

**CURRICULUM VITAE**

Name: **JESÚS MIGUEL**  
Last Name: **FERNÁNDEZ HERNÁNDEZ**  
Place of Birth: Murcia, Spain  
Date of Birth: September 16, 1976  
Work address: Westfälische Wilhelms-Universität. Physikalisches Institut. CeNTech.  
Mendelstrasse 7.  
48149 Münster.  
Telephone: +49 (0)251 980 2874  
e-mail: [jesusmig@um.es](mailto:jesusmig@um.es)

**University Education**

- 15.03.2006 **Ph.D. in Chemistry, cum laude** “*Synthesis, Characterization and Reactivity of Acetylonyl Pd(II), Pt(II) and Pt(IV) Complexes*”, supervised by Prof. Dr. José Vicente Soler and Dra. Aurelia Arcas García, at the University of Murcia.
- 06.2006 **Master in Environmental and Engineering consulting** (contaminated soils), University of Murcia.
- 05.2001 **Final year dissertation** (minor thesis). “*Synthesis and Characterization of New Acetylonylpalladium(II) Complexes*”. Research Advisors: Prof. José Vicente and Dr. Aurelia Arcas. University of Murcia. First Class with distinction.
- 1999-2001 **Postgraduate Studies** in Applied Chemistry, University of Murcia, Spain
- 1994-1999 **B.Sci. (Hons)**, University of Murcia, Spain. First Class average (23 subjects).

**Work and Research Experience**

- 04.2008-current **Postdoctoral researcher** at Prof. De Cola’s group in Centre for Nanotechnologies, CeNTech, University of Muenster, Germany. Research subject: *Tuning the (electro)luminescent properties of Pt complexes by controlling inter- and/or intramolecular interactions*.
- 10.2007-04.2008 **Analyst** in the Quality Assurance/Control department in a pharmaceutical company, Zoster S. A. (Murcia, Spain). Analysis of analytical results, problems solving, and elaboration of quality reports.
- 04.2006-10.2007 **Postdoctoral researcher** at the Inorganic Department, University of Murcia (Spain). Advisor: Prof. José Vicente. Research subject: *synthesis of phenylene oligomers with different bridges (NH, O, C≡C, etc...) and the study of their photophysical properties*.
- 2000-2006 **PhD Fellow** at the Inorganic Department, University of Murcia (Spain). Advisor: Prof. José Vicente. Research topic: *Synthesis, Characterization and Reactivity of new ketonyl Pd(II), Pt(II) and Pt(IV) Complexes*.
- 09.2002-01.2003 **Research stay** at the Department of Chemistry, University of North Carolina at Chapel Hill (USA), 15 weeks. Advisor: Prof. Dr. Maurice Brookhart. Research Topic: *Diimine Palladium complex as catalysts in copolymerization of ethylene and vinyl sulfonates*.
- 07.2001-10.2001 **Research stay** at the School of Chemistry, University of Bristol, UK, 15 weeks. Advisor: Prof. Dr. GuyLloyd-Jones. Research Topic: *Structural and kinetic aspects of Trost’s Ligand- Pd-allyl monomers and oligomers*.
- 07.1999-10.1999 **Research stay** at the Organic Chemistry Department, University of Kaiserslautern, Germany. Advisor: Dr. Bernhard Witulski. Research Topic: *Transition Metal Catalysed Cyclotrimerizations with Rh- and Ru-catalysts of aza-dipropargylic compounds*.

**Publications**

- 1) “Chemo- and Regioselective Crossed Alkyne Cyclotrimerisation of 1,6-diynes with Terminal Monoalkynes Mediated by Grubbs’ Catalyst or Wilkinson’s Catalyst”. Witulsky, D.; Stengel, T., Fernández-Hernández, J. M. *Chem. Commun.* **2000**, [1965-1966](#)
- 2) “[Pd{CH<sub>2</sub>C(O)Me}Cl]<sub>n</sub>, a Key Product for the Síntesis of Acetylplatinum(II) Complexes”. Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Bautista, D. *Organometallics*, **2001**, *20*, [2767-2774](#).
- 3) “Coordination of the Trost modular ligand to palladium allyl fragments: Oligomers, monomers, and memory effects in catalysis”. Lloyd-Jones, G. C.; Stephen, S. C.; Fairlamb, I. J. S.; Martorell, A.; Dominguez, B.; Tomlin, P. M.; Murray, M.; Fernández, J. M.; Jeffery, J. C.; Riss-Johannessen T.; Guerziz, T. *Pure Appl. Chem.*, **2004**, *76*, 589-601
- 4) “An unprecedented process involving normal and redox transmetallation reactions between Hg and Pt affording the unexpected K[Pt<sub>2</sub>{CH<sub>2</sub>C(O)Me}<sub>6</sub>(μ-Cl)<sub>3</sub>] complex: the key role of X-ray powder diffraction in unravelling its nature and structure” Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Sironi, A.; Masciocchi, N. *Chem. Commun.*, **2005**, [1967-1969](#)
- 5) “Reactivity of [Pd{CH<sub>2</sub>C(O)Me}Cl]<sub>n</sub> toward Isocyanides”. Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Bautista, D.; Jones, P. G. *Organometallics*, **2005**, *24*, [2516-2527](#)
- 6) “The First Family of Acetyl Platinum(IV) Complexes. Mono, Bis and Tris(acetyl) Derivatives”. Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Bautista, D. *Organometallics*, **2006**, *25*, [4404-4413](#).
- 7) “Acetyl Platinum(II) Complexes”. Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Aullón G.; Bautista, D. *Organometallics*, **2007**, *26*, [6155-6169](#).
- 8) “New Acetyl Palladium(II) Complexes”. Vicente, J.; Arcas, A.; Fernández-Hernández, J. M.; Bautista, D. *Organometallics*, in press (accepted).

