# Curriculum Vitae of Dr. Mahmoud El-Sebai











Université de Nice, France

# **Personal data**

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# **Qualifications**

| 4,0.0          |  |
|----------------|--|
| October 2014   | Lecturer, Faculty of Pharmacy, Mansoura University, <b>Egypt</b> .                   |
| onwards        |  |
| October 2012 - | Post-Doc Fellowship, Dep. of Biology and Dep. of Chemistry, University               |
| April 2014     | of Oulu, <b>Finland</b> .  |
| April 2014-    | Post-Doc Fellowship, Equipe Molécules Bioactives (Produits Naturels                  |
| September      | Marins), Université de Nice-Sophia Antipolis, <b>France</b> .                        |
| 2014           |  |
| October 2011-  | Lecturer, Faculty of Pharmacy, Mansoura University, <b>Egypt</b> .                   |
| October 2012   |  |
| 1/08/2007-     | PhD degree, with a Final Grade: <i>very good</i> , Bonn university, <b>Germany</b> . |
| 21/10/2011     |  |
| 1999-2003      | Master degree, Faculty of Pharmacy, Mansoura University, Egypt.                      |
| 1995 – 1997    | Military Service.  |
| 1989 -1995     | B.Sc. of pharmaceutical sciences, Final Grade: very good-Honour,                     |
|                | Faculty of Pharmacy, Mansoura University, Egypt.                                     |

#### **Publications**

- 1.Elsebai M. F., et al., <u>Journal of Virology</u> (2016) "Pan-genotypic hepatitis C virus inhibition by natural products derived from the wild Egyptian artichoke", 90, 4, 1918-1930.
- 2.Elsebai M. F., et al., <u>Food & Function</u> (2016) "The Wild Egyptian Artichoke as a Promising Functional Food for the Treatment of Hepatitis C Virus as Revealed via UPLC-MS and Clinical Trial", 7, 7, 3006-3016.
- 3. Elsebai M. F., et al., <u>Molecules</u> (**2016**) "Unusual phenalenone derivatives from the marinederived fungus *Coniothyrium cereale*", 21, 2, 1-13.
- 4. Elsebai M. F., and Ghabbour H. A. <u>Tetrahedron Letters</u> (**2016**) "Isocoumarin Derivatives from the Marine-Derived Fungus *Phoma* sp. 135", *57*, 354-356.
- 5.Elsebai M. F. (co-author) et al., <u>Industrial Crops and Products</u> (2016) "Chemical composition and in vitro antimicrobial, insecticidal and antioxidant activities of the essential oils of <u>Mentha pulegium</u> L. and <u>Mentha rotundifolia</u> (L.) Huds growing in Algeria", 88, 96-105.
- 6. Elsebai M. F., et al., *Natural Product Communications* (**2015**), "New bicyclo-spartinols from the marine-derived fungus *Phaeosphaeria spartinae*", 10(4), 637-639.
- 7. Elsebai M. F. and Itidal Mohamed, <u>Natural Product Research</u> (**2015**) "New pregnane glycoside derivative from *Caralluma retrospiciens* (Ehrenb)", 29(15): 1426-1431.
- 8. Patent application: (2015), Egyptian patent office, EG2016000014, titled "Potent and Broad Spectrum Compounds against all genotypes of Hepatitis C Virus (HCV)".
- 9. Patent application: (2014), European Patent Application, WO2014008901(A2), titled: "The use of Artichoke for eradication of Hepatitis C virus (HCV)".
- 10. Elsebai M. F., et al., *Natural Product Reports* (**2014**) "Fungal phenalenones: chemistry, biology, biosynthesis and phylogeny", 31, 628-645.
- 11. **Book chapter:** LEGRAVE Nathalie, Mahmoud F. Elsebai, MEHIRI Mohamed, AMADE Philippe, "Marine Polyacetylenes: Distribution, Biological Properties, and Synthesis" of the book "Studies in Natural Products Chemistry, Atta-ur-Rahman, FRS", (2015), Copyright © 2015 Elsevier, volume 45, pages 251-292.

