

Loïc Simonin

Speciality: Materials chemistry, energy storage and conversion, electrochemistry

Personal details:

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| Date of birth: | April 5 th , 1978 | Tel: | +31(0) 15 213 9513 |
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Objectives:

- Use my expertise in the field of materials chemistry and electrochemistry, my creativity, my skills in communicating and team-working.
- Apply these competencies to ambitious research and development projects in the field of energy storage and energy conversion like batteries and fuel cells.

Education:

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| 15/01/2004 - 15/01/2008 | PhD in materials chemistry at TUDelft (Delft University of Technology) Research Group: DelftChemTech, Laboratory for NanoStructured Materials. Research topic: Sn and Sb nano-materials for lithium battery negative electrodes. Supervisors: Dr. E. Kelder, Prof. J. Schoonman, Prof. S. Picken. |
| 01/10/2001 - 30/09/2003 | Master's degree in Materials chemistry at Université de Provence (Marseille, France): Subject: Thin films and divided materials (DESS Matériaux Minces ou Divisés). |
| 01/10/1996 -30/09/2001 | Bachelor's degree in Physics and Chemistry (Licence Sciences Physiques) at Université de Perpignan / Université de Provence. |
| 1993-1996 | Scientific high school degree. Lycée Jean Lurçat, Perpignan. |

Work experience:

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| Current position (until December 2008) | Post-Doctoral position at TUDelft. Synthesis and characterisation of new cathode materials for Li-ion batteries. |
| 15/01/2004 - 15/01/2008 | PhD at TUDelft. Laboratory work (Synthesis and characterisation, glove box operation and maintenance), redaction of scientific literature, oral presentations, teaching and supervision, contribution to different international conferences and project meetings. |
| 01/04/2003 - 30/09/2003 | Internship (Master's project) in CEA-GENEC laboratory, Cadarache, France. Management assistance of a European network of renewable energy storages (INVESTIRE) |

January 2001 Internship in MADIREL laboratory, Marseille, France.
Modulation modes in Thermoporometry (pore size measurement using low temperature Differential Scanning Calorimetry)

Skills:

Technical: X-Ray Diffraction, Transmission and scanning electron microscopy, Electrochemistry (EIS, CV, potentiometry, Amperometry...), thermo-analysis (TGA, DSC...). Glove box operation and maintenance. Spark Discharge Generator. Chemical synthesis. Gas phase synthesis.

Computer:

- Operating Systems: Windows, MacOS, Unix
- Software: Word, Excel, Origin, Powerpoint, LaTeX, Photoshop, Paintshop pro, etc.
- Programming languages: Pascal, Basic, Fortran, HTML.

Languages: **French:** Mother Tongue, **English:** Fluent, **Dutch,** **Spanish:** basic skills

Publications:

- 2008** Synthesis of Nanoparticles of Cu, Sb, Sn, SnSb and Cu₂Sb by Densification and Atomization Process
Journal of Nanoscience and Nanotechnology Vol.8, 1-7, 2008
U. Lafont, L. Simonin, N.S. Tabrizi, A. Schmidt-Ott, and E.M. Kelder
- 2008** SnSb micron-sized particles for li-ion batteries.
Journal of Power Sources, Volume 180, issue 2, June 2008, Pages 859-863,
L. Simonin, U. Lafont, and E.M. Kelder.
- 2007** Sb/O nano-composites produced via Spark Discharge Generation for Li-ion battery anodes,
Journal of Power Sources, Volume 174, Issue 2, 6 December 2007, Pages 805-809,
L. Simonin, U. Lafont, N. Tabrizi, A. Schmidt-Ott and E.M. Kelder
- 2007** Carbon coating via an alkyl phosphonic acid grafting route: Application on TiO₂,
Journal of Power Sources, Volume 174, Issue 2, 6 December 2007, Pages 1104-1108,
U. Lafont, L. Simonin, M. Gaberscek and E.M. Kelder
- 2007** Mg-doped LiNi_{0.5}Mn_{1.5}O₄ spinel for cathode materials,
Journal of Power Sources, Volume 174, Issue 2, 6 December 2007, Pages 847-851,
C. Locati, U. Lafont, L. Simonin, F. Ooms and E.M. Kelder
- 2007** Sn-Co compound for Li-ion battery made via advanced electrospraying
Journal of Power Sources, Volume 174, Issue 2, 6 December 2007, Pages 428-434,
M. Valvo, U. Lafont, L. Simonin and E.M. Kelder.
- 2003** Evaluation and perspectives of storage technologies for PV electricity.
Proceedings Of 3rd World Conference On Photovoltaic Energy Conversion, Volumes A-C, 2003, Page 2194,
M. Perrin, P. Malbranche, F. Mattera, L. Simonin, D. U. Sauer, P. Lailier, A. Joessen, and B. Willer., Vols A-C,
p. 2194, 2003.

Personal experience and hobbies:

Music: Saxophone with jazz and pop-music bands. Musical studies in conservatoire. Guitar.

Travelling: (Spain, Poland, Czech republic, Romania, Morocco, Vietnam, Cambodia...).

Internet: Webmaster of "Agnes Plume Photography" (<http://ag.plume.free.fr>).

Sports: Climbing, hiking, bicycle, badminton, swimming...

Photography: Digital and analog photography (good knowledge in dark room work).