

Curriculum Vitae

Maria Manuela Marques Raposo

Associate Professor

University of Minho

School of Sciences

Department of Chemistry

Braga

Portugal

Name: Maria Manuela Marques Raposo

Institutional address: Department of Chemistry, University of Minho, Campus de Gualtar, 4701-057, Braga, Portugal

Category on the Institution: Associate Professor since 25/07/2007

Phone: 351 253 604381 **Fax:** 351 253 604382 **Email:** mfox@quimica.uminho.pt

Academic formation:

Dec. 1987 - Oct. 1990 – Stagiary Assistant, Department of Chemistry, Faculty of Sciences and Technology, New University of Lisbon, Portugal

Nov. 1990 - Jan. 1992 – Stagiary Assistant, Department of Chemistry, University of Minho, Portugal

Jan. 1992 - Apr. 1996 – Assistant, Department of Chemistry, University of Minho, Portugal

Apr. 1996 - Assistant Professor, Department of Chemistry, University of Minho, Portugal

Apr. 2001 - Assistant Professor with Definitive Nomination, Department of Chemistry, University of Minho, Portugal

Jul. 2007 - Associate Professor, Department of Chemistry, University of Minho, Portugal

Scientific formation

Degree on Applied Chemistry (Organic Synthesis specialty), 1987 (14/20), New University of Lisbon, Faculty of Sciences and Technology, Portugal

“Provas de Aptidão Pedagógica e Capacidade Científica”, January of 1992 (Very Good), Department of Chemistry, University of Minho, Portugal

PhD. studies, April of 1996 (Distinction and Praise). Dissertation on “Synthetic studies on carbazoles and pyridocarbazoles”, Department of Chemistry, University of Minho, Portugal

Teaching expertise

During the last 29 years M. M. M. Raposo has taught more than 20 subjects (experimental and theoretical) in several areas of chemistry (general, organic, spectroscopic techniques) for several levels of students: degree in: Chemistry, Physics, Applied Biology, etc. and MSc students (*e.g.* Medicinal Chemistry). In particular she is an expert in teaching organic chemistry subjects such as organic and heterocyclic chemistry (*e.g.* “Laboratory techniques in chemistry”, “Topics of Structural Chemistry”, “Organic chemistry”, “Chemical reactions”, “Methods in organic chemistry”, “Heterocycles: chemistry and applications” and “Heterocycles in medicinal chemistry”).

Present research interests

Scopus Author ID: 7005684062 (<http://www.scopus.com/authid/detail.url?authorId=7005684062>)

ORCID ID: <http://orcid.org/0000-0002-7996-1626>

ResearcherID: A-5235-2013

ISI authors search: Raposo MMM (*h*-index: 27)

- Synthesis and characterization of sulfur, nitrogen and oxygen heterocycles as well as the corresponding amino acid derivatives with several applications:

- i) nonlinear optics (SHG and TPA);
- ii) colorimetric and/or fluorimetric chemosensors of anions and cations with potential analytical, environmental and medical applications;
- iii) fluorescence probes and markers.
- iv) dye sensitizers solar cells (DSSCs)
- v) organic light-emitting diodes (OLED's);

Publications

P1. Hall, R.J.; Dharmasena, P.; Marchant, J.; Oliveira-Campos, A. M. F.; Queiroz, M. J. R. P.; **Raposo, M. M. M.**; Shannon, P. V. R. A flexible approach to pyrido[4,3-*b*]carbazoles. The syntheses of 5-methyl-8,10-dimethoxy; 5,11-dimethoxy-7,10-dimethyl and 9-fluoro-5,11-dimethylpyrido[4,3-*b*]carbazoles by variations of the type D route. *J. Chem. Soc. Perkin 1* **1993**, 1879-1889. (IF = 1.948; 2003).
<http://dx.doi.org/10.1039/P19930001879>

P2. Dharmasena, P.; Oliveira-Campos, A. M. F.; **Raposo, M. M. M.**; Shannon, P. V. R. The effect of electron-withdrawing groups in the amide and bromo components on the yield of the Goldberg reaction. *J. Chem. Research* **1994**, (S), 296-297, (M), 1601-1611. (IF = 0.382; 2003).
<http://pubs.rsc.org/en/content/articlelanding/1994/p2/p299400bp101/unauth#!divAbstract>

