
PERSONAL DATA

AFFILIATION AND OFFICIAL ADDRESS:

Assistant Professor, Laboratory of Inorganic Chemistry, Department of Chemistry,
University of Patras, P.O Box 26504, Patras, Greece

Tel: +30-2610 996008

e-mail:vtango@upatras.gr

DATE AND PLACE OF BIRTH : 31 August 1969, Lamia

TITLES OF STUDY (Title, Date, University)

- ◆ **Diploma in Physics**, 1991, University of Ioannina
- ◆ **Ph.D in Inorganic Chemistry**, 1997, University of Patras

SPECIALIZATION- GENERAL RESEARCH ACTIVITIES

Main Field :	Inorganic Chemistry
Other Fields :	<ul style="list-style-type: none">• Materials Chemistry• PhysicoChemical Characterisation of Materials• Magnetic Materials• Thin Films• Nanoparticles/ Hybrid Materials based on Carbon nanotubes
Research Interests:	<ul style="list-style-type: none">• Magnetochemistry of polynuclear complexes of transition 3d metal ions focusing on Single Molecule Magnets (SMM's) as possible candidates for the new qubits in the area of Quantum Computing.• Magnetochemistry of low-dimensional compounds as molecular analogues of nanowires• Study (experimental and theoretical) of the magnetic interaction between 4f (lanthanides) ions and 3d transition metal ions.• Deposition of molecular magnetic systems on thin films.• Study of nanoporous molecular systems• Use of Monte Carlo simulation techniques (Classical and Quantum) for the magnetic study of molecular magnetic systems
Specialization in experimental techniques:	<ul style="list-style-type: none">• Magnetometers (SQUID, VSM), Microsquad Technology (Lab. Luis Neel, CNRS, Grenoble, France-Dr. W. Wernsdorfer).• EPR (Electron Paramagnetic Resonance) X-Band, Q-Band, and High Frequency-High Field (HF-EPR 100-550 GHz, H=0-30 Tesla)-CNRS-Grenoble, France.• XMCD (X-Ray Magnetic Circular Dichroism) in collaboration with Laboratoire pour l'Utilisation du Rayonnement Electromagnetique, Centre Universitaire Paris-Sud, Orsay Cedex. (Synchrotron Radiation from Storage Ring DCI (1.85 GeV)).• Paramagnetic ^1H NMR in solid state and ^{57}Fe-Mossbauer.• Atomic/Magnetic Force Microscopy (AFM/MFM)

SCIENTIFIC RESEARCH ACTIVITIES

Research Interests:

- Development of experimental methodology for the deposition of molecular magnetic materials on thin films (SiO, HOPG substrates). Wet coating techniques.
- Use of Atomic/Magnetic Force Microscopy (AFM/MFM) for the characterization of thin films
- Magnetochemistry of polynuclear complexes of transition metal ions and physicochemical characterization using magnetometers of Squid Technology and Electron Paramagnetic Resonance (EPR) spectroscopy.
- Magnetic Nanoparticles. Use of Monte Carlo simulation techniques for the interpretation of the magnetic properties of spinel systems. Development of experimental techniques for the deposition of nanoparticles on thin films.
- Synthesis and characterization of new microporous metallo-organic compounds of the general type $\{M_1(C_4H_4N_2)[M_2(CN)_4]\}$ where $M_1=3d$ metal ions, $M_2=Pt(II), Pd(II)$ with important hysteresis effects at room temperature.
- Use of Monte Carlo simulation techniques (Classical and Quantum) for the magnetic study of molecular magnetic materials.

New Infrastructure:

- Devices of Spin-Coater, Dip-Coater for deposition on thin films
 - Microscopy AFM/MFM/STM for the characterization of thin films
-

EMPLOYMENT-OCCUPATION

1993– 1997:	Ph.D Thesis in the Institute of Materials Science of the National Research center of Demokritos, Athens, Greece: « <i>Magnetic and Spectroscopic properties of polynuclear complexes of Mn(II), Ni(II) και Cu(II)</i> ».
1998–1999:	Postdoctoral researcher in the Laboratory of X-Rays , Institute of Materials Science, N.C S.R “DEMOKRITOS”.
2000–2001:	Postdoctoral researcher in the Dept. Of Chemistry, Univ. Of Firenze in collaboration with Prof. D. Gatteschi.
May 2000–July 2000:	Postdoctoral researcher in Laboratoire pour l’ Utilisation du Rayonnement Electromagnetique, Centre Universitaire Paris-Sud, Orsay Cedex (Synchrotron Radiation from Storage Ring DCI (1.85 GeV)), in collaboration with Prof. C. Cartier.
2001 –2004	Lecturer (PD 407/80) in the Department of Materials Science, University of Patras.
2004 –2006	Assistant Professor (PD 407/80) in the Department of Materials Science, University of Patras.
2006 – 2008	Laboratory Associate in the National Technological Institute of Patras, Department of Engineering
2009 – April 2014:	Lecturer in the field of Inorganic Chemistry, Lab. of Inorganic Chemistry, Aristotle University of Thessaloniki.
April 2014 – October 2015:	Assistant Professor in the field of Inorganic Chemistry, Lab. of Inorganic Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece
October 2015 – today:	Assistant Professor in the field of Inorganic Chemistry, Lab. of Inorganic Chemistry, University of Patras, Patras, Greece

