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Curriculum Vitae – Current Research Interests

Education

1974: D.Phil., School of Molecular Sciences, University of Sussex, UK.

1971 B.A.(Honours), School of Natural Sciences, Department of Chemistry, University of Oxford, UK.

Employment

2002-2015: Research Director at the National Hellenic Research Foundation, Institute of Organic and Pharmaceutical Chemistry (subsequently Institute of Biology, Medicinal Chemistry and Biotechnology resulting from merger with the Institute of Biological Research and Biotechnology of the NHRF in 2012).

1995-2002: Special Functional Scientist at the National Hellenic Research Foundation.

1985-1994: Researcher at the National Hellenic Research Foundation (fixed term contracts).

1981-1985: Lecturer in Chemistry and Physics at the Advanced Technology Centre, Athens and at the Center for Embry-Riddle Aeronautical Studies, Athens.

1979-1981: Head of Spectroscopy Section at Beechams Pharmaceutical Research Centre, Surrey, UK.

1977-1979: Post-doctoral Fellow, University of Saskatchewan, Canada.

1975-1977: Scientific Collaborator, University of Amsterdam, The Netherlands.

1974-1975: Post-doctoral Fellow, University of Sussex, UK.

Current Research Interests

1. Study and use of Main Group alkoxides and organometallic compounds.
2. Design and synthesis of dendrimers with applications in biomedicine, materials science and environmental chemistry.
3. Synthesis and study of new metal coordination complexes.

More details are given below.

Collaborations

Within NHRF: Dr. M.N. Alexis, Dr. T. Calogeropoulou, Dr. M.G. Papadopoulos, Dr. G. Skretas, Dr. G. Papavassiliou, Dr. N. Tagmatarchis, Dr. E. Zervou.

National: Prof. C.G. Biliaderis, University of Thessaloniki; Prof. C. Demetzos, Prof. T. Mavromoustakas, University of Athens; Prof. I. Smonou, University of Crete; Dr. A. Terzis, Dr. C. Raptopoulou, Dr. V. Psycharis, NCSR "Democritos".

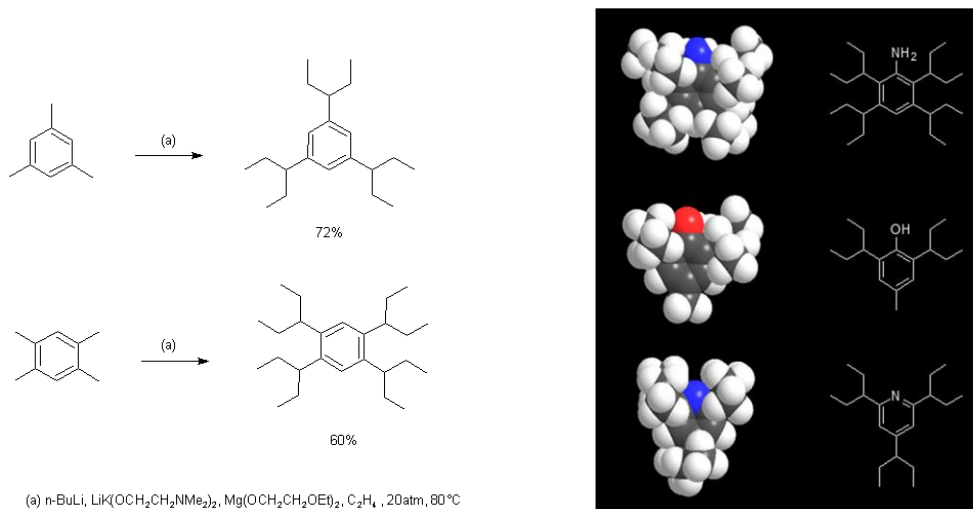
International: Prof. K.R. Acharya, University of Bath (UK); Prof. Dr. S.V. Amosova, Dr. V.A. Potapov, Favorsky Irkutsk Institute of Chemistry (Russia); Prof. Mark Bradley, University of Edinburgh (UK); Prof. G. Cravotto, University of Torino (Italy); Prof. W. Dehaen, KU Leuven, (The Netherlands); Prof. Dimitrios Fessas, DiSTAM, University of Milano (Italy); Prof. Dr. E. Hey-Hawkins, University of Leipzig (Germany); Prof. B. Klajnert-Maculewicz, University of Łódź (Poland); Prof. H. Oberacher, Medical University of Innsbruck (Austria); Prof. A. Pietrzykowski, Warsaw University of Technology (Poland).

