### **Curriculum Vitae**

#### 1. Personal data

Surname: Lambert First name: Stéphanie

Professional address: Laboratory of Chemical Engineering – Nanomaterials,

Catalysis, Electrochemistry Institute of Chemistry, B6a

University of Liège B-4000 Liège, Belgium stephanie lambert@ulg.ac

E-mail address: stephanie.lambert@ulg.ac.be

#### 2. Education

Ph.D. thesis in Applied Sciences (Chemical Engineering), University of Liège

"Development of Pd, Ag and Cu based mono- and bimetallic cogelled catalysts and their use in hydrodechlorination and oxidation reactions"

Supervisor: Professor Jean-Paul Pirard

Graduation date: December 10, 2003, diploma obtained with the highest distinction (average mark > 16.6/20)

Ingénieur Civil Chimiste (M.S. in Chemical Engineering), University of Liège, July 1, 1999, diploma obtained with the highest distinction (average mark > 16.6/20)

M.Sc. thesis: "Préparation par procédé sol-gel et caractérisation de catalyseurs métalliques supportés sur la silice"

Supervisor: Professor Jean-Paul Pirard

Graduation date: July 1, 1999

#### 3. Professional career

2004-2005 : Researcher Engineer at Nanocyl Society

2006 : Post-doctoral researcher at the Laboratory of Chemical Engineering of the University of Illinois at Chicago (Pr. John R. Regalbuto), USA

2007-2008: Post-doctoral researcher at the Charles Gerhardt Institute in Montpellier (Dr. Michel Wong Chi Man), France

Since 10/01/09: F.R.S. – F.N.R.S. Research Associate and Associate Professor at the

Department of Chemical Engineering – Nanomaterials, Catalysis,

Electrochemistry of the University of Liège, Belgium.

Since 01/01/2016: Co-Chair of the Department of Chemical Engineering.

## 4. Fields of researches: Heterogenous Catalysis and Catalytic Reactors

- Synthesis by sol-gel process of mono- or bimetallic catalysts supported on inorganic xerogels or aerogels;
- Physico-chemical characterisation of support and metal active sites (texture, morphology, metal dispersion and localisation, nanoparticles composition in the case of bimetallic catalysts, surface composition of alloys, ...);

- Development and optimisation of catalytic processes (hydrodechlorination, hydrogenation, oxidation of chlorinated volatile compounds, catalytic epuration of biogas, photocatalysis degradation of wastes in gaseous, aqueous and solid mediums);
- Study of mass and heat transfer inside catalysts (local diffusion calculations, experimental tests to detect diffusional limitations, ...);
- Study of the kinetics of catalytic reactions and of their mechanisms by fitting of phenomenological kinetic models on experimental data (experimental design, data statistical treatment, optimisation and statistical tests of models, ...).

# 5. 70 publications, 12 book chapters and 1 patent.

12 Invited lectures.

Member of Local Organizing Committee of SOL-GEL 2017, 3-8 septembre 2017, Liege, Belgium.

#### 6. Grants and awards

- 1. Prizewinner for Young Researchers delivered by the ROTARY Club de Liège for the most interesting PhD thesis in progress and realized at the University of Liège, October 26, 2002.
- 2. Prizewinner of a Student Scholarship Award 2003 delivered at the 18<sup>th</sup> North American Catalysis Meeting, Cancun, Mexique, for a PhD thesis in progress, June 6, 2003.
- 3. Prizewinner of the "Prix Frédéric Swarts" delivered by the Royal Belgian Academy of Sciences, Literature and Fine Arts for the most interesting PhD thesis in chemical engineering, December 11, 2004.
- 4. Prizewinner of the "Prix Triennal Jules Delruelle" (Three-year Prize Jules Delruelle) delivered by AILg (association of engineers from the University of Liège) for the most interesting PhD thesis in the field of non-ferrous metals or mineral chemistry, February 17<sup>th</sup>, 2005.
- 5. Prizewinner of the "Prix président André Leroux" (Annual Prize André Leroux) delivered by the "University of Liège's friends" for the most interesting PhD thesis from the University of Liège, November 14<sup>th</sup>, 2005.
- 6. Fulbright grant-in-aid delivered by the Commission for Educational Exchange between The United States of America, Belgium and Luxembourg, for the post-doctoral stay at the University of Illinois at Chicago, in the Laboratory of Chemical Engineering directed by Professor John R. Regalbuto, March 29<sup>th</sup>, 2006.
- 7. Three grants-in-aid delivered by the European Framework of Excellence "FAME: Functionalised Advanced Materials and Engineering: Hybrids and Ceramics", for postdoctoral stays at the "Ecole Nationale Supérieure de Chimie de Montpellier", in the "Laboratoire d'Architectures Moléculaires et Matériaux Nanostructurés" directed by Professor Michel Wong Chi Man, January 18<sup>th</sup>, 2007, July 10<sup>th</sup>, 2007 and December 12<sup>th</sup>, 2007.