EDUCATIONAL TEXT/BOOKS/ BOOK-TRANSLATIONS

- 1 **V. Tangoulis**, *Basic Principles of Molecular Magnetism*, textbook for graduated students of the Graduated Program “Bioinorganic Chemistry”, Dept. of Chemistry, University of Ioannina, 1999, pages. 120.
- 2 **V. Tangoulis**, Laboratory textbooks for Materials Science and Physics. Dept. of Materials Science, University of Patras, 2001-2004
- 3 **V. Tangoulis** *Magnetic Materials and applications*, textbook for the course “*Magnetic Materials*”, Dept. of Materials Science, University of Patras, 2004 (pages.110).
- 4 **V. Tangoulis, E. Koutouli-Argiropoulou, A. Xatzidimitriou, D. Sazou** *Chemistry of Materials*, Edition Gartagani, Thessaloniki, 2012.
- 5 **V. Tangoulis, A. Vanakaras, E. Drakopoulou, S. Baskoutas, K. Pliagos, G. Psaras**, translation team of the “*Materials Science and Engineering-5th Edition*”*WD. Callister, Willey Edition, 2000* and for the Greek version Edition Tziolas, 2004.

PUBLICATIONS

1995

1. "Benzotriazole-mediated Assembly of the Discrete Asymmetric Pentanuclear Nickel Complex $[\text{Ni}_5(\text{OH})(\text{bta})_5(\text{acac})_4(\text{H}_2\text{O})_4]$ (Hbta = benzotriazole, Hacac = pentane-2,4-dione)", E.G.Bakalbassis, E.Diamantopoulou, S.P.Perlepes, C.P.Raptopoulou, **V.Tangoulis**, A.Terzis and T.F.Zafiropoulos, *J.Chem.Soc., Chem.Commun.*, **1995**, 1347-1348.
2. "Preparation, Structural Characterization and Properties of Malonamato(-1) Complexes", C.Vancant, H.O.Desseyn, **V.Tangoulis**, C.P.Raptopoulou, A.Terzis and S.P.Perlepes, *Polyhedron*, **1995**, 14, 2115-2125.

1996

3. "First Example of a Cu^{II} Polymeric Complex Having a Tetranuclear Repeating Unit with a S=2 Ground State. Crystal Structure of $[\text{Cu}_4(\text{dpk.CH}_3\text{O})_2\text{Cl}_6]_n$ (dpk.CH₃OH = Unimethylated Diol of Di-2-pyridyl Ketone)", A.N.Papadopoulos, **V.Tangoulis**, C.P.Raptopoulou, A.Terzis and D.P.Kessissoglou, *Inorg.Chem.*, **1996**, 35, 559-565.
4. "Preparation, Structure and Preliminary Magnetic Studies of an Octanuclear Alkoxo-Bridged Copper(II) Cluster of the Acetato-Bridged Dicubane Type", **V.Tangoulis**, S.Paschalidou, E.G.Bakalbassis, S.P.Perlepes, C.P.Raptopoulou and A.Terzis, *Chem.Commun.*, **1996**, 1297-1298.
5. "Manganese(II/II/II) and Manganese(III/II/III) Trinuclear Compounds. Structure and Solid and Solution Behavior", **V.Tangoulis**, D.A.Malamatari, K.Soulti, V.Stergiou, C.P.Raptopoulou, A.Terzis, T.A.Kabanos and D.P.Kessissoglou, *Inorg.Chem.*, **1996**, 35, 4974-4983.
6. "Structurally Diverse Copper(II) Herbicide Complexes: Mono- and Bi-nuclear Neutral Cationic Complexes", C.Dendrinou-Samara, G.Psomas, K.Christophorou, **V.Tangoulis**, C.P.Raptopoulou, A.Terzis and D.P.Kessissoglou, *J.Chem.Soc., Dalton Trans.*, **1996**, 3737-3743.
7. "A Two-Dimensional Manganese(II) Carboxylato Polymer. Structure, Magnetism, and EPR Study", **V.Tangoulis**, G.Psomas, C.Dendrinou-Samara, C.P.Raptopoulou, A.Terzis and D.P.Kessissoglou, *Inorg.Chem.*, **1996**, 35, 7655-7660.

1997

8. "The $[\text{Cu}_2(\text{O}_2\text{CMe}_4(\text{H}_2\text{O})_2)/\text{dpk}]$ Reaction System as Source of an Unusual Heptanuclear Complex and a Novel Dodecanuclear "Fly-wheel" Cluster (dpk=di-2-pyridyl Ketone)", **V.Tangoulis**, C.P.Raptopoulou, S.Paschalidou, E.G.Bakalbassis, S.P.Perlepes and A.Terzis, *Angew.Chem.,Int.Ed.Engl.*, **1997**, 36, 1083-1085.
9. "Octanuclearity in Copper(II) Chemistry : Preparation, Characterization and Magnetochemistry of $[\text{Cu}_8(\text{dpk.OH})_8(\text{O}_2\text{CCH}_3)_4](\text{ClO}_4)_4.9\text{H}_2\text{O}$ (dpk.H₂O = the Hydrated, *gem*-Diol Form of Di-2-pyridyl Ketone)", **V.Tangoulis**, C.P.Raptopoulou, A.Terzis, S.Paschalidou, S.P.Perlepes and E.G.Bakalbassis, *Inorg.Chem.*, **1997**, 36, 3996-4006.
10. "The Case of a Cu₄ Rhombus in Molecular Magnetism : Preparation, Crystal Structure, and Magnetic Properties of $[\text{Cu}_4(\text{dpk.CH}_3\text{O})_4(\text{CH}_3\text{O})_2](\text{ClO}_4)_2$ (dpk.CH₃OH = Monomethylated Diol of Di-2-pyridyl Ketone), an Example of a Cluster Allowing the Determination of All Its Exchange Parameters, Ranging from Very Strong to Very Weak", **V.Tangoulis**, C.P.Raptopoulou, S.Paschalidou, A.E.Tsohos, E.G.Bakalbassis, A.Terzis and S.P.Perlepes, *Inorg.Chem.*, **1997**, 36, 5270-5277.