Other Activities

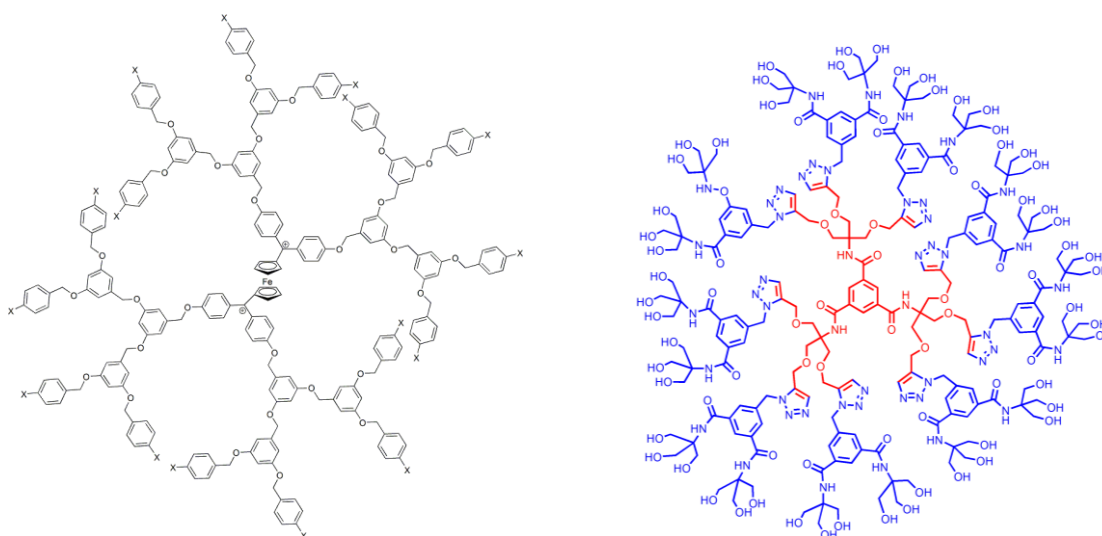
1. Management of European Research Network Projects: "*Simple and Mixed Metal Alkyls, Alkoxides and Amides in Synthesis and Catalysis and as Precursors for Ceramic and Polymeric Materials*" (Human Capital and Mobility Network), "*Design, Synthesis and Study of Novel Non-linear Optical Materials*" (Training and Mobility of Researchers Network), ARCADE (Regpot-2009) which were coordinated by the IOPC/NHRF.
2. Teaching activities: Seminars to secondary education teachers, (National Hellenic Research Foundation, May 1998). Post-Graduate course in organometallic chemistry (EURODESY project 2006-2010)
3. Participation in committees for the acquisition of scientific instruments and committees for the evaluation of research personnel.
4. Expert evaluator for FP6, FP7, Horizon 2020 EU programmes
5. Member of Organising Committee, 10th FECHEM Conference on Organometallic Chemistry, September 1993, Crete.
6. General Secretary, 20th International Conference on Organometallic Chemistry, July 2002, Corfu.
7. Chairman, COST D31 Workshop, March 2007, Athens

Recent Research Activities

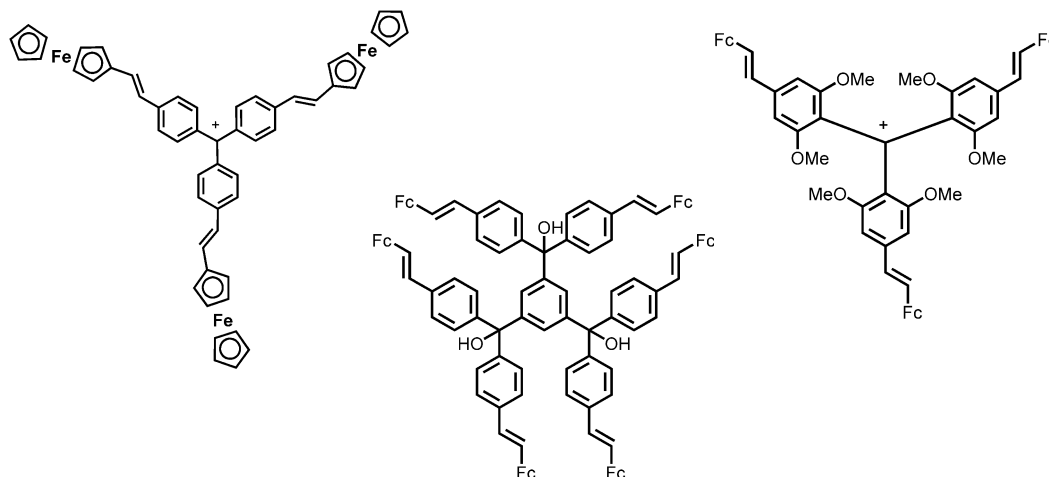
1. Study and use of Main Group alkoxides and organometallic compounds. The use of metal alkoxide additives can radically alter the reactivity of organometallic reagents and we have exploited these properties for the development of new reagents and synthetic methodologies. A particular instance is the discovery of a new and simple procedure for the synthesis of novel sterically hindered aromatic compounds.