P3. Oliveira-Campos, A. M. F.; Queiroz, M. J. R. P.; **Raposo, M. M. M.**; Shannon, P. V. R. A synthesis of 8,10-dimethoxyellipticine *via* a diphenylamine. *Tetrahedron Lett.* **1995**, 36(1), 133-134. (IF = 2.509; 2006).
<http://www.sciencedirect.com/science/article/pii/004040399402193F>

P4. Chunchatprasert, L.; Dharmasena, P.; Oliveira-Campos, A. M. F.; Queiroz, M. J. R. P.; **Raposo, M. M. M.**; Shannon, P. V. R. Anti-tumour heterocycles, Part 13. The syntheses of two new pyridocarbazoles (ellipticines) and some pyrrolocarbazole analogues. *J. Chem. Research* **1996**, (S), 84-85, (M), 630-678. (IF = 0.382; 2003).

<http://www.scopus.com/record/display.url?eid=2-s2.0-2742566263&origin=inward&txGid=BBBF2C08F5C3FDA2EA15EF9E7EED2460.WeLimyRvBMk2ky9SFKc8Q%3a12>

- P5.** Dharmasena, P.; Oliveira-Campos, A. M. F.; Queiroz, M. J. R. P.; **Raposo, M. M. M.**; Shannon, P. V. R.; Webb, C. M. Anti-tumour heterocycles, Part 16. The synthesis of 7,10-dimethoxyellipticine and its pyrrolo[2,3-*f*]carbazole and pyrrolo[3,2-*f*] analogues. *J. Chem. Research* **1997**, (S), 398-399, (M), 2501-2532. (IF = 0.382; 2003). <http://dx.doi.org/10.1039/A704615D>
- P6.** **Raposo, M. M. M.**; Oliveira-Campos, A. M. F.; Shannon, P. V. R. Alternative products to carbazoles in the oxidation of diphenylamines with palladium (II) acetate. *J. Chem. Research* **1997**, (S), 354-355, (M), 2270-2291. (IF = 0.382; 2003).
<http://dx.doi.org/10.1039/A701095H>
- P7.** **Raposo, M. M. M.**; Pereira, A. M. B.; Oliveira-Campos, A. M. F.; Shannon, P. V. R. Studies on 5-bromo-4,7-dimethylindene, an intermediate in the synthesis of 6-bromo-5,8-dimethylisoquinoline. *J. Chem. Research* **1999**, (S), 466-467, (M), 1970-1979. (IF = 0.560).
<http://dx.doi.org/10.1039/A809952I>
- P8.** **Raposo, M. M. M.**; Pereira, A. M. B.; Oliveira-Campos, A. M. F.; Shannon, P. V. R. Synthesis of highly substituted diphenylacetamides and diphenylsulfonamides by the Goldberg coupling. *J. Chem. Research* **2000**, (S), 156-158, (M), 528-558. (IF = 0.522).
<http://dx.doi.org/10.3184/030823400103166977>
- P9.** **Raposo, M. M. M.**; Kirsch, G. A combination of Friedel-Crafts and Lawesson reactions to 5-substituted-2,2'-bithiophenes. *Heterocycles* **2001**, 55(8): 1487-1498. (IF = 1.077).
<http://dx.doi.org/10.3987/COM-01-9249>
- P10.** **Raposo, M. M. M.**; Kirsch, G. Formylation, dicyanovinylolation and tricyanovinylolation on 5-alkoxy- and 5-amino-substituted-2,2'-bithiophenes. *Tetrahedron* **2003**, 59(26): 4891-4899. (IF = 2.643, 2004)
[http://dx.doi.org/10.1016/S0040-4020\(03\)00705-1](http://dx.doi.org/10.1016/S0040-4020(03)00705-1)
- P11.** Oliveira, A. M. A. G. **Raposo, M. M. M.**; Oliveira-Campos, A. M. F.; Griffiths, J.; Machado, A. E. H. Psoralen analogues based on dibenzofuran. *Helv. Chim. Acta* **2003**, 86(8): 2900-2907. (IF = 1.650; 2005)
<http://dx.doi.org/10.1002/hlca.200390237>
- P12.** **Raposo, M. M. M.**; Fonseca, A. M. C.; Kirsch, G. Synthesis of donor-acceptor substituted oligothiophenes by Stille coupling. *Tetrahedron* **2004**, 60(18): 4071-4078. (IF = 2.643)