- 12. **Book chapter:** Mahmoud F. Elsebai, Mysore V. Tejesvi, Anna Maria Pirttilä, "Endophytes as a novel source of bioactive new structures" of the book "*Advances in Endophytic Research*, V.C. Verma and A.C. Gange (eds.)", (**2014)**, DOI 10.1007/978-81-322-1575-2 10, <sup>©</sup>Springer India 2014, pages 191-202.
- 13. Elsebai M. F., et al., <u>Steroids</u> (**2013**) "Caught between triterpene- and steroid-metabolism: 4α-carboxylic pregnane-derivative from the marine alga-derived fungus *Phaeosphaeria spartinae*", 78(9), 880-883.
- 14. Elsebai M. F., et al., *European Journal of Organic Chemistry* (**2012**), "Polyketide skeletons from the marine alga-derived fungus *Coniothyrium cereale*", 6197–6203.
- 15. Elsebai M. F., et al., <u>Medicinal Chemistry Letters</u> (**2011c**), "Identification of a Potent and Selective Cannabinoid CB1 Receptor Antagonist from *Auxarthron reticulatum*", 2, 866-869.
- 16. Elsebai M. F., et al., *Journal of Natural Products* (**2011b**), "HLE-inhibitory alkaloids with a polyketide skeleton from the marine-derived fungus *Coniothyrium cereale*", 74, 10, 2282-2285.
- 17. Elsebai M. F., et al., <u>Organic & Biomolecular Chemistry</u> (**2011a**), "Antimicrobial phenalenone derivatives from the marine-derived fungus *Coniothyrium cereale*", 9, 3, 802-808.
- 18. Elsebai M. F., et al., *Natural Product Communications* (**2010**), "Spartinoxide, a new enantiomer of A82775C with inhibitory activity toward HLE from the marine-derived Fungus *Phaeosphaeria spartinae*", 5, 7, 1071-1076.
- 19. Elsebai M. F., et al., *Planta Medica* (**2010**), "Novel phenalenone derivatives", 76, 12, SL\_58.
- 20. Elsebai M. F., et al., *Natural Product Communications* (**2009**), "New polyketides from the marine-derived fungus *Phaeosphaeria spartinae*", 4, 11, 1463-1468.
- 21. Elsebai M. F., et al., *Planta Medica* (**2009**), "New polyketides from the algicolous fungus Phaeosphaeria spartinae", 75, 9, PA83.
- 22. Elsebai M. F., et al., *Planta Medica* (2008), "Isolation and structure elucidation of new polyketides from the marine-derived fungus Phaeosphaeria spartinae", 74, 09, PB47.

- 23. Elsebai M. F., et al., *Mans. J. Pharm. Sciences* (**2002**), "Phytochemical and Biological investigation of *Leptadenia Pyrotechnica* decne growing in Egypt", 18, 2, 122-138.
- 24. Elsebai M. F. and Atanas G. Atanasov, submitted to *Critical Reviews in Biotechnology* (2016) "Cynaropicrin: a comprehensive research review and therapeutic potential outlook".
- 25. Elsebai M. F., "Elsebai effect; a new rule in the Nuclear Magnetic Resonance of compounds" (manuscript).
- 26. Elsebai M. F., et al., "Sesquiterpene Lactones from the Wild Egyptian Artichoke", submitted to *Planta Medica*.
- 27. Elsebai M. F., (co-author) et al., submitted to (submitted to <u>Journal of Natural Products</u>) (2016) "Reactive Oxygen Species (ROS) and Elastase Inhibitors: An Overview of Natural Antiinflammatory Discoveries during Recent Years".

## Scientific advisory board member and Reviewer of Journals and Publishers

"Journal of Natural Products", "Marine Drugs", "Journal of Ethnopharmacology", "Phytochemistry Reviews", "Bioorganic & Medicinal Chemistry Letters", "Natural Product Research", "Pharmaceutics (MDPI)", "Polish Journal of Food and Nutrition Sciences", "Mediterranean Journal of Biosciences", "Journal of Marine Natural Products", "Journal of Shipping and Ocean Engineering", "Scientific & Academic Publishing (SAP)", "Cardiovascular & Hematological Agents in Medicinal Chemistry", "Journal of Intercultural Ethnopharmacology", "ELSEVIER SCIENCE PUBLISHERS – AMSTERDAM, PROF. ATTA-UR-RAHMAN, FRS".