1998

11. "Cu^{II}-herbicide Complexes: Structure and Bioactivity", G.Psomas, C.Dendrinou-Samara, P.Philippakopoulos, **V.Tangoulis**, C.P.Raptopoulou, E.Samaras and D.P.Kessissoglou, *Inorg.Chim. Acta*, **1998**, 272, 24-32.
12. "Polynuclear Nickel(II) Complexes: Preparation, Characterization, Magnetic Properties, and Quantum-Chemical Study of $[\text{Ni}_5(\text{OH})(\text{Rbta})_5(\text{acac})_4(\text{H}_2\text{O})_4]$ (RbtaH = Benzotriazole and 5,6-Dimethylbenzotriazole)", **V.Tangoulis**, C.P.Raptopoulou, A.Terzis, E.G.Bakalbassis, E.Diamantopoulou and S.P.Perlepes, *Inorg.Chem.*, **1998**, 37, 3142-3153.
13. "Synthesis, Crystal Structure, and Magnetic Properties of a One-Dimensional Polymeric Copper(II) Complex, Containing Unicoordinated Phthalato Bridges", E.G.Bakalbassis, D.G.Paschalidis, C.P.Raptopoulou and **V.Tangoulis**, *Inorg.Chem.*, **1998**, 37, 4735-4737

1999

14. "The Case of Symmetry-Dependent Ground-State Spin Value in Ni(II) Clusters of High Nuclearity. Crystal Structure and Magnetic Properties of a Pentanuclear and a

Nonanuclear Ni(II) Clusters", **V. Tangoulis**, E. Diamantopoulou, E.G. Bakalbassis, C.P. Raptopoulou, A Terzis and S.P. Perlepes, *Mol. Cryst. Liq. Cryst.*, **1999**, 335, 1175-1184.

15. " Tris (*N,N'*- dimethylurea)bis(nitrato-*O,O'*) manganese(II), the First Example of a Seven-Coordinate Manganese(II) Complex with a Monodentate Organic Ligand", R. Keuleers, G.S.Papaefstathiou, C.P. Raptopoulou, **V. Tangoulis**, H.O. Desseyn and S.P. Perlepes, *Inorg. Chem. Commun.*, **1999**, 2, 472-475.

2000

16. "An EPR and ¹H NMR Active Mixed-Valence Manganese (II/III/II) Trinuclear Compound ", **V. Tangoulis**, D.A. Malamataris, G.A. Spyroulias, C.P. Raptopoulou, A. Terzis and D.P. Kessissoglou, *Inorg. Chem.*, **2000**, 39, 2621-2630.
17. "Ferromagnetism in an Extended Three-Dimensional, Diamond-Like Cu(II) Network : A New Copper(II)/1-Hydroxybenzotriazolato Complex being a Soft Magnet Exhibiting Two Transition Temperatures, T_c, at 6.4 K and 4.4. K", **V. Tangoulis**, C.P. Raptopoulou, V. Psycharis, A. Terzis, K. Skorda, S.P. Perlepes, O. Cador, O. Kahn and E.G. Bakalbassis, *Inorg. Chem.*, **2000**, 39, 2522-2529.
18. "Structurally Diverse Copper(II)-Carboxylato Complexes: Neutral and Ionic Mononuclear Structures and a novel Binuclear Structure", G. Psomas, C.P. Raptopoulou, L. Iordanidis, C.Dendrinou-Samara, **V. Tangoulis** and D.P. Kessissoglou, *Inorg. Chem.*, **2000**, 39, 3042-3048.
19. "Synthesis, Spectroscopic and Structural Characterization of the First Aqueous Cobalt(II)-Citrate Complex. Toward a Potentially Bioavailable Form of Cobalt in Biologically Relevant Fluids", M. Matzapetakis, M. Dakanali, C. P. Raptopoulou, **V. Tangoulis**, A. Terzis, N. Moon, J. Giapintzakis, A. Salifoglou, *J. Biol. Chem.*, **2000**, 5, 469-474.
20. "Manganese Citrate Chemistry: Synthesis, Spectroscopic and Structural Characterization of Novel Mononuclear, Water Soluble Manganese Citrate Complexes", M. Matzapetakis, N. Karligiano, A. Bino, M. Dakanali, C. P.Raptopoulou, **V. Tangoulis**, A. Terzis, J. Giapintzakis , A. Salifoglou, *Inorg. Chem.*, 2000, 39, 4044-4051.
21. "Synthesis and Structural, Spectroscopic and Magnetic Characterization of (NH₄) [Fe₃(3-OH)(H₂L)₃(HL)₃] (H₃L=Orotic Acid) Presenting Two Novel Metal-Binding Modes of the Orotate Ligand: The Case of a Spin-Frustrated System", C.P. Raptopoulou, **V. Tangoulis***, V. Psycharis, *Inorg. Chem.*, **2000**, 39, 4452-4459.