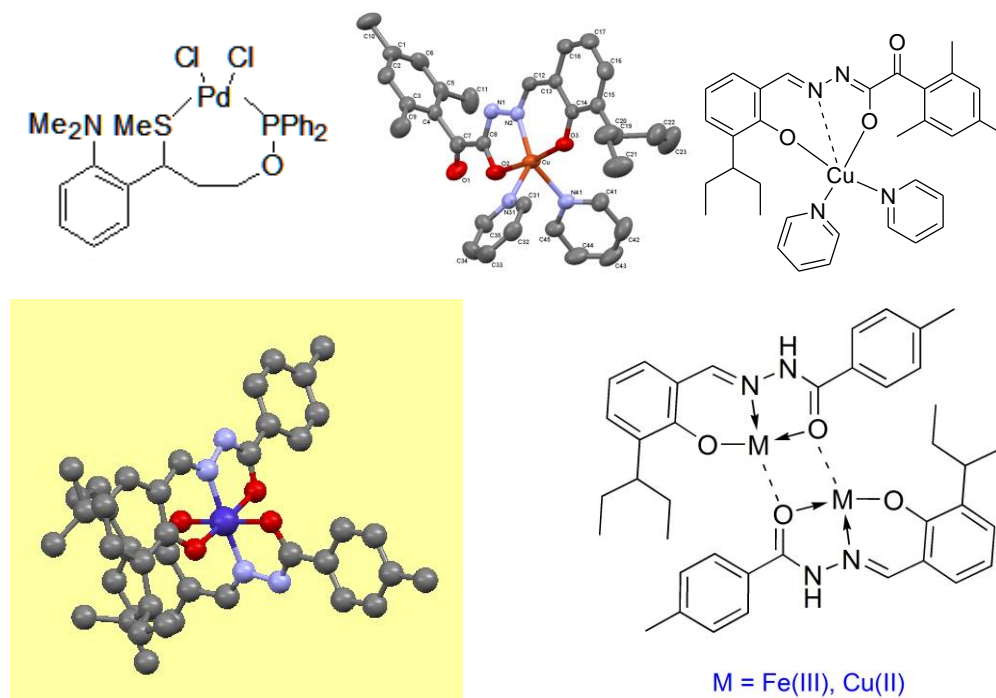
2. Design and synthesis of dendrimers with applications in biomedicine, materials science and environmental chemistry. The focus is on molecules with anti-oxidant properties, with chromophore motifs, with metal chelating properties, etc.



3. Development of synthetic procedures towards organometallic stilbene derivatives and their further elaboration. The aim is to prepare compounds with special optical properties or biological behaviour.



4. Synthesis and study of new coordination complexes with potential use in homogeneous catalysis, as imaging reagents or as bioactive molecules.



Funded Projects

A. Scientist in Charge

1. PENED 1999 (99ED 173): 2000 - 2001
Title: Monomeric and polymeric chiral micelles as microreactors for the production of technological useful materials.
Collaboration between NRCPS Democritos, NHRF, University of Athens.
2. Joint Research and Technology Programme for Bilateral Cooperation, Greece-Russia: 1999 - 2001
Title: Design and synthesis of hemi-labile ligands for homogeneous catalysis.
Collaboration between NHRF, Siberian Branch of the Russian Academy of Sciences
3. Joint Research and Technology Programme for Bilateral Cooperation, Greece-Poland: 2000 - 2002
Title: Comparative study of the chemistry of aluminium and nickel cyclopentadienyl derivatives.
Collaboration between NHRF, Warsaw University of Technology
4. Joint Research and Technology Programme for Bilateral Cooperation, Greece-Russia: 2002 - 2004
Title: Novel catalysts for industrially important processes.
Collaboration between NHRF, Siberian Branch of the Russian Academy of Sciences
5. PRAXE (M 4.1.1, EPAN): 2002 - 2003
Title: New products with high added value.
6. ENTER (EPAN 01EP 70): 2004 - 2006
Title: Design and synthesis of new near-infrared organometallics
Fellowship to Dr. Veronika Kovač
7. Marie Curie Intra-European Fellowship (MEIF-CT-2003-501082): 2004 - 2006
Title: Design, synthesis and study of novel organometallic near infrared dyes
Fellowship to Dr. Carolina Villalonga-Barber
8. IKYDA 2004
Title: Active catalytic systems with complexes of rhodium, palladium and zinc with hemi-labile sterically demanding phosphorus-nitrogen ligands.
Collaboration between NHRF, Universität Leipzig.
9. PENED 2003 (EPAN 03ED242): 2005 - 2008
Title: Dendrimers as near-infrared dyes
10. REGPOT-2009-1 (FP7)-"ARCADE" (GA 245866): 2009 - 2013
Title: Advancement of Research Capability for the Development of New Functional Compounds

