

## **Curriculum vitae (01-2017)**

### **1. Personal data**

#### ***Full name***

Carlos Filipe Reis Alves Costa Lima

#### ***National identity card***

12345354

#### ***Birth place and date***

Porto 12-05-1983

#### ***Nationality***

Portugal

#### ***Institutional address***

- CIQ-UP, Department of Chemistry and Biochemistry, Faculty of Science University of Porto, Porto, Portugal.

- Department of Chemistry & QOPNA, University of Aveiro, Aveiro, Portugal.

#### ***Contact data***

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url: <http://orcid.org/0000-0002-5065-0912>

### **2. Academic degrees**

<b>Year</b>	<b>Academic degree</b>	<b>Institution</b>	<b>Classification</b>
2011	PhD	Faculdade de Ciências Univ. Porto	Approved
2006	Graduation in Chemistry	Faculdade de Ciências Univ. Porto	17

### **3. Previous and current scientific and/or professional activities**

- Teaching experience.
- Co-supervisor in the Master's thesis of Carla Manuela Coelho da Fonseca Ribeiro, "Efeito da Introdução de Grupos Fenilo e Incremento de Anéis Fundidos na Estrutura, Propriedades Térmicas e Características Óticas de Poliacenos". Year of conclusion: 2012.
- Co-supervisor in the Master's thesis of Ricardo Jorge Silveira Taveira, "Líquidos Iónicos em Semicondutores Orgânicos". Year of conclusion: 2015.
- Participation in various science fairs and science divulgation initiatives as a presenter.
- Invited reviewer of various articles in international peer-reviewed journals.
- Jury member in the PhD proofs of Master José Carlos da Silva Costa with the thesis entitled: "Estudo Termodinâmico e Morfológico de Filmes Finos de Materiais Semicondutores Orgânicos".
- Member of the Local Organizing Committee of ECTP2014 (20th European Conference on Thermophysical Properties).
- Member of the Local Organizing Committee of 10th MEDICTA 2011, Porto, Portugal.

### **4. Area of scientific activity**

Physical Chemistry.  
Physical Organic Chemistry.  
Chemical Thermodynamics.  
Computational Chemistry.  
Organic Chemistry.

### **5. Domain of specialization**

#### ***Domain of specialization***

Experimental and computational thermochemistry.  
Calorimetry.  
Vapour pressure measurements.  
Organic synthesis.  
Suzuki-Miyaura cross-coupling reaction.  
Molecular energetics.

Aromatic interactions.  
Entropy.  
Intermolecular and intramolecular interactions.  
Phase change thermodynamics.  
Chemical equilibrium.

***Present research interests***

Molecular structure and energetics.  
Molecular symmetry and entropy.  
Aromatic interactions.  
Chemical equilibrium.  
Charge transport in organic semiconductors.  
Assembly and characterization of thin films.  
Ionic liquids.  
Electronic correlation in chemical systems.  
Phase change kinetics.  
Phase change thermodynamics.  
Molecular internal rotation.  
Supramolecular chemistry.  
Suzuki-Miyaura cross-coupling reaction.

***Other skills/activities***

Solution NMR ( $^1\text{H}$ ,  $^{13}\text{C}$ , 2D-NMR, dynamic NMR); solid NMR.  
Mass spectrometry.  
UV-Vis, Fluorescence and Infra-red spectroscopy.  
Thermogravimetry.  
X-ray crystallography.  
Cyclic voltammetry.  
Thin-films deposition.

## **6. Publications**

### ***Thesis***

PhD Thesis in Chemistry: "Study of Aromatic Systems with Intramolecular  $\pi\cdots\pi$  Interactions"; Faculdade de Ciências da Universidade do Porto, Porto, **2011**, Portugal.

### ***Papers in international scientific periodicals with referees***

#### **1 - "Lead Optimisation: Improving the Affinity of the Antiretrovirals Nelfinavir and Amprenavir for HIV-1 Protease"**

P.A. Fernandes, M.L.A.C. Araújo, A.J.M. Barbosa, C.N. Alves, Z.Q. Ferreira, C.R.-N. Gonzalez, C.F.R.A.C. Lima, S.I.E. Loureiro, J.M.T. Magalhães, F.C. Maia, S.A. Moura, E.M.M. Peredo, M.A.S. Perez, T.A.Q. Rodrigues, A.M. Pessoa, C.A.M. da Silva, J.P.A. da Silva, M.J. Ramos; *Lett. Drug Des. Discov.*, **2006**, 3(6), 383-389.