<http://dx.doi.org/10.1016/j.tet.2004.03.022>

- P13.** Costa, F.; Silva, C. J. R.; **Raposo, M. M. M.**; Fonseca, A. M. C.; Neves, I. C.; Carvalho, A. P.; Pires, J. Synthesis and immobilization of molybdenum complex in a pillared layered clay. *Microporous Mesoporous Mater.* **2004**, 72(1-3):111-118. (IF = 2.093)
<http://dx.doi.org/10.1016/j.micromeso.2004.04.003>
- P14.** Batista, R. M. F.; Costa S. P. G.; **Raposo, M. M. M.** Synthesis of new fluorescent 2-(2,2'-bithienyl)-1,3-benzothiazoles. *Tetrahedron Lett.* **2004**, 45(13): 2825-2828. (IF = 2.484)
<http://dx.doi.org/10.1016/j.tetlet.2004.02.048>
- P15.** Oliveira, A. M. A. G.; **Raposo, M. M. M.**, Oliveira-Campos, A. M. F.; Griffiths, J.; Machado, A. E. H. Fries rearrangement of dibenzofuran-2-yl ethanoate under photochemical and acid-catalysed conditions. *Tetrahedron* **2004**, 60(29): 6145-6154. (IF= 2.643)
<http://dx.doi.org/10.1016/j.tet.2004.05.060>
- P16.** **Raposo, M. M. M.**, Sampaio; A. M. B. A.; Kirsch, G. Arylamino-thieno-oxobutanamides under Lawesson's conditions: competition between thienylpyrrole and bithiophene formation. *Synthesis* **2005**, 2: 199-210. (IF = 2.401)
<http://dx.doi.org/10.1055/s-2004-834952>
- P17.** **Raposo, M. M. M.**, Sousa, A. M. R. C.; Fonseca, A. M. C.; Kirsch, G. Thienylpyrrole azo dyes: synthesis, solvatochromic and electrochemical properties. *Tetrahedron* **2005**, 61(34): 8249-8256. (IF = 2.610)
<http://dx.doi.org/10.1016/j.tet.2005.06.039>
- P18.** **Raposo, M. M. M.**, Sampaio; A. M. B. A.; Kirsch, G. A convenient access to thienyl-substituted phthalazines", *J. Heterocyclic Chem.* **2005**, 42(7): 1245-1251. (IF = 0.735)
<http://dx.doi.org/10.1002/jhet.5570420701>
- P19.** Fonseca, A. M. C.; **Raposo, M. M. M.**, Sousa, A. M. R. C.; Kirsch, G.; Beley, M. Synthesis, electrochemical and spectroscopic properties of molybdenum complexes bearing 5-alkoxy-thiophenic or bithiophenic groups. *Eur. J. Inorg. Chem.* **2005**, 21: 4361-4365. (IF = 2.514)
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- P20.** **Raposo, M. M. M.**; Sousa, A. M. R. C.; Kirsch, G.; Ferreira, F.; Belsey, M.; Matos Gomes, E.; Fonseca, A. M. C. Synthesis of tricyanovinyl-substituted thienylpyrroles and characterization of the solvatochromic, electrochemical and non-linear optical properties. *Tetrahedron* **2005**, 61(50): 11991-11998. (IF = 2.610)
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- P21.** Zotti, G.; Zecchin, S.; Vercelli, B.; Berlin, A.; Pasini, M. C.; Destri, S.; Porzio, W.; **Raposo, M. M. M.** Electrochemical, magnetic and electrical properties of α,ω -capped sexithiophene films. Neutral-polaron and polaron-bipolaron conductions. *Chem. Mater.* **2005**, *17*(25): 6492-6502. (IF = 4.818)
<http://dx.doi.org/10.1021/cm051798u>
- P22.** Oliveira, A. M. A. G.; **Raposo, M. M. M.**, Oliveira-Campos, A. M. F.; Machado, A. E. H. ; Puapairoj, P.; Pedro, M.; Nascimento, M. S. J.; Portela, C.; Afonso C.; Pinto, M. Psolaren analogues: synthesis, inhibitory activity of growth of human tumor cell lines and computational studies. *Eur. J. Med. Chem.* **2006**, *41*(3): 367-372. (IF = 2.187)
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- P23.** **Raposo, M. M. M.**, Sousa, A. M. R. C.; Fonseca, A. M. C.; Kirsch, G. Synthesis of formyl-thienylpyrroles: versatile building blocks for NLO materials. *Tetrahedron* **2006**, *62*(15): 3493-3501. (IF = 2.817)
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- P24.** Coelho, P.; Carvalho, L.; Fonseca, A. M. C.; **Raposo, M. M. M.** Photochromic properties of thienylpyrrole azo dyes in solution. *Tetrahedron Lett.* **2006**, *47*(22): 3711-3714. (IF = 2.509)
<http://dx.doi.org/10.1016/j.tetlet.2006.03.125>
- P25.** **Raposo, M. M. M.**; Sousa, A. M. R. C.; Kirsch, G.; Cardoso, P.; Belsey, M.; Matos Gomes, E.; Fonseca, A. M. C. Synthesis and characterization of dicyanovinyl-substituted thienylpyrroles as new NLO-chromophores. *Org. Lett.* **2006**, *8*(17): 3681-3684. (IF = 4.659)
<http://dx.doi.org/10.1021/ol061277s>
- P26.** Costa, S. P. G.; Batista, R. M. F.; Cardoso, P.; Belsey, M.; **Raposo, M. M. M.** 2-Arylthienyl-substituted 1,3-benzothiazoles as new nonlinear optical chromophores. *Eur. J. Org. Chem.* **2006**, *17*: 3938-3946. (IF = 2.769)
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- P27.** Oliva, M. M.; Casado, J.; **Raposo, M. M. M.**, Fonseca, A. M. C.; Hartmann, H.; Hernández, V.; López Navarrete, J. T. Structure-property relationships in push-pull amino-cyanovinyl end capped oligothiophenes: quantum chemical and experimental studies. *J. Org. Chem.* **2006**, *71*(20): 7509-7520. (IF = 3.790)
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- P28.** Batista, R. M. F.; Costa, S. P. G.; Malheiro, E. L.; Belsey, M.; **Raposo, M. M. M.** Synthesis and characterization of new thienylpyrrolyl-benzothiazoles as efficient and thermally stable nonlinear optical chromophores. *Tetrahedron* **2007**, *63*(20): 4258-4265. (IF = 2.869)