B. Project Participation

11. Human Capital and Mobility (CHRX-CT93-0148): 1993 - 1996
 Title: Conjugated Ladder-Type Oligomers and Polymers Containing Fused Six- and Five-Membered Rings.
Network involving groups from Greece, UK, Germany, Italy and Portugal.
12. Human Capital and Mobility (CHRX-CT93-0281): 1993 - 1997
 Title: Simple and Mixed Metal Alkyls, Alkoxides and Amides in Synthesis and Catalysis and as Precursors for Ceramic and Polymeric Materials
Network involving groups from Greece, UK, Germany, Spain, France, Ireland and the Netherlands. The network was coordinated by the IOPC, NHRF.
13. Training and Mobility of Researchers (ERBFMRXCT 960047): 1996 - 2000
 Title: Design, Synthesis and Study of Novel Non-linear Optical Materials
Network involving groups from Greece, UK, Germany, Sweden, France and Ireland. The network was coordinated by the IOPC, NHRF.
14. YPER 1997: 1999 - 2001
 Title: Synthesis of compatible organic additives for the protection of coloured polyester fibres from photochemical bleaching.
Collaboration between NHRF, VIOCHROM.
15. EPET II-EKBAN 98/66: 1998 - 2001
 Title: Development of new methods for the therapy and prognosis of hormone dependent neoplasia.
Collaboration between NHRF, University of Patras, University of Crete, RAFARM AEBE.
16. Excellence in Research Centres overseen by the GSRT (EPAN 3.3.1): 2002 – 2005
 Title: New approaches against neurodegenerative diseases.
17. Marie Curie Transfer of Knowledge (MTKD-CT-2004-014399) – “Sopholidés”: 2005-2009
 Title: Solid-phase phospholipid and dendrimer synthesis.
18. Marie Curie Early Stage Training (MEST-CT-020575) – “EURODESYS”: 2006-2010
 Title: A European research training site for the design and synthesis of novel neuroprotective and hypoglycaemic agents through a multidisciplinary approach.
19. Developmental proposals of research institutions – KRIPIS (STHENOS): 2014 – 2016)
 Title: Targeted therapeutic approaches against degenerative diseases, with emphasis on cancer and aging.
20. Developmental proposals of research institutions – KRIPIS “STHENOS-b: 2017 – 2020

Title: Targeted therapeutic approaches against degenerative diseases with special focus on cancer and ageing-optimisation of the targeted bioactive molecules.

C. Other Collaborative Actions

21. Quality of Life and Management of Living Resources: 2002 – 2003
Title: Design of foods with improved functionality and superior health effects.
Collaboration/provision of services with the University of Thessaloniki
22. COST (European Cooperation in the field of Scientific and Technical Research),
Action D31: 2004-2009
Title: Organising Non-Covalent Chemical Systems with Selected Functions
Member of the Management Committee.

Publications

Theses

1. "Hydrazine complexes of platinum", undergraduate thesis, University of Oxford, 1971
2. "The chemistry of compounds with platinum-tin bonds", doctoral thesis, University of Sussex, 1974

Publications in Refereed Journals

1. C. Eaborn, A. Pidcock and B. R. Steele, *J. Chem. Soc., Dalton Trans.*, **1975**, 809-813.
"The reaction between carbonatobis(phosphine)platinum(II) complexes and triorganotin hydrides. Formation of Sn-Pt^{IV} bonds."
2. C. Eaborn, A. Pidcock and B.R. Steele, *J. Chem. Soc., Dalton Trans.*, **1976**, 767-776.
"Oxidative addition of triorganotin halides to platinum(0) complexes."
3. B.R. Steele and K. Vrieze, *Transition Met. Chem.*, **1977**, 2, 140-144.
"Complexes with metal-carbon bonds, Part III. Preparation and properties of binuclear diarylplatinum(0) compounds."
4. B.R. Steele and K. Vrieze, *Transition Met. Chem.*, **1977**, 2, 169-174.
"Complexes with metal-carbon bonds, Part IV. Binuclear diarylplatinum(III) complexes. Long-range trans-effect in platinum-platinum bonded compounds containing methyl and aryl groups."
5. C.C. Lee, B.R. Steele, K.J. Demchuk and R.G. Sutherland, *Can. J. Chem.*, **1979**, 57, 946-948.