#### **2 - "Substituent Effects on the Energetics and Aromaticity of Aminomethylbenzoic Acids"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos; *J. Phys. Chem. A*, **2007**, 111(42), 10598-10603.

#### **3 - "Phase Transition Thermodynamics of Phenyl and Biphenyl Naphthalenes"**

Marisa A.A. Rocha, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos; *J. Chem. Thermodyn.*, **2008**, 40, 1458-1463.

#### **4 - "(E)-1-Phenylbutan-2-one (2,4-dinitrophenyl)hydrazone"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos, José E. Rodriguez-Borges, John N. Low; *Acta Cryst.*, **2009**, E65, o2729.

#### **5 - "4-(1-Naphthyl)benzoic acid"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos, John N. Low; *Acta Cryst.*, **2009**, E65, o3037.

#### **6 - "1,3-Diphenylpropan-2-one(2,4-dinitrophenyl)hydrazone"**

Lígia R. Gomes, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos, Paula Brandão, John N. Low; *Acta Cryst.*, **2010**, E66, o565.

**7 - "Neutral, Ion Gas-Phase Energetics and Structural Properties of Hydroxybenzophenones"**

Juan Z. Dávalos, A. Guerrero, R. Herrero, P. Jimenez, A. Chana, J.L.M. Abboud, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos, A.F. Lago; *J. Org. Chem.*, **2010**, *75*, 2564-2571.

**8 - "The supramolecular structures of oximes: an update and the crystal structure of 1,3-diphenyl propan-2-one oxime"**

John N. Low, Luís M.N.B.F. Santos, Carlos F.R.A.C. Lima, Paula Brandão, Lígia R. Gomes; *Eur. J. Chem.*, **2010**, *1(2)*, 61-66.

**9 - "The Role of Aromatic Interactions in the Structure and Energetics of Benzyl Ketones"**

Carlos F.R.A.C. Lima, Carlos A.D. Sousa, José E. Rodriguez-Borges, André Melo, Lígia R. Gomes, John N. Low, Luís M.N.B.F. Santos; *Phys. Chem. Chem. Phys.*, **2010**, *12(37)*, 11228-11237.

**10 - "Phase transition equilibrium of terthiophene isomers"**

José C.S. Costa, Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos; *J. Chem. Thermodyn.*, **2011**, *43*, 133-139.

**11 - "4-(1-Naphthyl)benzotrile"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos, John N. Low; *Acta Cryst.*, **2010**, *E66*, o3289.

**12 - "4,4'-(1,8-Naphthalene-1,8-diyl)dibenzotrile"**

Carlos F.R.A.C. Lima, Ligia R. Gomes, Luís M.N.B.F. Santos, John N. Low; *Acta Cryst.*, **2011**, *E67*, o66.

**13 - "Exploring the selectivity of the Suzuki-Miyaura cross-coupling reaction in the synthesis of aryl naphthalenes"**

Carlos F.R.A.C. Lima, José E. Rodriguez Borges, Luís M.N.B.F. Santos; *Tetrahedron*, **2011**, *67*, 689.

**14 - "New Knudsen effusion apparatus with simultaneous gravimetric and quartz crystal microbalance mass loss detection"**

Luís M.N.B.F. Santos, Luís M.S.S. Lima, Carlos F.R.A.C. Lima, Fernão D. Magalhães, Manuel C. Torres, Bernd Schröder, Manuel A.V. Ribeiro da Silva; *J. Chem. Thermodyn.*, **2011**, *43*, 834.

**15 - "Thermodynamic Insights on the Structure and Energetics of s-Triphenyltriazine"**

Carlos F.R.A.C. Lima, José C.S. Costa, Luís M.N.B.F. Santos; *J. Phys. Chem. A*, **2011**, *115*, 9249.

**16 - "High-Accuracy Vapor Pressure Data of the Extended [C<sub>n</sub>C<sub>1</sub>im][Ntf<sub>2</sub>] Ionic Liquid Series: Trend Changes and Structural Shifts"**

Marisa A.A. Rocha, Carlos F.R.A.C. Lima, Lígia R. Gomes, Bernd Schröder, João A.P. Coutinho, Isabel M. Marrucho, José M.S.S. Esperança, Luís P.N. Rebelo, Karina Shimizu, José N.A. Canongia Lopes, Luís M.N.B.F. Santos; *J. Phys. Chem. B*, **2011**, *115*, 10919.