22. "Tetranuclear Iron(III) Carboxylate Clusters with 1,10-phenantroline and 2,2'-bipyridine: a new $[\text{Fe}_4(\mu_4\text{-OHO})(\mu\text{-OH})_2]^7+$ Core", A. Boudalis, N. Lalioti, G.A. Spyroulias, C.P. Raptopoulou, A. Terzis, **V. Tangoulis***, S.P. Perlepes; *J. Chem. Soc. Dalton Trans.*, **2001**, 955-957.
23. "pH-Dependent Investigations of Vanadium(V)-Peroxo-Malate Complexes from Aqueous Solutions. In Search of Biologically Relevant Vanadium(V)-Peroxo Species", M. Kaliva, T. Giannadaki, A. Salifoglou, C.P. Raptopoulou, A. Terzis, **V. Tangoulis**; *Inorg. Chemistry*, **2001**, 40, 3711-3718
24. "Vanadium(IV)-Citrate Complex Interconversions in Aqueous Solutions. A pH-Dependent Synthetic, Structural, Spectroscopic and Magnetic Study", M. Tsaramyrsi, M. Kaliva, A. Salifoglou, C. P. Raptopoulou, A. Terzis, **V. Tangoulis**, J. Giapintzakis, *Inorg. Chemistry*, **2001**, 40, 5772-5779
25. "Host-Guest Interaction of 12-MC-4, 15-MC-5 and Fused 12-MC-4 Metallocrowns with Mononuclear and binuclear Carboxylato Complexes. Structure and Magnetic Behaviour", C. D-Samara, G. Psomas, L. Iordanidis, **V. Tangoulis***, D. P. Kessissoglou, *Chem. Eur. Journal*, **2001**, 7, 5041-5051.
26. "The $[\text{Cu}_2(\text{O}_2\text{CMe})_4(\text{btd})_2]$ Complex as a Bridging Unit: Preparation, Characterization, X-Ray Structure and Magnetism of the 2D Coordination polymer $\{[\text{Cu}_6(\text{O}_2\text{CMe})_8(\text{OMe})_4(\text{btd})_2]\}_n$ (btd=2,1,3-benzothiazole)", K. Skorda, G.S. Papaefstathiou, A. Vafiadis, A. Lithoxidou, C.P.Raptopoulou, A.Terzis, V. Psycharis, E.G.Bakalbassis*, **V.Tangoulis*** and S.P.Perlepes*, *Inorg. Chim. Acta.*, **2001**, 326, 53-64.
27. " ^1H NMR Investigation of the Spin Dynamics of the Spin-Frustrated Trinuclear Fe Cluster $(\text{NH}_4)[\text{Fe}_3(\mu_3\text{-OH})(\text{H}_2\text{L})_3(\text{HL})_3]$ (H_3L =orotic acid)", M. Fardis, G. Diamantopoulos, M. Karayianni, G. Papavassiliou, **V. Tangoulis**, A.Konsta, *Phys. Rev. B*, **2001**, 65, 014412

28. “[Fe(OMe)₂{O₂CC(OH)Ph₂}]₁₂ : Synthesis and characterization of a New Member in the Family of Molecular Ferric Wheels with the Carboxylato bis(alkoxo) Bridging Unit”, C. P. Raptopoulou, **V. Tangoulis**, E. Devlin, *Angew. Chem. Int. Ed.*, **2002**, 2386-2389.
29. “A Tetranuclear Mixed-Valence Mn(II)₃Mn(IV)₁ Compound with (μ₄-O)Mn₄ core”, T. Afrati, C.D. Dendrinou, C.P. Raptopoulou, A. Terzis, **V. Tangoulis***, D. P. Kessissoglou, *Angew. Chem. Int. Ed.*, **2002**, 2148-2150.
30. “Ising Type Magnetic Anisotropy In A Covalt(II) Nitronyl Nitroxide Compound: A Key to Understanding the Formation of Molecular Magnetic Nanowires”, A. Caneschi, D. Gatteschi, N. Lalioti, R. Sessoli, L. Sorace, **V. Tangoulis**, A. Vindigni, *Chem. Eur. Journal*, **2002**, 8, 286-292.
31. “Ántiferromagnetic Coupling in a Six-Coordinate High Spin Cobalt(II)-Semiquinonato Complex”, A. Caneschi, A. Dei, D. Gatteschi, **V. Tangoulis**, *Inorg. Chem.*, **2002**, 41, 3508-3512.
32. “Synthesis, Structural, and Spectroscopic Characterization of a Complex between Co(II) and Imino-bis(methylphosphonic acid). Gaining insight into biologically Relevant Metal-Ion Phisphonate Interactions or looking at a new Co(II)-Organophosphonate Material?”, H. Jancovic, M. Daskalakis, C.P. Raptopoulou, A. Terzis, **V. Tangoulis**, J. Giapintzakis, T. Kiss, A. Salifoglou, *Inorg. Chem.*, **2002**, 41, 3366-3374.
33. “Heptanuclearity in Nickel(II) Chemistry: Preparation, Characterization, Crystal Structure and Magnetic Properties of [Ni₇(OH)₂(acac)₈(btaO)₄(H₂O)₂](btaO⁻=the 1-hydroxybenzotriazolate ion)”, E. Diamantopoulou, C.P. Raptopoulou, A. Terzis, **V. Tangoulis***, S. P. Perlepes*, *Polyhedron*, **2002**, 21, 2117-2126.
34. “The novel Rectangular [Fe₄(μ₄-OHO)(μ-OH)₂]⁷⁺ Versus Butterfly [Fe₄(μ₃-O)₂]⁸⁺ Core Topology in the Fe^{III}/ RCO₂⁻ / 1,10-phenanthroline Systems (R=Me,Ph)”, A.K. Boudalis, N. Lalioti, G.A. Spiroulas, C.P. Raptopoulou, A. Terzis, A. Bousseksou, J.P. Tuchagues, **V. Tangoulis**, S.P. Perlepes*, *Inorg. Chem.*, **2002**, 41, 6474-6487.