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- P29.** Ana M. A. G. Oliveira, Ana M. F. Oliveira-Campos, Lúgia M. Rodrigues, **Raposo, M. M. M.**, Antonio E. H. Machado, M. São José Nascimento, N. Nazareth, Madalena Pinto, "Synthesis and antitumour evaluation of benzopsoralen analogues", *Chem. Biodiv.*, **2007**, 4(5), 980-990. (IF = 1.420)
<http://dx.doi.org/10.1002/cbdv.200790089>
- P30.** J. Pina, J. Seixas de Melo, H. D. Burrows, Rosa M. F. Batista, Susana P. G. Costa **Raposo, M. M. M.**, "Spectral and photophysical characterization of donor- π -acceptor arylthienyl- and bithienyl-benzothiazole derivatives in solution and solid state", *J. Phys. Chem. A*; **2007**, 111(35), 8574 - 8578. (IF = 2.918)
<http://dx.doi.org/10.1021/jp0730646>
- P31.** Rosa M. F. Batista, Elisabete Oliveira, Susana P. G. Costa, Carlos Lodeiro and **Raposo, M. M. M.**, "Synthesis and ion sensing properties of new colorimetric and fluorimetric chemosensors based on bithienyl-imidazo-anthraquinone chromophores", *Org. Lett.*, **2007**, 9(17), 3201-3204. (IF = 4.802)
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- P32.** Batista, R. M. F.; Costa, S. P. G.; Belsey; M.; **Raposo, M. M. M.** Synthesis and second-order nonlinear optical properties of new chromophores containing benzimidazole, thiophene and pyrrole heterocycles. *Tetrahedron* **2007**, 63(29): 9842-9849. (IF = 2.869)
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- P33.** Costa, S. P. G.; Oliveira, E.; Lodeiro C.; **Raposo, M. M. M.** Synthesis, characterization and metal ion detection of novel fluoroionophores based on heterocyclic substituted alanines. *Sensors* **2007**, 7: 2096-2114. Special Issue Supramolecular Sensors by editor invitation. (IF = 1.573)
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- P34.** Figueiredo, H.; Silva, B.; **Raposo, M. M. M.**; Fonseca, A. M.; Neves, I. C.; Quintelas, C.; Tavares, T. Immobilization of Fe(III) complexes of pyridazine derivatives prepared from biosorbents supported on zeolites, *Microporous Mesoporous Mater.* **2008**, 109: 163-171. (IF = 2.555)
<http://dx.doi.org/10.1016/j.micromeso.2007.04.038>
- P35.** **Raposo, M. M. M.**; Ferreira, A. M. F. P.; Belsley, M.; Moura, J. C. V. P. 5'-Alkoxy-2,2'-bithiophene azo dyes: a novel promising series of NLO chromophores. *Tetrahedron* **2008**, 64(25): 5878-5884. (IF = 2.897)
<http://dx.doi.org/10.1016/j.tet.2008.04.061>