**17 - "Structural and Thermodynamic Characterization of Polyphenylbenzenes"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, André Melo, Lígia R. Gomes, John N. Low, Luís M.N.B.F. Santos; *J. Phys. Chem. A*, **2011**, *115*, 11876-11888.

**18 - "Phase Stability Trend in Linear  $\alpha$ -Polythiophene Oligomers"**

Jose C.S. Costa, Carlos F.R.A.C. Lima, Lígia R. Gomes, Bernd Schröder, Luís M.N.B.F. Santos; *J. Phys. Chem. C*, **2011**, *115*, 23543-23551.

**19 - "Phenyl-naphthalenes: Sublimation Equilibrium, Conjugation, and Aromatic Interactions"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, Bernd Schröder, Lígia R. Gomes, John N. Low, Luís M.N.B.F. Santos; *J. Phys. Chem. B*, **2012**, *116*, 3557-3570.

**20 - "Experimental Support for the Role of Dispersion Forces in Aromatic Interactions"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, Lígia R. Gomes, John N. Low, Artur M.S. Silva, Luís M.N.B.F. Santos; *Chem. Eur. J.*, **2012**, *18*, 8934-8943.

**21 - "Elucidating the Role of Aromatic Interactions in Rotational Barriers Involving Aromatic Systems"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, John N. Low, Artur M.S. Silva, Luís M.N.B.F. Santos; *J. Org. Chem.*, **2012**, *77*, 10422-10426.

**22 - "The origin of stereoselectivity in cycloaddition reactions promoted by stereoisomers of 8-phenylmenthyl glyoxylate oxime"**

Carlos A.D. Sousa, Carlos F.R.A.C. Lima, Mariana Andrade, Xerardo García-Mera, José E. Rodríguez-Borges; *Tetrahedron*, **2013**, *69*, 5048-5057.

**23 - "Role of the Base and Control of Selectivity in the Suzuki-Miyaura Cross-Coupling Reaction"**

Carlos F.R.A.C. Lima, Ana S.M.C. Rodrigues, Vera L.M. Silva, Artur M.S. Silva, Luís M.N.B.F. Santos; *ChemCatChem*, **2014**, *6*, 1291-1302.

**24 - "Self-association of oligothiophenes in isotropic systems"**

Carlos F. R. A. C. Lima, José C. S. Costa, Tiago L. P. Galvão, Hilário R. Tavares, Artur M. S. Silva and Luís M. N. B. F. Santos; *Phys. Chem. Chem. Phys.*, **2014**, *16*, 14761-14770.

**25 - "Electron Transport Materials for OLEDs: Understanding the Crystal and Molecular Stability of the Tris-(8-hydroxyquinolines) of Al, Ga and In"**

José C.S. Costa, Carlos F.R.A.C. Lima, Luis M.N.B.F. Santos; *J. Phys. Chem. C*, **2014**, *118*, 21762-21769.

**26 - "Reactivity and Mechanistic Studies of the Reactions of Chlorodiphenylphosphine and Its Oxide with Methyl Glyoxylate, Glyoxylate Oximes, and Methyl Cyanofornate"**

Carlos A. D. Sousa, Carlos F. R. A. C. Lima, Ivo E. Sampaio-Dias, Xerardo Garcia-Mera and José E. Rodríguez-Borges; *Heteroatom Chem.*, **2015**, *26*, 249-256.

**27 - "Effect of Self-Association on the Phase Stability of Triphenylamine Derivatives"**

Carlos F. R. A. C. Lima, José C. S. Costa, André Melo, Hilário R. Tavares, Artur M. S. Silva, and Luís M. N. B. F. Santos; *J. Phys. Chem. A*, **2015**, *119* (25), 6676-6682.

**28 - "Diarylferrocene tweezers for cation binding"**

Carlos F. R. A. C. Lima, Ana M. Fernandes, André Melo, Luís M. Gonçalves, Artur M. S. Silva and Luís M. N. B. F. Santos; *Phys. Chem. Chem. Phys.*, **2015**, *17*, 23917-23923.

**29 - "Ferrocene Aryl Derivatives for the Redox Tagging of Graphene Nanoplatelets"**

Minjun Yang, Christopher Batchelor-McAuley, Luís Moreira Gonçalves, Carlos F.R.A.C. Lima, Vlastimil Vyskocil, Kristina Tschulik, Richard G. Compton; *Electroanalysis*, **2016**, *28*, 197 – 202.