35. "Polyoxovanadium (IV) Sulfite Compounds: Synthesis, Structural and Physical studies", M.J. Manos, H. N. Miras, J.D. Woollins, **V. Tangoulis**, A.M.Z. Slawin,* T.A. Kabanos*, *Angew. Chem. Int. Edt.*, **2003**, 42, 425427.
36. "Correlations of Synthetic, Spectroscopic, Structural, and Speciation Studies in the Biologically Relevant Cobalt(II)-Citrate System. The Tale of the First Aqueous Dimeric Cobalt(II)-Citrate Complex", N. Kotsakis, C.P. Raptopoulou, **V. Tangoulis**, A. Terzis, T. Jakusch, T. Kiss, A. Salifoglou, *Inorg. Chem.*, **2003**, 42, 22-31.
37. "Synthesis and Characterization of Heterodinuclear Ln^{3+} - Fe^{3+} and Ln^{3+} - Co^{3+} Complexes, Bridged by Cyanide Ligand ($\text{Ln}^{3+} = \text{La-Yb}$). Nature of the Magnetic Interaction in the Ln^{3+} - Fe^{3+} Complexes", A. Figuerola, C. Diaz, J. Ribas, **V. Tangoulis**, J. Granell, F. Lloret, J. Mahía, M. Maestro, *Inorg. Chem.*, 2003, 42, 641-649.
38. "XMCD for Monitoring Exchange Interactions. The Role of the Gd 4f and 5d Orbitals in Metal-Nitronyl Nitroxide Magnetic Chains", Champion G, Lalioti N, **Tangoulis V**, Arrio MA, Saintavit P, Villain F, Caneschi A, Gatteschi D, Giorgetti C, Baudelet F, Verdaguer M, Moulin CCD, *J. Am. Chem. Soc.*, **2003**, 125 (27), 8371-8376.
39. "Magnetism of Cyano-Bridged Hetero-One-Dimensional Ln^{3+} - M^{3+} Complexes ($\text{Ln}^{3+} = \text{Sm, Gd, Yb}$; $\text{M}^{3+} = \text{Fe}_{\text{LS}}, \text{Co}$)", A. Figuerola, C. Diaz, J. Ribas, **V. Tangoulis**, C. Sangregorio, D. Gatteschi, M. Maestro, J. Mahia, *Inorg. Chem.*, **2003**, 42, 5274-5281.
40. "Magnetic Critical Behavior Observed in the $[\text{Cu}(\text{btaO}_2)(\text{MeOH})]_n(\text{btaOH}=1\text{-hydroxybenzotriazolate})$ Molecule-Based Random Field Magnet", M. Fardis, C. Christides, G. Diamantopoulos, V. Psycharis, C. Raptopoulou, **V. Tangoulis**, and G. Papavassiliou, *Phys. Rev. B*, 2003, 68, 184415

2004

41. "A new example of a tetranuclear iron(III) cluster containing the $[\text{Fe}_4\text{O}_2]^{8+}$ core: preparation, X-ray crystal structure, magnetochemistry and Mössbauer study of $[\text{Fe}_4\text{O}_2(\text{O}_2\text{CMe})_6(\text{N}_3)_2(\text{phen})_2]$ ", A.K. Boudalis, **V. Tangoulis**, C. P. Raptopoulou, A. Terzis, J.-P. Tuchagues, S. P. Perlepes, *Inorg. Chim. Acta*, **2004**, 357, 1345-1354.

42. "A Cationic Tetranuclear $[\text{Ni}_4(\text{II})(\text{MeOH})_2(\text{pko})_6]^{2+}$ Cluster Showing Antiferro- and ferromagnetic Features", M. Alexiou, C.D. Dendrinou, C.P. Raptopoulou, A. Terzis, **V. Tangoulis***, D. P. Kessissoglou, *Eur. J. Inorg. Chem.*, **2004**, 19, 3822-3827.

