

Dr. Laurance Bourghli

Curriculum Vitae

➤ PERSONAL INFORMATION

Nationality	Jordanian
Place & Date of Birth	Amman 1 st April 1972
Marital Status	Married
Home Address	P. O. Box 6907, Amman 11118, Jordan
Mobile	+962 796403340
Work Address	Faculty of Pharmacy, Al-Zaytoonah University of Jordan, P. O. Box 130, Amman 11733, Jordan
Email	laurance.bourghli@zuj.edu.jo lmsbourghli@gmail.com

➤ EDUCATION

PhD, Organic Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, U.K (Oct 1993- Oct 1998).

Title of Thesis: Studies Related to Anthracyclines; Supervisor: Prof. R. J. Stoodley

BSc, Applied Chemistry, Jordan University of Science and Technology, Irbid, Jordan (Sep 1989- June 1993).

➤ PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Pharmaceutical Sciences, College of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan (1/3/2015-to date)

Courses: *Pharmaceutical Organic Chemistry I, Pharmaceutical Organic Chemistry II, Practical Pharmaceutical Organic Chemistry, General Chemistry for Pharmacy Students, General Chemistry for Nursing Students, Practical General Chemistry.*

Chemistry Section Head, Research and Development Department, Jordan Company for Antibody Production (MONOJO), Amman, Jordan (21/1/2013-31/1/2015).

Main duties:

- *Chromatographic separation & spectroscopic characterization of isolated organic compounds from selected natural products.*
- *Design and synthesis of polyphenolic compounds with potential antibacterial properties.*

Design & synthesis of dendrimers for drug encapsulation/solubilization.

Assistant Professor, Department of Chemistry, University College at Qunfudah, Umm Al-Qura University, Saudi Arabia (28/9/2010-16/1/2013).

Courses Taught: *General Chemistry, Organic Chemistry I, Organic Chemistry II, Physical Organic Chemistry, Heterocyclic Chemistry, Spectroscopic Identification of Organic Compounds.*

Assistant Professor, Department of Chemistry, Al-Hussein Bin Talal University, Ma'an, Jordan (26/9/2004-11/ 9/2011).

Founding member of the department of chemistry. Participated in setting up the study plan for a BSc degree in Chemistry. Constructed and continually developed curriculum of all organic chemistry courses. Participated in preparation of General Chemistry I and II lab manuals. Head of the department for one academic year 2005/2006. Member in several departmental committees for establishing the department's laboratories and warehouse, and for recruiting faculty members and teaching assistants. Academic advisor for students. Supervision of 7 undergraduate projects (One of my students won the first place of the best student award from the Jordan Ministry of Higher Education). Council Member of the Faculty Staff Development Center for one academic year (2006/2007).

Courses taught: *General Chemistry I and lab, General Chemistry II and lab, Organic Chemistry I and lab, Organic Chemistry II and lab, Organic Chemistry III, Organic Chemistry for Non-Chemistry Students and lab, Introduction to Polymer Chemistry, Chemical Literature, Special Topics in Organic Chemistry (Heterocyclic Chemistry), Research Project.*

Researcher, Industrial Chemistry Center, Royal Scientific Society, Amman, Jordan (2/2/2003-30/9/2004)

Main duties:

- *Organic Materials Department Head: this department included three technical laboratories: food lab, pesticides lab, and medical gases lab. These labs serve to analyze products and issue certificates of analyses for local and foreign companies. Analytical methods of analyses are according to the testing methods and standards set up by the Jordan Institution for Standards and Metrology.*

- *I was assigned the duty to establish a laboratory for olive oil analysis according to the testing methods and standards of the International Olive Oil Council, which were later adopted by the Jordan Institution for Standards and Metrology. Initiating and following up proficiency testing for olive oil in order to qualify to the United Kingdom Accreditation System.*

Full-Time Lecturer, Department of Applied Chemical Sciences, Jordan University of Science and Technology, Irbid, Jordan (11/2/2001-13/6/2002)
Courses taught: *General Chemistry I, General Chemistry II, General Chemistry, Organic Chemistry and lab, Organic Chemistry II*

Research Supervisor, Advanced Pharmaceutical Industries Co. Ltd., Amman, Jordan (16/8/1998-5/2/1999); then Organic Chemistry Section Head (6/2/1999-31/1/2001)

Main duties:

- *I was in charge of establishing a synthetic organic chemistry laboratory for the total syntheses of five active ingredients of drugs produced by the company from commercially available chemicals.*
- *I was responsible for designing the experimental procedures, performing the experiments for the syntheses of the candidate ingredients, and working up the reactions. The products isolated were characterized by IR & NMR spectroscopy.*

