Trends in Molecular and Nanoscale Magnetism»
27-31 May 2019, Rhodes, Greece.

Representative publications:

"Arrested substrate binding resolves catalytic intermediates in higher-plant water oxidation" G. Zahariou, N. Ioannidis, Y. Sanakis, D. A. Pantazis, *Angew. Chem. Int. Ed.* 2021, 60, 3156-3162.

"Magnetic Properties and Electronic Structure of the S = 2 Complex [MnIII{(OPPh₂)₂N}₃] Showing Field-Induced Slow Magnetization Relaxation" Y. Sanakis, J. Krzystek, D. Maganas, A. Grigoropoulos, E. Ferentinos, M. G. Kostakis, V. Petroulea, M. Pissas, K. Thirunavukkuarasu, W. Wernsdorfer, F. Neese, P. Kyritsis. *Inorg. Chem.* 2020, 59, 13281-13294

"A microporous Co(II) - based 3-D metal organic framework built from magnetic infinite rod-shaped secondary building units" A. Kourtellaris, E. E. Moushi, I. Spanopoulos, P. N. Trikalitis, M. Pissas, G. S. Papaefstathiou, Y. Sanakis, A. J. Tasiopoulos, *Eur. J. Inorg. Chem.* 2019, 4056-4062 (cover)

"Interactions between H-bonded [Cu^{II}₃(μ₃-OH)] triangles; A combined magnetic susceptibility and EPR study" L. Mathivathanan, A. K. Boudalis, P. Turek, M. Pissas, Y. Sanakis, R. G. Raptis *Phys. Chem. Chem. Phys.* 2018, 20, 17234-17344

"Site preferences in hetero-metallic [Fe_{9-x}Ni_x] clusters: a combined crystallographic, spectroscopic and theoretical analysis" A. N. Georgopoulou, K. Al-Ameed, A. Boudalis, D. F. Anagnostopoulos, V. Psycharis, J. E. McGrady, Y. Sanakis and C. P. Raptopoulou, *Dalton Trans.* 2017, 46, 12835–12844

"A Redox-Induced Spin-State Cascade in a Mixed-Valent Fe₃(μ₃-O) Triangle" E. V. Govor, K. A. Ameer, I. Chakraborty, C. S. Coste, O. Govor, Y. Sanakis, J. E. McGrady, and R. G. Raptis, *Angew. Chem. Int. Ed.* 2017, 56, 582-586.