- P36.** Batista, R. M. F.; Costa, S. P. G.; Lodeiro, C.; Belsley, M.; **Raposo, M. M. M.** Synthesis and characterization of novel (oligo)thienyl-imidazo-phenanthrolines as versatile π -conjugated heterocyclic systems for several optical applications. *Tetrahedron* **2008**, *64*(39): 9230-9238. (IF = 2.897)
<http://dx.doi.org/10.1016/j.tet.2008.07.043>
- P37.** Costa, S. P. G.; Oliveira, E.; Lodeiro, C.; **Raposo, M. M. M.** Heteroaromatic alanine derivatives bearing (oligo)thiophene units: synthesis and photophysical properties. *Tetrahedron Lett.* **2008**, *49*(36): 5258-5261. (IF = 2.538)
<http://dx.doi.org/10.1016/j.tetlet.2008.06.109>
- P38.** Costa, S. P. G.; Batista, R. M. F.; **Raposo, M. M. M.** Synthesis and photophysical characterization of new fluorescent *bis*-amino acids bearing a heterocyclic bridge containing benzoxazole and thiophene. *Tetrahedron* **2008**, *64*(41): 9733-9737. (IF = 2.897)
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- P39.** Batista, R. M. F.; Oliveira, E. Costa, S. P. G.; Lodeiro, C.; **Raposo, M. M. M.** Synthesis and evaluation of bidentate-armed (oligo)thiophene crown ether derivatives as new chemical sensors. *Tetrahedron Lett.* **2008**, *49*(46): 6575-6578. (IF = 2.538)
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- P40.** Batista, R. M. F.; Costa, S. P. G.; Belsley, M.; **Raposo, M. M. M.** Synthesis and evaluation of the optical properties of novel thermally stable phenanthrolines bearing a arylthienyl-imidazo conjugation pathway. *Dyes Pigments* **2009**, *80*(3): 329-336. (IF = 2.855)
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- P41.** Pedras, B.; Fernandes, L.; Oliveira, E. Rodríguez, L.; **Raposo, M. M. M.**; Capelo, J. L.; Lodeiro, C. Synthesis, characterization and spectroscopic studies of two new Schiff-base bithienyl pendant-armed 15-crown-5 molecular probes. *Inorg. Chem. Commun.* **2009**, *12*(2): 79-85. (IF = 2,029).
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- P42.** Coelho, P.; Carvalho, L.; Moura, J. C. V. P.; **Raposo, M. M. M.** Novel photochromic 2,2'-bithiophene azo dyes. *Dyes Pigments* **2009**, *82*(2): 130-133. (IF = 2.855)
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- P43.** Herbivo, C.; Comel, A.; Kirsch, G. **Raposo, M. M. M.** Synthesis of 5-aryl-5'-formyl-2,2'-bithiophenes as new precursors for nonlinear optical (NLO) materials. *Tetrahedron* **2009**, *65*(10): 2079-2086. (IF = 3.219)
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- P44.** Batista, R. M. F.; Oliveira, E.; Nuñez, C.; Costa, S. P. G.; Lodeiro, C.; **Raposo, M. M. M.** Synthesis and evaluation of new thienyl and bithienyl *bis*-indolylmethanes as colorimetric sensors for anions. *J. Phys. Org. Chem.* **2009**, 22(5): 362-366. (IF = 1.602)
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- P45.** **Raposo, M. M. M.**, Ferreira, A. M. F. P.; Amaro, M.; Belsley, M.; Moura, J. C. V. P. The synthesis and characterization of the thermal and the solvatochromic properties of heterocyclic azo dyes derived from 5-*N,N*-dialkylamino-2,2'-bithiophene couplers. *Dyes Pigments* **2009**, 83(1): 59-65. (IF = 2.855)
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- P46.** Esteves, C. I. C.; Silva, A. M. F.; **Raposo, M. M. M.**, Costa, S. P. G. Unnatural benz-X-azolyl asparagine derivatives as novel fluorescent amino acids: synthesis and photophysical characterization. *Tetrahedron* **2009**, 65(45): 9373-9377. (IF = 3,219)
<http://dx.doi.org/10.1016/j.tet.2009.08.086>
- P47.** Figueiredo, H.; Silva, B.; **Raposo, M. M. M.**; Parpot, P.; Fonseca, A. M.; Lewandowska, A. E.; Bañares, M. A.; Neves, I. C.; Tavares, T. Immobilization of chromium complexes in zeolite Y obtained from biosorbents: synthesis, characterization and catalytic behaviour. *Applied Catalysis B: Environmental* **2010**, 94(1-2): 1-7. (IF = 4,749).
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- P48.** Herbivo, C.; Comel, A.; Kirsch, G.; Fonseca, A. M. C.; Belsley, M.; **Raposo, M. M. M.** Synthesis and characterization of novel efficient and thermally stable 2-aryl-5-dicyanovinylthiophenes and 5-aryl-5'-dicyanovinyl-2,2'-bithiophenes as potentially promising nonlinear optical (NLO) materials. *Dyes Pigments* **2010**, 86(3): 217-226. (IF = 2.635).
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- P49.** **Raposo, M. M. M.**; García-Acosta, B.; Ábalos, T.; Calero, P.; Martínez-Manez, R.; Ros-Lis, J. V.; Soto, J. Synthesis and study of the use of heterocyclic thiosemicarbazones as signalling scaffolding for the recognition of anions. *J. Org. Chem.* **2010**, 75(9): 2922–2933. (IF = 4.002)
<http://dx.doi.org/10.1021/jo100082k>
- P50.** Pina, J.; Seixas de Melo, J. S.; Batista, R. M. F.; Costa, S. P. G. **Raposo, M. M. M.** Synthesis and characterization of the ground and excited states of tripodal-like oligothieryl-imidazoles. *J. Phys. Chem. B* **2010**, 114(15), 4964-4972. (IF = 3.603)
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- P51.** Pina, J.; Seixas de Melo, J. S.; Batista, R. M. F.; Costa, S. P. G.; **Raposo, M. M. M.** The influence of the relative position of the thiophene and pyrrole rings in donor-acceptor thienylpyrrolyl-benzothiazole