- "Nucleophilic reactions of zwitterionic species from deprotonation of η^6 -arene- η^5 -cyclopentadienyliron cations."
6. R.G. Sutherland, B.R. Steele, K.J. Demchuk and C.C. Lee, *J. Organomet. Chem.*, **1979**, *181*, 411-424.
"Zwitterionic species from deprotonation of η^6 -arene- η^5 -cyclopentadienyliron cations and their reactions as nucleophiles."
 7. C.C. Lee, B.R. Steele and R.G. Sutherland, *J. Organomet. Chem.*, **1980**, *186*, 265-270.
"Ligand exchange of some heterocyclic analogues of fluorene and anthracene with ferrocene."
 8. B.R. Steele, C.C. Lee, and R.G. Sutherland, *J. Chem. Soc., Dalton Trans.*, **1981**, 529-534.
"A carbon-13 nuclear magnetic resonance study of (arene)(cyclopentadienyl)iron salts."
 9. A.E. Bird, B.R. Steele, M.O. Boles and P.A.C. Ganes, *J. Chem. Soc., Perkin Trans. 1*, **1982**, 563-569.
"Nuclear magnetic resonance and circular dichroism of penicillins derived from disubstituted acetic acids."
 10. C.C. Lee, A. Piorko, B.R. Steele, U.S. Gill and R.G. Sutherland, *J. Organomet. Chem.*, **1983**, *256*, 303-308.
"Ring opening reactions of some η^6 -heterocycle- η^5 -cyclopentadienyliron hexafluorophosphates."
 11. C.G. Screttas and B.R. Steele, *J. Organomet. Chem.*, **1986**, *317*, 137-144.
"Formation of ketones in the reaction of aldehydes with unsolvated dibutylmagnesium in hydrocarbon solvents under homogeneous conditions and its implications."
 12. C.G. Screttas and B.R. Steele, *J. Org. Chem.*, **1988**, *53*, 5151-5153.
"Carboxamidation of organolithium and organomagnesium reagents by a two-step one-flask reaction. Promotion by magnesium alkoxides."
 13. C.G. Screttas and B.R. Steele, *J. Org. Chem.*, **1989**, *54*, 1013-1017.
"Metal alkoxide modified organometallic reagents. Preparation and stability of organolithium reagents in tetrahydrofuran in the presence of magnesium 2-ethoxy-ethoxide."
 14. C.G. Screttas and B.R. Steele, *J. Organomet. Chem.*, **1993**, *453*, 163-170.
"Activated alkyl- and allylalkali metal reagents. Contrasting behaviour towards ethylene."
 15. C.G. Screttas, G.A. Heropoulos and B.R. Steele, *J. Chem. Soc., Faraday Trans.*, **1996**, 1717-1719.
"Deviation from Trouton's rule and a method for converting a non-constitutive molecular parameter into a constitutive one"