**30 - "Energetics of neutral and deprotonated (Z)-cinnamic acid"**

Juan Z. Dávalos, Carlos F. R. A. C. Lima, Artur M. S. Silva, Luís M. N. B. F. Santos, R. Erra-Balsells, María L. Salum; *J. Chem. Thermodyn.*, **2016**, *95*, 195–201.

**31 - "Stochastic Detection and Characterisation of Individual Ferrocene Derivative Tagged Graphene Nanoplatelets"**

Haoyu Wu, Qianqi Lin, Christopher Batchelor-McAuley, Luís M Gonçalves, Carlos F. R. A. C. Lima and Richard G Compton; *Analyst*, **2016**, *141*, 2696-2703.

**32 - "Optical band gaps of organic semiconductor materials"**

José C.S. Costa, Ricardo J.S. Taveira, Carlos F.R.A.C. Lima, Adélio Mendes, Luís M.N.B.F. Santos; *Opt. Mater.*, **2016**, *58*, 51.

**33 - "Understanding M-ligand bonding and mer-/fac-isomerism in tris(8-hydroxyquinolate) metallic complexes"**

Carlos F. R. A. C. Lima, Ricardo J. S. Taveira, José C. S. Costa, Ana M. Fernandes, André Melo, Artur M. S. Silva and Luís M. N. B. F. Santos; *Phys. Chem. Chem. Phys.*, **2016**, *18*, 16555-16565.

**34 - "Fluorination effect on the thermodynamic properties of long-chain hydrocarbons and alcohols"**

José C.S. Costa, Carlos F.R.A.C. Lima, Adélio Mendes, Luís M.N.B.F. Santos; *J. Chem. Thermodyn.*, **2016**, *102*, 378–385.



35 - **"On the scope of oxidation of tertiary amines: Meisenheimer Rearrangements versus Cope Elimination in 2-(cyanoethyl)-2-azanorbornanes"**

Carlos Alberto Sousa, Ivo E Sampaio-Dias, Xerardo Garcia-Mera, Carlos Filipe F. R. A. C. Lima, José Enrique Rodriguez-Borges; *Org. Chem. Front.*, **2016**, 3, 1624-1634.

36 - **"2-[(1E,3E)-4-Arylbuta-1,3-dien-1-yl]-4H-chromen-4-ones as dienes in Diels-Alder reactions: experimental and computational studies"**

Hélio M.T. Albuquerque, Clementina M.M. Santos, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos, José A.S. Cavaleiro and Artur M.S. Silva; *Eur. J. Org. Chem.*, **2017**, 87-101.

***Papers in national periodicals with referees***

1 - **"Como as moléculas sublimam"**

Carlos Lima, Artigos PYCA 2012, *Boletim Química SPQ*, **2012**, 125, 39-42.

**10. Communications**

***Invited oral communications***

1 - **"Evaluation of Aromatic Interactions by Thermodynamic Based Methodologies"**

C.F.R.A.C. Lima, L.M.N.B.F. Santos, Artur M. S. Silva; *11<sup>o</sup> ENQF*, 9-10 May **2013** - Porto - Portugal.

2 - **"Molecular and Supramolecular Understanding of Thermophysical Properties"**

L.M.N.B.F. Santos, L.M.S.S. Lima, C.F.R.A.C. Lima, M.A.A. Rocha; *XXIII Encontro Nacional da SPQ*, 12-14 June **2013** - Aveiro - Portugal.

3 - **"Role of the Base and Control of Selectivity in the Suzuki-Miyaura Cross-Coupling Reaction"**

Carlos F. R. A. C. Lima, Ana S. M. C. Rodrigues, Vera L. M. Silva, Artur M. S. Silva, Luís M. N. B. F. Santos; 7th Spanish-Portuguese-Japanese Organic Chemistry Symposium, 23-26 June **2015** - Seville - Spain.

## ***Oral communications***

### **1 - "Intramolecular pi-pi Interaction in 1,3-Diphenyl-2-propanone"**

C.F.R.A.C. Lima, L.M.N.B.F. Santos, L.R. Gomes; *9<sup>o</sup> ENQF / 1st IMIL*, 15-16 June 2009 - Aveiro - Portugal.

### **2 - "On the Measurement's Accuracy of the Volatility of Ionic Liquids"**

Marisa A.A. Rocha, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos, Isabel M. Marrucho, João A.P. Coutinho, Lígia R. Gomes, José M.S.S. Esperança, Luís P.N. Rebelo; *9<sup>o</sup> ENQF / 1st IMIL*, 15-16 June 2009 - Aveiro - Portugal.