- derivatives. A photophysical and theoretical investigation. *Phys. Chem. Chem. Phys.* **2010**, *12*(33): 9719-9725. (IF = 3.453)
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- P52.** Fonseca, A. F.; Belsley, M.; Matos Gomes, E.; Castro, M. C. R.; **Raposo, M. M. M.** Molybdenum complexes bearing (bi)thienyl- or arylthienyl-substituted π -conjugated spacers: synthesis, electrochemical, spectroscopic and nonlinear optical properties. *Eur. J. Inorg. Chem.* **2010**, *19*: 2998-3004. (IF = 2.909)
<http://dx.doi.org/10.1002/ejic.201000218>
- P53.** Esteves, C. I. C.; **Raposo, M. M. M.**; Costa, S. P. G. Synthesis and evaluation of new benzothiazolyl and benzimidazolyl asparagines as amino acids based selective fluorimetric chemosensors for Cu^{2+} *Tetrahedron* **2010**, *66*(38): 7479-7486. (IF = 3.011)
<http://dx.doi.org/10.1016/j.tet.2010.07.063>
- P54.** Oliveira, E.; Batista, R. M. F.; Costa, S. P. G.; **Raposo, M. M. M.**; Lodeiro, C. Exploring the emissive properties of new azacrown compounds bearing aryl, furyl or thienyl moieties: a special case of chelation enhancement of fluorescence upon interaction with Ca^{2+} , Cu^{2+} or Ni^{2+} . *Inorg. Chem.* **2010**, *49*(23): 10847-10857. (IF = 4.325)
<http://dx.doi.org/10.1021/ic101095y>
- P55.** Collado, D.; Casado, J.; González, S. R.; Navarrete, J. T. L.; Suau, R.; Perez-Inestrosa, E.; Pappenfus, T. M.; **Raposo, M. M. M.** Enhanced functionality for donor-acceptor oligothiophenes via inclusion of BODIPY: synthesis, electrochemistry, photophysics and model chemistry. *Chem. Eur. J.* **2011**, *17*:498-507. (IF = 5.925)
<http://dx.doi.org/10.1002/chem.201001942>
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Proceedings and Communications