➤ FUNDED RESEARCH PROJECTS

Title of Research Project: **Synthesis and Characterization of Biodegradable Polyesters Derived from Bio-based Products**; Principal Investigator. *Research grant from Deanship of Scientific Research, Al-Zaytoonah University of Jordan (12/2015-8/2017).*

Title of Research Project: **Design and Synthesis of Aromatic Polysulfonate Dendrimers**; Co-Investigator. *Research grant from Deanship of Scientific Research, Jordan University of Science & Technology (2/2016- 2/2017).*

Title of Research Project: **Polysulfonimide Dendrimers: Design, Synthesis, and Applications**. *Host: Prof. Dr. Heinrich Lang, Chemnitz University of Technology, Chemnitz, Germany; Grant from DFG (German Research Foundation) (6-9/2009).*

Title of Research Project: **Tomato Seed Oil: Extraction, Composition, Properties, and Uses**. *Grant from Deanship of Scientific Research, Al-Hussein Bin Talal University (9/2005-9/2007)*.

➤ PUBLICATIONS

Published Manuscripts

- “**Preparation and Characterization of Alkyd Resins of Jordan Valley Tomato Oil**”, *J Polym Environ*, Vol. 22, 553-558 (2014).
- “**Total Synthesis of 8-Hydroxy-8-Methylidarubicinone**”, *Bioorg. Med. Chem.*, Vol. 12, 2863-2866 (2004).

Manuscripts in preparation

- “Synthesis and Characterization of Vanillin-based Polyesters”.
- “Design and Synthesis of a Sustainable Dendrimer based on Protocatechuic Acid”.

➤ ADDITIONAL PROFESSIONAL ACTIVITIES

Project Manager; "Specialty Chemicals Market Needs Analysis", Faculty for Factory (FFF) program, Higher Council of Science and Technology, Amman, Jordan (9/2008-11/2008)

The idea of the project was to define the most used chemicals in the local chemical industry and their quantities per year. This was achieved by compiling a database that describes the types of chemical industries, number of operating companies with their names, the raw materials they use in production, and their finished products. In the recommendation section of the report submitted to the program, I recommended to produce some raw materials in Jordan from local sources based on existing technologies, as this would possibly have valuable socio-economic outcome.

Project Manager; "Total Synthesis of Hydroxyitraconazole", Arabic Company for Drug Industries and Medical Appliances (ACDIMA), Amman, Jordan (2/2002-6/2002)

This project was carried out in the laboratories of ACDIMA. Hydroxyitraconazole is the metabolite of the drug itraconazole. It appears almost instantly in the blood serum of patients. ACDIMA was carrying out a bioequivalence study for a company when they needed the metabolite. I started the project by setting out a proposed synthetic

scheme for the target molecule and the anticipated budget to synthesize 100 mg. I wrote down the experimental procedures, and run most of the reactions by myself. I had two lab assistants working under my supervision to work-up the reactions. We utilized the available HPLC systems to determine the purity of the synthesized intermediates after confirming the structure by NMR spectroscopic analysis. It took 4 months from day one to submit the required amount of the target molecule. I concluded the project by presenting the results in front of a panel of ACDIMA administration.

➤ PROFESSIONAL MEMBERSHIPS

- Society of Chemical Industry (SCI), London, U.K
- Jordan Chemical Society, Amman, Jordan (I served as a member of the administration panel of the society for two consecutive years 2002/2003).

➤ CONFERENCES AND COURSES ATTENDED

I attended several national chemistry conferences organized by Jordan Chemical Society at several national universities. In addition, I attended the following workshops/courses/conferences:

- Financial Management Skills, organized by Business Development Center, Amman, Jordan (3/2014): 4-Day training workshop.
- Entrepreneurship Training Workshop “Empretec”, organized by Business Development Center, Amman, Jordan (9/2013): 5-Day training workshop.
- Modern Training and Pruning Systems in Olive Trees, organized by Jordan Agriculture Engineers Association, Amman, Jordan (4/2004): 5-Day training workshop.
- Strategic Management, organized by Royal Scientific Society, Amman, Jordan (5/2003): 5-Day course.
- Chemical Development and Scale-Up in the Fine Chemical Industry, organized by Scientific Update, London, U.K (2/2000): 4-Day course.
- Stereochemistry at Sheffield, University of Sheffield, England: attended three times 12/97, 12/96, 12/ 93: 1-Day Conference.