2006

43. "In Search of Binary Hybrid Systems in Manganese Chemistry: The synthesis, Spectroscopic and Structural Characterization, and Magnetic Properties of a New Species in the Aqueous MnII-Quinic System" M. Menelaou, C. P. Raptopoulou, A. Terzis, **V. Tangoulis**, and A Salifoglou, *Eur. J. Inorg. Chem.*, **2006**, 1957-1967.
44. "pH-Specific Synthesis and Structural and Spectroscopic Characterization of a Complex Between CoII and *N,N*-Bis(phosphonomethyl)glycine: Cobalt-Phosphonate Interactions in the Solid State and in Solution" A. Mateescu, C. P. Raptopoulou, A Terzis, **V. Tangoulis**, and A. Salifoglou" *Eur. J. Inorg. Chem.*, **2006**, 1945-1956.
45. "Synthesis, Crystal Structure and Magnetic Properties of One-Dimensional Cyano-Bridged Ln^{3+} - Cr^{3+} Complexes with bpy as a Blocking Ligand", M. Estrader, J. Ribas, C.P. Raptopoulou, **V. Tangoulis***, X. Solans, Merce Font-Bardia, M. Maestro, C. Diaz, *Inorg. Chem.*, **2006**, 45, 8239-8250

2007

46. "Copper Inverse-9-Metallacrown-3 Compounds Showing Antisymmetric Magnetic Behavior". T. Afrati, C. Dendrinou-Samara, C. Raptopoulou, A. Terzis, **V. Tangoulis***, D. P. Kessissoglou, *Dalton Trans.*, **2007**, 44, 5156-5164.
47. Monte Carlo Studies of a Mn^{II} Molecular System with a 2D Trellis Layer Coupled-Ladder Configuration, **Vassilis Tangoulis***, *Chem. Physics*, **2007**, 332, Issues 2-3, 271-276
48. "Interaction of Fe(III) with Herbicide-Carboxylato Ligands – Di-, Tri- and Tetra-Nuclear Compounds: Structure and Magnetic Behavior" C. Dendrinou-Samara, S. Katsamakas, C.P. Raptopoulou, A. Terzis, **V. Tangoulis*** and D. P. Kessissoglou *Polyhedron*, **2007**, 26, 763-772.

49. pH-Specific Synthesis and Spectroscopic, Structural, and Magnetic Studies of a Chromium(III)-Citrate Species. Aqueous Solution Speciation of the Binary Chromium(III)-Citrate System” C. Gabriel, C. P.Raptopoulou, A. Terzis, **V. Tangoulis**, C. Mateescu, A. Salifoglou, *Inorg. Chem.*, **2007**, 46, 2998-3009
50. “Anisotropic exchange interactions in [LnFe] dinuclear systems: Magnetometry, dual mode X-band Electron Paramagnetic Resonance, and Mossbauer spectroscopic studies” A. Figuerola, Albert, **V. Tangoulis***, Y. Sanakis, *Chem. Physics*, **2007**, 334,1-3, 204-215
51. “Dual-Mode X-Band EPR and Magnetic Study of (Cu²⁺, Ln³⁺) Pairs: Investigation of Magnetic Anisotropy”, **V. Tangoulis ***, Jean-Pierre Costes, *Chem. Phys.*, **2007**, 334, Issues 1-3, 77-84.
52. “Anisotropic exchange interactions in hetero-one-dimensional Ln³⁺-M³⁺ systems (Ln³⁺ = Er, Yb; M³⁺ = Cr, Fe_{LS}): Magnetometry and Dual Mode X-band Electron Paramagnetic Resonance spectroscopic studies” **V. Tangoulis***, Marta Estrader, Albert Figuerola, Joan Ribas and Carmen Diaz *Chem. Phys.*, **2007**, 336, Issues 1-3, 74-82.
53. “Substituent Effect on Formation of Heterometallic Molecular Wheels: Synthesis, Crystal Structure, and Magnetic Properties”, Z.-H.Ni, L.-F.Zhang, **V. Tangoulis***, W. Wernsdorfer, A.-L. Cui, O. Sato, H.-Z. Kou, *Inorg. Chem.*, **2007**, 46, 6029-6037.
54. “Anisotropic exchange interactions in Ln³⁺-Fe³⁺ dinuclear systems (Ln³⁺ = Dy, Tm, Yb): Magnetometry and Dual Mode X-band Electron Paramagnetic Resonance spectroscopic study”, **V. Tangoulis***, Albert Figuerola. *Chem. Phys.*, **2007**, 340, Issues 1-3, 293-301.
55. “Synthesis, Crystal Structure and Magnetic Studies of Oxo-Centered Trinuclear Chromium(III) Complexes: [Cr₃(μ₃-O)(μ₂-PhCOO)₆(H₂O)₃]NO₃·4H₂O·2CH₃OH, a Case of Spin-Frustrated System and [Cr₃(μ₃-O)(μ₂-PhCOO)₂(μ₂-OCH₂CH₃)₂(bpy)₂(NCS)₃], a New Type of [Cr₃O] Core.” **V. Tangoulis**, C. Diaz, J. Ribas, A. Figuerlola, M. Maestro, *Inorg. Chem.*, **2007**, 46, 11017-11024.

2008

56. “The First Tridecanuclear Nickel(II) Cluster: [Ni₁₃(OH)₆(O₂CMe)₈(btaO)₁₂(H₂O)₆(*n*PrOH)₄] (btaOH = 1-hydroxybenzotriazole)” C.Papatriantafyllopoulou, E.

Diamantopoulou, A.Terzis, N. Lalioti, **V.Tangoulis***, S.P. Perlepes, *Inorg.Chem. Comm.*, **2008**, 11, 454-460.