16. C.G. Screttas, M. Micha-Screttas and B.R. Steele, *J. Organomet. Chem.*, **1997**, *536-537*, 149-163.
"The tert-butyl chloride-lithium naphthalene radical anion and tert-butyllithium-naphthalene systems. Mechanism of metallation"
17. J. Andrieu, B.R. Steele, C.G. Screttas, C.J. Cardin and J. Fornies, *Organometallics*, **1998**, *17*, 839-845.
"Synthesis of new phosphinoaminoalcohol ligands via ortho-alkyllithiation reactions. Versatile coordination behaviour towards Cu(I) and Pd(II)."
18. C.G. Screttas, G.A. Heropoulos, B.R. Steele and D. Bethell, *Mag. Res. Chem.*, **1998**, *36*, 656-662.
"Phosphorus-31 contact shifts as a measure of weak ligand affinities. Interaction between alkali metal fluorenone radical anions and certain phosphorus (III and V) ligands."
19. A. Behrendt, C.G. Screttas, D. Bethell, O. Schiemann and B.R. Steele, *J. Chem. Soc., Perkin Trans. 2*, **1998**, 2039-2045.
"Magnetic and electrochemical investigations on anions derived from oligoketones containing fluorenone and benzophenone units. An approach to the design of stable multiradical organic materials."
20. M. Micha-Screttas, G. A. Heropoulos and B.R. Steele, *J. Chem. Soc., Perkin Trans. 2*, **1999**, 1443-1446.
"Evidence for a concentration dependent $^{6(7)}\text{Li}$ NMR contact shift in tetrahydrofuran solutions of lithium naphthalene radical anion and the effect of added $^{6(7)}\text{LiCl}$ "
21. C.S. Salteris, I.D. Kostas, M. Micha-Screttas, B.R. Steele, G.A. Heropoulos, C.G. Screttas and A. Terzis *J. Organomet. Chem.*, **1999**, *590*, 63-70.
"Synthesis of lithium ω -(m- and p-lithiophenoxy)alkoxides modified with magnesium 2-ethoxyethoxide. Crystal structures of bis[4-(2-hydroxyethoxy)phenyl]mercury and bis[4-(3-hydroxypropoxy)phenyl]mercury"
22. M. Micha-Screttas, G. A. Heropoulos and B.R. Steele, *J. Chem. Soc., Perkin Trans. 2*, **1999**, 2685-2690.
"Interaction between alkali metal aromatic ketone radical anions and the chlorides of lithium and magnesium in solution. A case of a carbon-carbon bond strengthening through complex formation"
23. B.R. Steele and C.G. Screttas, *J. Am. Chem. Soc.* **2000**, *122*, 2391-2392.
"A chemoselective catalytic side-chain alkylation of aromatics by ethylene leading to sterically demanding alkylbenzenes."
24. S.R. Bayly, E.R. Humphrey, H. de Chair, C.G. Paredes, Z.R. Bell, J.C. Jeffery, J.A. McCleverty, M.D. Ward, F. Totti, D. Gatteschi, S. Courric, B.R. Steele and C.G. Screttas, *J. Chem. Soc. Dalton Trans.* **2001**, 1401-1414

- "Electronic and magnetic metal-metal interactions in dinuclear oxo-Mo(V) complexes across bis-phenolate bridging ligands with different spacers between the phenolate termini: ligand-centred vs. metal-centred redox activity"
25. M. Micha-Screttas, G. A. Heropoulos and B.R. Steele, *Mag. Res. Chem.* **2001**, *39*, 586-592.
"Structural changes in concentrated solutions of alkali metal monosubstituted benzophenone radical anions in pure and mixed solvents"
 26. B.R. Steele, M. Micha-Screttas and C.G. Screttas, *Appl. Organomet. Chem.* **2002**, *16*, 501-505
"Applications of novel sterically demanding aromatics in organometallic synthesis"
 27. M. Micha-Screttas, C.G. Screttas, B.R. Steele and G. A. Heropoulos, *Tetrahedron Lett.* **2002**, *43*, 4871-4873.
"Chemical and physical evidence for metal-metal interchange between lithium alkoxides and dibutylmagnesium"
 28. I.D. Kostas, B.R. Steele, A. Terzis and S.V. Amosova, *Tetrahedron*, **2003**, *59*, 3467-3473.
"A palladium complex with a new hemilabile amino- and sulfur-containing phosphinite ligand as an efficient catalyst for the Heck reaction of aryl bromides with styrene. The effect of the amino group."
 29. D.P. Catsoulacos, B.R. Steele, G.A. Heropoulos, M. Micha-Screttas and C.G. Screttas, *Tetrahedron Lett.*, **2003**, *44*, 4575-4578.
"An imino-phosphine dendrimeric ligand and its evaluation in the Heck reaction"
 30. C.G. Screttas, G.A. Heropoulos, M. Micha-Screttas, B.R. Steele and D.P. Catsoulacos, *Tetrahedron Lett.*, **2003**, *44*, 5633-5635
"Reductive lithiation of alkyl phenyl sulfides in diethyl ether. A ready access to α,α -dialkylbenzylolithiums"
 31. G.C. Papavassiliou, G.A. Mousdis, G.C. Anyfantis, N. Assimomytis and B.R. Steele, *Z. Naturforsch. B* **2003**, *58b*, 813-814.
"Preparation and characterization of 5,6-dimethyl-5,6-dihydro-[1,4]diselenino[2,3-*d*][1,3]dithiole-2-thione and similar compounds"
 32. A. Lazaridou, C.G. Biliaderis, M. Micha-Screttas and B. R. Steele, *Food Hydrocolloids*, **2004**, *18*, 837-855.
"A comparative study on structure – function relations of mixed linkage (1→3), (1→4) linear β -D-glucans"
 33. A.V. Martynov, N.A. Makhaeva, V. A. Potapov, S.V. Amosova, B.R. Steele and I.D. Kostas, *Phosphorus Sulfur*, **2004**, *179*, 1373-1380.
"Reduction of terminal organylchalcogeno phosphonates as a way to prepare primary organylchalcogeno phosphines"
 34. I. D. Kostas, B.R. Steele, F.J. Andreadaki and V.A. Potapov, *Inorg. Chim. Acta*, **2004**, *357*, 2850-2854.

