

EL BLIDI Lahssen

Nationality : Moroccan

Date of Birth: 17 février 1979 El Jadida (Morocco)

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EDUCATION

2003- 2006: Ph D in Organic and Bioorganic chemistry

Laboratory: synthesis and study of systems with biologic interest (SEESIB) **UMR 6504**, Université Blaise Pascal, Clermont Ferrand (France).

Subject: « *chemoenzymatic Synthesis and evaluation of glycosidases inhibitors* ».

Referees : M. Lemaire (supervisor), J. Bolte (supervisor), O. Martin, C. Augé, C. Taillefumier, C. Nugier-chauvin.

2003: Master in Organic and Bioorganic chemistry.

Université Blaise Pascal, Clermont Ferrand (France).

Main subjects: Organic chemistry, inorganic chemistry, theoretical chemistry, physical chemistry of interfaces, medicinal chemistry....

2001: Bsc in chemistry

Université Chouaib Doukkali, Morocco.

Main subjects: Organic chemistry, thermodynamics, kinetic, spectroscopy, theoretical chemistry.....

PROFESSIONAL EXPERIENCE

Since Aug 2012: Assistant Professor

Department of Chemical Engineering, College of Engineering
King Saud University, Ryadh, Kingdom of Saoudi Arabia.

Feb 2011, June 2011: Part-time lecturer

Level: licence

Qulaity management, food formulation, drug formulation

Lecture (45h), Tutorials (24h), pratical work (20h).

Université Cadi Ayyad, science faculty of Safi, Morocco.

Oct 2009, Aug 2010: ATER (Teaching Assistant Fellowship) (294 hours)

Level: two year diploma from a university institute of technology
Practical work in inorganic chemistry
Tutorials in physical chemistry, thermodynamics, inorganic chemistry
Laboratory URCOM, Université Le Havre
Alkaloid synthesis of Rosettacin, Topoisomerase I inhibitors.
supervised by Prof. A. Daich.

Sept 2007, Sept 2009: **Post Doctoral Research**
(2 years)

Chemistry Laboratory of Provence, Organic chemistry Group
Université Paul Cézanne, Marseille, France
Radical and Enzyme Catalyzed Dynamic Resolution of Amines
supervised by Dr. G. Gil and Dr. S. Gastaldi.

Sep 2006, Aug 2007: **ATER** (Teaching Assistant Fellowship) (246 hours)

Level: Licence, Master, engineering school (biologic engineering)
Practical work in organic chemistry and inorganic chemistry
Tutorials in organic chemistry
Laboratory SEESIB, Université Blaise Pascal, Clermont Fd, France
Total synthesis of Cyclotheonamide C. supervised by Dr. S. Faure.

Oct 2003, Nov 2006: **PhD Research**

Laboratory: synthesis and study of systems with biologic interest,
Université Blaise Pascal, France
chemoenzymatic Synthesis and evaluation of glycosidases inhibitors.
supervised by Prof. M. Lemaire and Prof. J. Bolte.

2004: Tutorials in Organic chemistry (88hours), medical school (first year)
Université Blaise Pascal, France.

2003: Tutorials and Practical work in office automation, Level : Licence
Université Blaise Pascal, France.

SKILLS

- **Synthesis organic:** total synthesis, multi-étapes, heterocyclic chemistry and peptidic, biocatalysis, radical chemistry, coupling reactions.
- **Analytical Methode :** enzymatic kinetic, NMR, HPLC (chirale), CPV (chirale).
- **Scientific software :** ChemDraw, Beilstein, SciFinder, Xwin.
- **Languages :** English, French.

RESEARCH PROJECT

- 1- Towards pharmacological chaperone therapy for the treatment of genetic lysosomal storage disorders (Principal investigator: NPST program 2013: 13-MED1022-02).
- 2- Production of biodiesel from seeds using bio-catalysis (researcher, NPST project 11-ENE2115-02).

SUPERVISING ACTIVITIES

- 1- Séverine Bouillet, Engineer training, 3th year, Clermont-Ferrand's Superior National School of Chemistry, technological project (2004).
« *chemoenzymatic Synthesis of glycosidases inhibitors* ».
- 2 Aurélien Tixier, Bsc training, Montluçon, France (2006) (3 months).
« *Contribution in chemoenzymatic Synthesis and evaluation of glycosidases inhibitors* ».
- 3- Aurilie Namoune, PhD student, Université Le Havre, 2009, (1 year)
« *Synthesis of a new series of aromathécines analogues potential inhibitors of topoisomerase-I* »