57. "Low-Dimensional Copper(II) Complexes Triply Bridged with Azide/ Carboxylate/ DMSO Showing Very Strong Ferromagnetic Interaction and Influence of Dipolar Fields at Low Temperatures: A Quantum Monte Carlo Magnetic Study" **V.Tangoulis**, D. Panagoulis, C.P. Raptopoulou, C. Dendrinou-Samara, *Dalton Trans.*, **2008**, 1752-1760.
58. "Experimental and Theoretical Study of the Antisymmetric Magnetic Behavior of Copper inverse-9-metallacrown-3 Compounds" T.Afrati, C.Dendrinou-Samara, C.P. Raptopoulou, A.Terzis, **V.Tangoulis***, A. Tsipis, D.P. Kessissoglou, *Inorg. Chem.*, **2008**, 47, 7545-7555.
59. "Novel Mixed-Valence Manganese Cluster with two Distinct Mn 3(II/III/II) and Mn3(III/II/III) Trinuclear Units in a Pseudocubane-Like Arrangement" A. Dimitrakopoulou, V. Psycharis, C.P. Raptopoulou, A. Terzis, **V.Tangoulis***, D.P.Kessissoglou, *Inorg. Chem.*, **2008**, 47, 7608-7614.
60. "Di-2-pyridyl ketone/benzoate/azide Combination as a Source of Copper(II) Clusters and Coordination Polymers: Dependence of the Product Identity on the Solvent" T.C.Stamatatos, **V.Tangoulis**, C.P. Raptopoulou, A.Terzis, G.S.Papaefstathiou, S.P. Perlepes, *Inorg.Chem.*, **2008**, 47, 7969-7971.

2009

61. "Self-Assembly Of High-Nuclearity Copper Cages: Tricorne Cu₂₁ and Saddlelike Cyclic Cu₁₆" Y.-L.Bai,**V.Tangoulis***,R.-B.Huang , L.-S.Zheng and J.Tao, *Chem. Eur.J.*, **2009**, 15, 2377-2383
62. "High-Nuclearity Nickel(II) Clusters: Ni₁₃ Complexes from the use of 1-hydroxy-benzotriazole" C. Papatriantafyllopoulou, E. Diamantopoulou, A.Terzis, **V. Tangoulis**, N. Lalioti, S.P.Perlepes, *Polyhedron*, **2009**, 28, 1903-1911.
63. "New Copper(II) Clusters and Coordination Polymers from the Amalgamation of Azide/Benzoate/di-2-pyridyl ketone Ligands" T.C.Stamatatos, J.C.Vlahopoulou, **V. Tangoulis**, C.P. Raptopoulou, A.Terzis, G.S.Papaefstathiou, S.P. Perlepes, *Polyhedron*, **2009**, 28 ,1656-1663.

64. "A Ferromagnetic Linear Trinuclear Ni(II)-Schiff Base Complex Supported by Phenoxo and Cinnamato Bridges" P.Mukherjee, M.G.B. Drew, **V.Tangoulis**, V, M.Estrader, C. Diaz, A.Ghosh, *Inorg.Chem.Comm.*, **2009**, 12, 929-932.
65. Facile Strategies for the Synthesis and Crystallization of Linear Trinuclear Nickel(II)-Schiff Base, Complexes with Carboxylate Bridges: Tuning of Coordination Geometry and Magnetic Properties", P.Mukherjee, M.G.B.Drew, **V.Tangoulis**, C. Diaz, A.Ghosh, *Polyhedron*, **2009**, 28, 2989-2996.
66. "Self-Assembly of Multidecker Ni-II Clusters from Preformed Ni-4 Decks ", C.-M. Ji, H.-J. Yang, C.-C. Zhao, **V.Tangoulis***, A.-L. Cui, H.-Z. Kou, *Crystal Growth & Design*, **2009**, 9, 4607-4609

2010

67. «Biological evaluation of non-steroidal anti-inflammatory drugs-cobalt(II) complexes» F. Dimiza, A.N. Papadopoulos, **V. Tangoulis**, V. Psycharis, C.P. Raptopoulou, D.P. Kessissoglou, G. Psomas, *Dalton Trans.*, **2010**, 4517-4528
68. Magnetic coupling in trinuclear partial cubane copper(II) complexes with a hydroxo bridging core and peripheral phenoxo bridges from NNO donor Schiff base ligands C.Biswas, M. G.B. Drew, A. Figuerola, S. Gomez-Coca, E. Ruiz, **V. Tangoulis**, A. Ghosh, *Inorg. Chim. Acta*, **2010**, 363, 5, 846-854

2011

69. "Non-steroidal antiinflammatory drug-copper(II) complexes: Structure and biological perspectives" F. Dimiza, S. Fountoulaki, A.N. Papadopoulos, C. A. Kontogiorgis, **V. Tangoulis**, C.P. Raptopoulou, V. Psycharis, A. Terzis, D. P. Kessissoglou, G.Psomas, *Dalton Trans.*, **2011**, 8555-8568
70. Ferromagnetic and antiferromagnetic copper(II) complexes: Counterplay between zero-field effects of the quartet ground state and intermolecular interactions Boulsourani, Z.; **Tangoulis, V.**; Raptopoulou, C. P.; Psycharis, V.; Dendrinou-Samara, C., *Dalton Trans*, 7946-7956
71. In depth investigation of the synthesis, structural, and spectroscopic characterization of a high pH binary Co(II)-N,N-bis(phosphonomethyl)glycine species. Association with aqueous speciation studies of binary Co(II)-(carboxy)phosphonate systems Menelaou,