- "Rhodium complexes possessing *S*-phosphinite ligands with or without an amino group. Application to hydroformylation of styrene"
35. B.R. Steele, M. Micha-Screttas and C.G. Screttas, *Tetrahedron Lett.* **2004**, *45*, 9537-9540.
"Synthesis and properties of 1-bromo-2,3,5,6-tetrakis(3-pentyl)benzene : a highly sterically hindered aryl bromide"
 36. C. Arbez-Gindre, B.R. Steele, G.A. Heropoulos, C.G. Screttas, J.-E. Communal, W.J. Blau and I. Ledoux-Rak, *J. Organomet. Chem.* **2005**, *690*, 1620-1626
"A facile organolithium route to ferrocene-based triarylmethyl dyes with substantial near IR and NLO properties"
 37. G.A. Heropoulos, S. Georgakopoulos and B.R. Steele, *Tetrahedron Lett.* **2005**, *46*, 2469-2473
"High intensity ultrasound assisted reduction of sterically demanding nitroaromatics"
 38. S.V. Amosova, N.A. Makhaeva, A.V. Martynov, V.A. Potapov, B.R. Steele and I.D. Kostas, *Synthesis* **2005**, 1641-1648
"Terminal organochalcogenoethyl- and -propylamines and their Schiff base derivatives."
 39. C.G. Screttas, G.A. Heropoulos, M. Micha-Screttas and B.R. Steele, *Tetrahedron Lett.* **2005**, *46*, 4357-4360.
"Medium-dependent lithiated side products in the reductive lithiation of allylic phenyl thioethers. Diethyl ether versus tetrahydrofuran"
 40. B.R. Steele, C. Villalonga-Barber, M. Micha-Screttas and C.G. Screttas, *Tetrahedron Lett.* **2006**, *47*, 2093-2097.
"Selective catalytic carbanionic ethylation of methylphenols. Influence of catalyst and substitution pattern"
 41. C. Villalonga-Barber, B. R. Steele, V. Kovač, M. Micha-Screttas and C. G. Screttas, *J. Organomet. Chem.* **2006**, *691*, 2785-2792.
"New stable, isolable triarylmethyl based dyes absorbing in the near infrared"
 42. I. D. Kostas, B. R. Steele, A. Terzis, S. V. Amosova, A. V. Martynov and N. A. Makhaeva, *Eur. J. Inorg. Chem.* **2006**, 2642-2646.
"New palladium complexes with S- or Se-containing Schiff base ligands as efficient catalysts for the Suzuki-Miyaura cross-coupling reaction of aryl bromides with phenylboronic acid under aerobic conditions"
 43. G. A. Heropoulos, G. Cravotto, C. G. Screttas and B. R. Steele, *Tetrahedron Lett.* **2007**, *48*, 3247-3250.
"Contrasting chemoselectivities in the ultrasound and microwave assisted bromination reactions of substituted alkylaromatics with *N*-bromosuccinimide"