Co-author of over 30 proceedings published on the ambit of in international congresses, over 200 oral and poster communications in national and international congresses.

Referee in the following journals

Amino Acids, Analytical Methods, Beilstein Journal of Organic Chemistry, Chemical Communications, Chemistry an Asian Journal, Chemistry an European Journal, Coordination Chemical Revues, Dyes and Pigments, European Journal of Organic Chemistry, European Polymer Journal, Green Chemistry, Inorganic Chemistry, Inorganic Chemistry Communications, Journal of American Chemical Society, Journal of Hazardous Materials, Journal of Luminescence, Journal of Materials Chemistry, Journal of Molecular Liquids, Journal of Molecular Structure, Journal of Organic Chemistry, Journal of Photochemistry and Phothobiology A: Chemistry, Journal of Physics and Chemistry of Solids, Journal of Physical Organic Chemistry, Materials Chemistry and Physics, Materials Science and Engineering C, Materials Science Forum

Mediterranean Journal of Chemistry, Molecules, New Journal of Chemistry, Organic Letters, Optical Materials, Phosphorous, Sulfur, and Silicon and Related Elements, Polymer Chemistry, RSC Advances, Synthesis, Synlett, Sensors and Actuators B: Chemical, Tetrahedron, Tetrahedron Letters.

Editor

Member of the editorial board of *American Journal of Optics and Photonics* since 2011.

Member of the editorial board of *Mediterranean Journal of Chemistry* since 2014.

Recent funded scientific projects

- "*Nanostructured systems for tailored performance*" on the âmbito of "ON2 O Novo Norte: Programa Operacional Regional do Norte; eixo prioritário I - Competitividade, Inovação e Conhecimento", 2013-2016; Budget: 45 000 Euros. (Collaborator)

- "*Nonlinear spectroscopy of push-pull organic molecules*"; (PTDC/CTM/105597/2008); 2011-2014; Budget: 165 000 Euros. (Collaborator)

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- "*Development of new heterocyclic compounds as luminescent and colorimetric chemosensors: metallic anion and cation detection*"; PTDC/QUI/66250/2006, 2008-2011; Budget: 110 100 Euros. (Coordinator).

- "*Synthesis and characterization of coordination compounds with heterocyclic ligands with potential application in nonlinear optics (NLO)*"; POCTI/2001/QUI/37816; 2002-2005; Budget: 54 200 Euros. (Coordinator)

University of Minho,
Department of Chemistry
Portugal
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Maria Manuela Marques Raposo

Maria Manuela Marques Raposo
(Associate Professor)