M.; Daskalakis, M.; Mateescu, A.; Raptopoulou, C. P.; Terzis, A.; Mateescu, C.; **Tangoulis, V.**; Jakusch, T.; Kiss, T.; Salifoglou, A., *Polyhedron*, **2011**, 30, 2, 427-437

72. Interaction of copper(II) with the non-steroidal anti-inflammatory drugs naproxen and diclofenac: Synthesis, structure, DNA- and albumin-binding Dimiza, Filitsa; Perdih, Franc; **Tangoulis, Vassilis**; Turel, Iztok; Kessissoglou, Dimitris P.; Psomas, George, *J. Inorg. Biochem.*, **2011**, 105, 3, 476-489

2012

73. Biological evaluation of cobalt(II) complexes with non-steroidal anti-inflammatory drug naproxen F. Dimiza, A.N.Papadopoulos, **V. Tangoulis**, V. Psycharis, C.P.Raptopoulou, D.P. Kessissoglou, G. Psomas, *J. Inorg. Biochem.*, **2012**, 107(1), 54-64
74. "Solvent-Dependent Access to two Different Ni^{II}₄ Core Topologies from the Initial Use of Pyridine-2,6-dimethanol in Nickel(II) Cluster Chemistry" K. I. Alexopoulou, C. P. Raptopoulou, V. Psycharis, A. Terzis, **V. Tangoulis***, T. C. Stamatatos, S.P. Perlepes, *Aust. J. Chem.*, **2012**, 12, 1608-1619

2013

75. pH-Specific synthesis, spectroscopic, structural and magnetic, and aqueous solution studies in the binary Cr(III)–quinato system C. Mateescu, C. Gabriel, C.P. Raptopoulou, A. Terzis, **V. Tangoulis**, A. Salifoglou *Polyhedron*, **2013**, 52, 598-609
76. Manganese clusters derived from 2-pyridylcyanoxime: new topologies and a large spin ground state in pyridyloximate chemistry, L. Alcazar, B. Cordero, J. Esteban, V. Tangoulis, M. Font-Bardia, T. Calvet, A. Escuer, *Dalton Trans.*, **2013**, 42(34), 12334-12345.
77. Aromatic Chelator-Specific Lattice Architecture and Dimensionality in Binary and Ternary Cu(II)-Organophosphonate Materials, V. Georgantas, M. Menelaou, V. Psycharis, C.P. Raptopoulou, A. Terzis, V. Tangoulis, C. Mateescu, A. Salifoglou, *Inorg. Chem.*, **2013**, 52(9), 4963-4976

78. “Defective dicubanes of Co^{II}/Co^{III} complexes with triethanolamine and N-donors”, S.R. Hosseinian, V. Tangoulis, * M. Menelaou, C.P. Raptopoulou, V. Psycharis, C. Dendrinou-Samara*, *Dalton Trans.*, **2013**, 42(15), 5355-5366.
79. New Type of Single Chain Magnet: Pseudo-One-Dimensional Chain of High-Spin Co(II) Exhibiting Ferromagnetic Intrachain Interactions, V. Tangoulis, M. Lalia-Kantouri, M. Gdaniec, C. Papadopoulos, V. Miletic, A. Czapik, *Inorg. Chem.*, **2013**, 52(11), 6559-6569
80. Heptanuclear Antiferromagnetic Fe(III)-D(-)-Quinato Assemblies with an S=3/2 Ground State-pH-Specific Synthetic Chemistry, Spectroscopic, Structural, and Magnetic Susceptibility Studies, M. Menelaou, E. Vournari, V. Psycharis, C.P. Raptopoulou, A. Terzis, V. Tangoulis, Y. Sanakis, C. MATEescu, A. Salifoglou, *Inorg. Chem.*, **2013**, 52(24), 13849-13860

2014

81. Manganese(II) Complexes with the Non-steroidal Anti-Inflammatory Drug Tolfenamic Acid: Structure and Biological Perspectives, M. Zampakou, N. Rizeq, V. Tangoulis, A.N. Papadopoulos, F. Perdih, I. Turel, G. Psomas, *Inorg. Chem.*, **2014**, 53(4), 2040-2052
82. From Molecular Magnets to Magnetic Nanomaterials – Deposition of Co₇ Single-Molecule Magnet; Theoretical Investigation of the Exchange Interactions, V. Tangoulis*, M. Skarlis, C.P. Raptopoulou, V. Psycharis, C.P. Dendrinou-Samara, *Eur. J. Inorg. Chem.*, **2014**, 16, 2678-2686.

2015

83. Unveiling the Physicochemical Features of CoFe₂O₄ Nanoparticles Synthesized via a Variant Hydrothermal Method: NMR Relaxometric Properties., V. Georgiadou, V. Tangoulis, I. Arvanitidis, O. Kalogirou, C. Dendrinou-Samara, *J. Phys. Chem. C*, **2015**, 119, 8336-8348.

84. Structurally Diverse Manganese(II)-Diclofenac Complexes Showing Enhanced Antioxidant Activity and Affinity to Serum Albumins in Comparison to Sodium Diclofenac, M. Zampakou, V. Tangoulis, C.P. Raptopoulou, V. Psycharis, A.N. Papadopoulos, G. Psomas, *Eur. J. Inorg. Chem.*, **2015**, 13, 2285-2294

CITATIONS

h index = 34 (Source: Scopus 2015/ Web of Science 2015)

Total Citations : **2956** / Citations without self-citations: **2820** (Πηγή Web of Science 2015)