**Scientific Meetings,(poster contributions)**

- “Un Nuevo Producto de Partida para la Síntesis de Acetonil Complejos de Paladio”, J. Vicente, A. Arcas, J. M. Fernández-Hernández, D. Bautista. XIX<sup>th</sup> Reunión del Grupo Especializado de Química Organometálica. Valladolid (España). 19-21 julio, 2000.
- “Symposium on Organometallic Chemistry GEQONOVA’01”. Junio 2001, Madrid (España)
- “Reactivity of Acetylplatinum(II) Complexes Toward Isonitriles”, J. Vicente, A. Arcas, J. M. Fernández-Hernández, D. Bautista. XX<sup>th</sup> International Conference on Organometallic Chemistry. Corfú (Grecia). 7-12 julio, 2002.
- “Síntesis y Caracterización de Nuevos Acetonil Complejos de Pd(II) y Pt(II)”, J. Vicente, A. Arcas, J. M. Fernández-Hernández, D. Bautista. XXII<sup>th</sup> Reunión del Grupo Especializado de Química Organometálica. Ciudad Real (España). 12-14 julio, 2004.

**Scholarships and Awards:**

- |                 |  |
|-----------------|--|
| 2008-2009       | 2 year Postdoctoral Research Fellowship from “Fundacion Seneca” (Region de Murcia, Spain).   |
| 2004-2007       | Research Fellowship from Fundación Cajamurcia  |
| 2003-2004       | Research Fellowship the Grupo de Química Organometálica de la Universidad de Murcia (Spain). Research Project: Synthesis and Reactivity of Coordination and Organometallic Compounds”. |
| 1999-2003       | 4 year Ph. D. Fellowship from “Fundación Séneca” (Región de Murcia. Spain)   |
| 07.1999-10.1999 | Erasmus Fellowship. Universidad de Kaiserslautern (Alemania). 3 months.  |

**Competences and Personal skills:**

*Languages:* Spanish (mother tongue); English (Fluent); German (Basic)

*Technical skills:*

Organic and inorganic synthesis and molecular characterization: IR, vis-UV and NMR spectroscopy, GC-MS, ESI-MS, HPLC, monocrystal X-ray diffraction. Glove-box and Schlenk-line techniques, column and plate chromatography.

*Teaching experience*

- Practical courses on Inorganic Chemistry at University of Murcia (March, 2002 and 2003).
- Supervisor of undergraduate student research work.
- High School teacher (2007, 2 months)

*Computer skills and competences*

Operating systems (Windows 98, 2000, XP), Microsoft Office Package, Data processing (MestreC, ChemOffice), Bibliography tools (Scifinder Scholar, ISI Web of Knowledge, EndNote 9, Cambridge Crystallographic Data Base).

*Other competences*

Knowledge of quality control and assurance systems in chemical and pharmaceutical companies.

**References**

Prof. Jose Vicente Soler  
Departamento de Química Inorgánica,  
Universidad de Murcia, Murcia, Spain  
Tel. +34 968364143  
e-mail: [jvs1@um.es](mailto:jvs1@um.es)

Prof. Aurelia Arcas García  
Departamento de Química Inorgánica,  
Universidad de Murcia, Murcia, Spain  
Tel. +34 968364143  
e-mail: [aurelia@um.es](mailto:aurelia@um.es)

Prof. Guy Lloyd-Jones  
School of Chemistry  
University of Bristol Cantock's Close  
Bristol, BS8 1TS, UK  
Tel. +44 (0)117 928 8165  
e-mail: [Guy.Lloyd-Jones@bristol.ac.uk](mailto:Guy.Lloyd-Jones@bristol.ac.uk)