44. G. C. Papavassiliou, G. C. Anyfantis, B. R. Steele, A. Terzis, C. P. Raptopoulou, G. Tatakis, G. Chaidogiannos, N. Glezos, Y. Weng, H. Yoshino and K. Murata, *Z. Naturforsch. B* **2007**, *62b*, 679-684.
"Some new nickel 1,2-dichalcogenolene complexes as single-component semiconductors"
45. B. R. Steele, G. A. Heropoulos and C. G. Screttas, *Collect. Czech. Chem. Commun.* **2007**, *72*, 589-598.
"Metal chloride reductions with aromatic radical anions. The magnesium chloride catalysed cleavage of tetrahydrofuran by sodium naphthalene radical anion"
46. B. R. Steele, S. Georgakopoulos, M. Micha-Screttas and C. G. Screttas, *Eur. J. Org. Chem.* **2007**, 3091-3094.
"Synthesis of new sterically hindered anilines"
47. G. Skretas, A. Meligova, C. Villalonga-Barber, D. J. Mitsiou, M. N. Alexis, M. Micha-Screttas, B. R. Steele, C. G. Screttas and D. W. Wood, *J. Am. Chem. Soc.* **2007**, *129*, 8443 - 8457.
"Engineered chimeric enzymes as tools for drug discovery: Generating reliable bacterial screens for the detection, discovery and assessment of estrogen receptor modulators"
48. G. Pagona, A. S. D. Sandanayaka, A. Maigné, J. Fan, G. C. Papavassiliou, I. D. Petsalakis, B. R. Steele, M. Yudasaka, S. Iijima, N. Tagmatarchis and O. Ito, *Chem. Eur. J.* **2007**, *13*, 7600-7607.
"Photo-induced electron-transfer on aqueous carbon nanohorn-pyrene-tetrathiafulvalene architectures"
49. S. V. Amosova, V. N. Elokhina, A. S. Nakhmanovich, L. I. Larina, A. V. Martynov, B. R. Steele and V. A. Potapov, *Tetrahedron Lett.* **2008**, *49*, 974-976.
"Reactions of selenourea with benzoyl- and 2-thienoylbromo-acetylenes: synthesis of 1,3-diselenetanes and 1,4-diselenafulvenes"
50. F. Wiesbrock, C. Patteux, T. K. Olszewski, A. Blanrue, G. A. Heropoulos, B. R. Steele, M. Micha-Screttas and T. Calogeropoulou, *Eur. J. Org. Chem.* **2008**, 4344-4349.
"Solution-phase synthesis and scale-up of 1st generation tetraester-dendritic branches involving microwave and/or ultrasonic irradiation"
51. M. Bucos, C. Villalonga-Barber, M. Micha-Screttas, B. R. Steele, C. G. Screttas and G. A. Heropoulos, *Tetrahedron* **2010**, *66*, 2061-2065.
"Microwave assisted solid additive effects in simple dry chlorination reactions with N-chlorosuccinimide"
52. K. Gardikis, S. Hatziantoniou, M. Bucos, D. Fessas, M. Signorelli, T. Felekis, M. Zervou, C. G. Screttas, B. R. Steele, M. Ionov, M. Micha-Screttas, B. Klajnert, M. Bryszewska and C Demetzos, *J. Pharm. Sci.* **2010**, *99*, 3561-3571.
"New drug delivery nanosystem combining liposomal and dendrimeric technology (liposomal locked-in dendrimers) for cancer therapy"

53. C. Koukoulitsa, S. Durdagi, E. Siapi, C. Villalonga-Barber, X. Alexi, B. R. Steele, M. Micha-Screttas, M. N. Alexis and T. Mavromoustakos, *Eur. Biophys. J.* **2011**, *40*, 865–875.
“Comparison of thermal effects of stilbenoid analogs in lipid bilayers using differential scanning calorimetry and molecular dynamics. Correlation of their thermal effects and topographical position with antioxidant activity”
54. R. Csonka, C. Villalonga-Barber, V. Psycharis, C. P. Raptopoulou and B. R. Steele, *Polyhedron* **2012**, *34*, 181-187.
“Transition metal complexes of new glyoxylato-arylohydrazones and their role in L-ascorbic acid oxidation inhibition”
55. H. Oberacher, F. Pitterl, E. Siapi, B. R. Steele, T. Letzel, S. Grosse, B. Poschner, F. Tagliaro, R. Gottardo, S. A. Chacko and J. L. Josephs, *J. Mass Spectrom.* **2012**, *47*, 263-270.
“On the inter-instrument and the inter-laboratory transferability of a tandem mass spectral reference library. 3. Focus on ion trap and up-front CID”
56. C. G. Screttas, B. R. Steele, M. Micha-Screttas and G. A. Heropoulos, *Org. Lett.* **2012**, *14*, 5680–5683.
“Aryllithiums with increasing steric crowding and lipophilicity prepared from chlorides in diethyl ether. The first directly prepared room temperature-stable dilithioarenes”
57. C. Villalonga-Barber, K. Vallianatou, S. Georgakopoulos, B. R. Steele, M. Micha-Screttas, E. Levin and N. G. Lemcoff, *Tetrahedron* **2013**, *69*, 3885-3895.
“Synthesis, characterisation, electronic spectra and electrochemical investigation of ferrocenyl-terminated dendrimers”
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