## **Analysis of Theses and Dissertations**

2015, 13-August, Master thesis of Mr. *Rogers Mwakalukwa*, Pharmacognosy Department, Muhimbili University of Health and Allied Sciences, Tanzania. Title of thesis: MEDICINAL USE, PHYTOCHEMICAL AND NUTRITIONAL PROPERTIES OF *CROTALARIA LABURNOIDES* KLOTZSCH.

## **Scientific missions**

- 2016, 27 March-4 April, External Examiner at Muhimbili University of Health and Allied Sciences, School of Pharmacy, Department of Pharmacognosy, **Tanzania**.
- 2015, 9-17-August, External Examiner at Muhimbili University of Health and Allied Sciences, School of Pharmacy, Department of Pharmacognosy, **Tanzania**.

• 2015, 8-14-March, External Examiner at Muhimbili University of Health and Allied Sciences, School of Pharmacy, Department of Pharmacognosy, **Tanzania**.

## **Honors & Awards and Scholarships**

- 2015, "Mansoura University Award جائزة الجامعة التشجيعية for the year 2015,
   Mansoura, Egypt.
- 2014, complete grant from the "European Union" for the "EU COST FA1103
   Training School 2014": "Isolation and characterization of fungal root endophytes",
   Grossbeeren-Berlin, Germany.
- 2013, Post-doctoral fellowship award from the French Government, at the Department of marine natural products, Université de Nice-Sophia Antipolis, France.
- 2012, Post-doctoral fellowship award from the Egyptian Government, at the Departments of Chemistry and Biology, University of Oulu, **Finland**.
- 2011 **Sweden**, Travel award of the "Phytochemical Society of Europe (PSE)" for the best oral presentation.

## **Academic work**

| Time         | Work   |
|--------------|--|
| 1995 – 2003  | Demonstrator, Faculty of Pharmacy, Mansoura University, Egypt.           |
| 2003 – 2007  | Assistant lecturer, Faculty of Pharmacy, Mansoura University, Egypt.     |
| April 2009 - | Wissenschaftlicher Hilfskraft (assistant scientist), university of Bonn, |
| October 2009 | Faculty of Pharmacy, Germany.  |
| 26 December  | Academic Lecturer, Faculty of Pharmacy, Mansoura University, Egypt.      |
| 2011 onwards |  |

## **Membership in Professional Associations**

- Phytochemical Society of Europe (PSE), membership number: PSE-1512.
- Member of the VAAM (Association for General and Applied Microbiology= Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM), membership number: 4935.

# Conferences / symposia / workshops

| Venue       | Title  | Time      |
|-------------|--|-----------|
| Egypt,      | 3 <sup>rd</sup> Conference of Pharmacognosy Dept. on Green Chemistry | May, 10,  |
| Mansoura    | (oral presentation, Coordinator)                                     | 2016      |
| University, |  |           |
| Faculty of  |  |           |
| Pharmacy    |  |           |
| Egypt,      | "1st PharmaSchool International Conference                           | February, |