PUBLICATIONS AND COMMUNICATIONS

- Publications

- 1- *Improved Straightforward Chemical Synthesis of Dihydroxyacetone Phosphate (DHAP) through Enzymatic Desymmetrization of 2,2-Dimethoxypropane-1,3-diol.*
F. Charmantray, **L. El Blidi**, T. Gefflaut, L. Hecquet, J. Bolte and M. Lemaire.
J. Org. Chem. **2004**, 69, 9310-9312.
- 2- *Straightforward synthesis of a valioline analog based on an enzymatic aldol reaction and a highly stereoselective intramolecular Henry reaction.*
L. El Blidi, D. Crestia, E. Gallienne, C. Demuynck, J. Bolte and M. Lemaire.
Tetrahedron: Asymmetry, **2004**, 15, 2951-2954.
- 3- *Straightforward chemo-enzymatic synthesis of new aminocyclitols, analogues of valioline and their evaluation as glycosidase inhibitors.*
L. El Blidi, M. Ahbala, J. Bolte and M. Lemaire.
Tetrahedron: Asymmetry, **2006**, 17, 2684-2688.
- 4- *Total Synthesis of Cyclotheonamide C by Use of an α -Keto Cyanophosphorane Methodology for Peptide Assembly.*
S. P. Roche, S. Faure, **L. El Blidi**, and D. J. Aitken.

Eur. J. Org. Chem. **2008**, 5067–5078.

- 5- *N*-Acyl glycines as acyl donors in serine protease-catalyzed kinetic resolution of amines. Improvement of selectivity and reaction rate.
M. Nechab, **L. El Blidi**, N. Vanthuyne, S. Gastaldi, M. P. Bertrand, and G. Gil.
Org. Biomol. Chem., **2008**, 6, 3917–3920.
- 6- *En Route to (S)*-Selective Chemoenzymatic Dynamic Kinetic Resolution of Aliphatic Amines. One-Pot KR/Racemization/KR Sequence Leading to (*S*)-Amides.
L. El Blidi, M. Nechab, N. Vanthuyne, S. Gastaldi, M. P. Bertrand, and G. Gil.
J. Org. Chem., **2009**, 74, 2901-2903.
- 7- *Fructose-1,6-Bisphosphate Aldolase-Mediated Synthesis of Aminocyclitols (Analogues of Valiolamine) and their Evaluation as Glycosidase Inhibitors.*
L. EL Blidi, Z. Assaf, F.Camps Bres, H. Veschambre, V. Thery, J. Bolte, M. Lemaire
ChemCatChem, **2009**, 1, 463-471.
- 8- *Switching from (R)- to (S)-selective chemoenzymatic DKR of amines involving sulfanyl radical-mediated racemization*
L. El Blidi, N. Vanthuyne, D. Siri, S. Gastaldi, M. P. Bertrand, and G. Gil.
Org. Biomol. Chem., **2010**, 8, 4165–4168.
- 9- *Total syntheses of Rosettacin*
L. El blidi, A. Namoune, S. Coumesse and A. Daich
Org. Biomol. Chem, submitted

- **Chapter in books**

Straightforward Fructose-1,6-Diphosphate Aldolase mediated synthesis of aminocyclitols
M. Lemaire and **L. El Blidi**, *Practical Methods in Biocatalysis and Biotransformation*, Eds J. Whittall and P. Sutton, VCH-Wiley, **2010**, 206-211.

- **Oral Communications**

- 1- *Synthesis of aminocyclitols, valioline analogues, via fructose-1,6-bisphosphate aldolase.*
L. El Blidi, M. Lemaire, J. Bolte, SAJEC, Villeneuve d'Ascq, France, october 2005.
- 2- *Chemo-enzymatic Synthesis and inhibition proprieties of aminocyclitols, analogues of valioline.*
L. El Blidi, J. Bolte, M. Lemaire, international Symposium of molecular chemistry and bioactives molecules, Meknès, Morocco, May 2006.

- **Posters**

- 1- *Fructose-1,6-diphosphate aldolase mediated syntheses of aminocyclitols, analogues of valioline.*
L. El Blidi, C. Demuynck, E. Gallienne, M. Lemaire, J. Bolte, CBSO, France, april 2004.

- 2- *Synthesis of aminocyclitols, valioline analogues, via fructose-1,6-bisphosphate aldolase.*
L. El Blidi, M. Lemaire, J. Bolte, SAJEC, Villeneuve d'Ascq, France, october 2005.
- 3- *N-Acyl glycines as acyl donors in serine protease-catalyzed kinetic, resolution of amines. Improvement of selectivity and reaction rate.*
M. Nechab, **L. El Blidi**, N. Vanthuyne, S. Gastaldi, M. P. Bertrand, G. Gil, Rcom 5, Marseille, France, Mai 2008.

REFERENCES

Pr. **Marielle LEMAIRE**, Laboratory SEESIB UMR 6296. PhD. supervisor, 24 avenue des Landais, Campus des Cézeaux, Université Blaise Pascal 63177 AUBIERE.
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Dr. **Stéphane GASTALDI**, CR-CNRS, UMR 6517, Chimie, Biologie et Radicaux Libres, Laboratoire de Chimie Moléculaire Organique, Faculté des Sciences Saint Jérôme - Case 562 Av. Escadrille Normandie-Niemen, F-13397 MARSEILLE CEDEX 20.
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Dr. **Yousef Alsoghayer**, Chemical Engineering Department, College of Engineering, PO Box 800, King Saud University, Riyadh 1142, King Saudi Arabia.
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