### **3 - "Role of the base and control of selectivity in the Suzuki-Miyaura cross-coupling reaction."**

Carlos F.R.A.C. Lima, Ana S.M.C. Rodrigues, Vera L.M. Silva, Artur M.S. Silva, Luís M.N.B.F. Santos; *4<sup>o</sup> PYCheM*, 29 April - 1 May - Coimbra - Portugal.

### **4 - "SELF-ASSOCIATION OF OLIGOTHIOPHENES IN ISOTROPIC SYSTEMS"**

Carlos F. R. A. C. Lima; José C. S. Costa; Tiago L. P. Galvão; Artur M. S. Silva; Hilário R. Tavares; Luís M. N. B. F. Santos; *ECTP2014 - 20th European Conference on Thermophysical Properties*, 31 August - 4 September - Porto - Portugal.

### **5 - "Tris(8-hydroxyquinolates)M(III): exploring the molecular and solid state properties"**

Ricardo J. S. Taveira, Carlos F. R. A. C. Lima, José C. S. Costa, Luís M. N. B. F. Santos; *IJUP 2015 - Encontro Investigação Jovem da Universidade do Porto*, May 2015 - Porto - Portugal.

### **6 - "Understanding M-ligand bonding and mer-/fac- isomerism in tris(8-hydroxyquinolate) metallic complexes"**

Carlos F. R. A. C. Lima, Ricardo J. S. Taveira, José C. S. Costa, Ana M. Fernandes, André Melo, Artur M. S. Silva, Luís M. N. B. F. Santos; *6th EuCheMS Chemistry Congress*, 11th-15th September 2016 - Seville - Spain.

### **7 - "Chromone derivatives as novel dienes in Diels-Alder reactions"**

Hélio M. T. Albuquerque, Clementina M. M. Santos, Carlos F. R. A. C. Lima, Luís M. N. B. F. Santos, José A. S. Cavaleiro, Artur M. S. Silva; *XXII Encontro Luso-Galego de Química*, 9-11 Novembro 2016 - Bragança - Portugal.

## ***Poster communications***

### **1 - "Energetic Study of Six Aminomethylbenzoic Acids"**

C.F.R.A.C. Lima, L.M.N.B.F. Santos, L.R. Gomes; *ICCT, 2006*, Boulder, Colorado, USA.

### **2 - "Lead Optimisation: Improving the Activity of the anti HIV Antiretrovirals Nelfinavir and Amprenavir"**

P.A. Fernandes, M.L. Araujo, A.J. Barbosa, C.A. Alves, Z.A. Ferreira, C.R.-N. Gonzalez, C.F.R.A.C. Lima, S.I. Loureiro, J.M. Magalhaes, F.C. Maia, S.A. Moura, E.M. Peredo, M.A. Perez, T.A. Rodrigues, A.M. da Silva, C.A. da Silva, J.P. da Silva, M.J. Ramos; *The XII<sup>th</sup> International Congress of Quantum Chemistry, ICQC, 2006*, Kyoto, Japan.

### **3 - "Synthesis of 1,8-diarylnaphthalenes by the Suzuki cross coupling reaction"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, Luís M.N.B.F. Santos, José E. Rodriguez-Borges; *7<sup>o</sup> Encontro Nacional de Química Orgânica, SPQ, 2007*, Lisboa, Portugal.

### **4 - "Phase Transition Thermodynamics of Poliphenylbenzenes"**

Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos; *XIX IUPAC Conference on Physical Organic Chemistry*, 13-18 July **2008** - Santiago de Compostela - Spain.

### **5 - "Aromatic $\pi\cdots\pi$ Interactions in Arylnaphthalenes"**

Carlos F.R.A.C. Lima, Lígia R. Gomes, José E. Rodriguez-Borges and Luís M.N.B.F. Santos; *20th International Conference on Chemical Thermodynamics*, August 3-8, **2008**, Warsaw, Poland.

### **6 - "A Thermodynamic Insight on the Structure and Energetics of 2,4,6-Triphenyl-1,3,5-triazine"**

Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos; *17<sup>th</sup> Symposium on Thermophysical Properties*, Boulder, CO, USA, June 21-26, **2009**.

### **7 - "Rationalizing the selectivity of the Suzuki-Miyaura cross-coupling reaction in the synthesis of 1-arylnaphthalenes and 1,8-diarylnaphthalenes"**

Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos, José E. Rodriguez-Borges; *16<sup>th</sup> European Symposium on Organic Chemistry*, 12-16 July, **2009**, Prague - Czech Republic.

**8 - "Intramolecular  $\pi\cdots\pi$  interactions in diarylnaphthalenes: a NMR, thermodynamic and quantum chemical approach."**

Carlos F.R.A.C. Lima, Lígia R. Gomes, Artur M.S. Silva, Luís M.N.B.F. Santos; *2<sup>nd</sup> Portuguese Young Chemists Meeting*, 21-23 April, **2010**, Aveiro - Portugal.

**9 - "Thermodynamic and Structural Study of Terthiophene isomers"**

José C.S. Costa, Carlos F.R.A.C. Lima, Lígia R. Gomes, Luís M.N.B.F. Santos; *2<sup>nd</sup> Portuguese Young Chemists Meeting*, 21-23 April, **2010**, Aveiro - Portugal.

**10 - "Experimental evaluation of the substituent effects on parallel displaced aromatic interactions"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, Lígia R. Gomes, John N. Low, Artur M.S. Silva, Luís M.N.B.F. Santos; *XXII Encontro Nacional SPQ*, Braga, 3-6 Julho **2011** – Portugal.

**11 - "Termodinâmica e estrutura supramolecular de oligómeros de politiofenos"**

José C.S. Costa, Carlos F.R.A.C. Lima, Lígia R. Gomes, B. Schröder, Luís M.N.B.F. Santos; *XXII Encontro Nacional SPQ*, Braga, 3-6 Julho **2011**.

**12 - "Phenylnaphthalenes: sublimation equilibria, electron delocalization, and aromatic interactions"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, Lígia R. Gomes, Bernd Schröder, John N. Low, Luís M.N.B.F. Santos; *10<sup>th</sup> MEDICTA*, **2011**, Porto, 24-27 Julho, Portugal.

**13 - "How residual entropy and hindered rotation influence sublimation equilibria in polyphenylbenzenes"**

Carlos F.R.A.C. Lima, Marisa A.A. Rocha, André Melo, Lígia R. Gomes, Luís M.N.B.F. Santos; *19<sup>th</sup> ECTP*, **2011**, Thessaloniki, 28/08-01/09, Greece.

**14 - "Phase Stability Trend in Linear Oligothiophene Materials"**

José C.S. Costa, Carlos F.R.A.C. Lima, Lígia R. Gomes, Bernd Schröder, Luís M.N.B.F. Santos; *19<sup>th</sup> ECTP*, **2011**, Thessaloniki, 28/08-01/09 2011, Greece.

**15 - "Suzuki-Miyaura Synthesis of Some Linear Arylacenes"**

Carla M.C.F. Ribeiro, Carlos F.R.A.C. Lima, Luís M.N.B.F. Santos; *IJUP*, **2012**, Porto, Portugal.

**16 - "Role of the Base and Control of Selectivity in the Suzuki-Miyaura Cross-Coupling Reaction"**

C.F.R.A.C. Lima, A.S.M.C. Rodrigues, V.L.M. Silva, A.M.S. Silva, L.M.N.B.F. Santos; *XXIII Encontro Nacional da SPQ*, 12-14 Junho 2013 - Aveiro – Portugal.

**17 - "A Structural and Energetic Approach for Understanding the Semiconducting Properties of Rubrene"**

Carlos F. R. A. C. Lima; José C. S. Costa; Luís M. Spencer S. Lima; Luís M. N. B. F. Santos; ECTP2014 - 20th European Conference on Thermophysical Properties, 31 August - 4 September - Porto – Portugal.

**18 - "The influence of molecular symmetry on the entropy of pure phases"**

Carlos F. R. A. C. Lima; Artur M. S. Silva; Luís M. N. B. F. Santos; JEEP 2015 - 41st Conference on Phase Equilibria, March 2015 - Coimbra – Portugal.

**19 - "Tris(8-hydroxiquinolines)M(III): exploring the molecular and solid state properties"**

Ricardo J. S. Taveira, Carlos F. R. A. C. Lima, José C. S. Costa, Luís M. N. B. F. Santos; JEEP 2015 - 41st Conference on Phase Equilibria, March 2015 - Coimbra – Portugal.

**20 - "Cohesive energy of Protic ionic liquids"**

Filipe Ribeiro, Carlos Lima, Inês Vaz, Ana Rodrigues, Erlin Sapei, Luís Santos; 6th EuCheMS Chemistry Congress, 11th-15th September 2016 - Seville - Spain.