| Mansoura                     | of Pharmaceutical Sciences" (oral presentation).  | 15-16,             |
|------------------------------|---|--------------------|
| University,                  |   | 2016               |
| Faculty of                   |   |                    |
| Pharmacy                     | "2nd International Conference on Natural Products Utilization:  | Octobor            |
| <b>Bulgaria</b> ,<br>Plovdiv | From Plants to Pharmacy Shelf' (oral presentation).   | October,<br>14-17, |
| i lovalv                     | Tront lands to Fharmacy Shell (Grai presentation).  | 2015               |
| Turkey,                      | MESMAP-2 "The Second Mediterranean Symposium on   | April, 22-         |
| Antalya                      | Medicinal and Aromatic Plants" (oral presentation).   | 25,                |
|                              |   | 2015               |
| Egypt,                       | 4 <sup>th</sup> Scientific Conference for Pharmacy Students (coordinator)   | April, 6-7,        |
| Mansoura,                    |   | 2015               |
| Faculty of                   |   |                    |
| Pharmacy                     |   |                    |
| Germany,                     | EU COST FA1103 workshop 2014: "Isolation and  | September          |
| Grossbeeren                  | characterization of fungal root endophytes"   | 8-12, 2014         |
| Finland, Oulu                | Seminar "Bioeconomy concept today and tomorrow",  | April 8,           |
|                              | university of Oulu  | 2014               |
| Germany,                     | Workshop "Screening for Antiviral Compounds", Department  | October            |
| Braunschweig,                | of Chemical Biology at Helmholtz Centre for Infection   | 14-16,             |
|                              | Research (Plenary Talker)   | 2013               |
| Finland, Oulu                | WARES conference of Water Research  | August 15,<br>2013 |
| Finland, Oulu,               | WATERS Seminar on UPC <sup>2</sup> (Ultra Performance Convergence   | December           |
| Department of                | Chromatography)   | 12, 2012           |
| Biochemistry                 |   |                    |
| Finland, Oulu,               | <sup>16</sup> th KAAMOS Symposium (oral presentation),  | December           |
| Department of                | https://wiki.oulu.fi/display/Kaamos/Timetable+and+Abstracts+2012  | 11-12,             |
| Biology                      |   | 2012               |
| Egypt,                       | International Workshop for "Computational Molecular   | September          |
| Mansoura,                    | Modelling and Drug Discovery"   | 2-3, 2012          |
| Mansoura                     |   |                    |
| University                   | The Ord Later of Control October 10 to 10 | NA I OO            |
| Egypt,                       | The 3 <sup>rd</sup> International Conference of Biological and  | March 20-          |
| Hurghada -                   | Environmental Sciences, ICBES (oral presentation)   | 24,                |
| Mansoura                     | The 2011 appual V/A AM mosting  | 2012<br>Santambar  |
| <b>Germany</b> ,<br>Bonn     | The 2011 annual VAAM meeting "Biology of Bacteria Producing Natural Compounds"  | September 28-30,   |
| DOM                          | Biology of Bacteria Froducing Natural Compounds   | 20-30,             |
| Germany,                     | International Symposium, NRW International Graduate   | September          |
| Bonn                         | Research School BIOTECH-PHARMA  | 12-13,             |
| Domi                         | Trescaron denote blot Earl 1 1 // (rivi)  | 2011               |
| Sweden,                      | 7 <sup>th</sup> European Conference on Marine Natural Products ( <b>Best</b>  | August 14-         |
| Strömstad                    | Oral Presentation and Travel Grant),  | <b>1</b> 8,        |
|                              | http://www.fkog.uu.se/7ecmnp/   | 2011               |
| Italy,                       | ESF-COST High-Level Research Conference on Natural  | September          |
| Acquafredda                  | Products Chemistry, Biology and Medicine III (oral  | 5-10, 2010         |
| di Maratea                   | presentation)   |                    |
| (near Naples)                | http://www.esf.org/index.php?id=6867  |                    |
| Germany,                     | 58 <sup>th</sup> International Congress and Annual Meeting of the   | August 29-         |

| Berlin         | Society for Medicinal Plant and Natural Product Research              | September   |
|----------------|---|-------------|
|                | (oral presentation)   | 2,          |
|                |   | 2010        |
| Poland, Lublin | 7 <sup>th</sup> International Symposium on Chromatography of Natural  | June 13-    |
|                | Products  | 17,         |
|                | joined with 6 <sup>th</sup> International Symposium of International  | 2010        |
|                | Society for the Development of Natural Products (oral                 |             |
|                | presentation)   |             |
| Switzerland,   | 57 <sup>th</sup> International Congress and Annual Meeting of the     | August 16-  |
| Geneva         | Society For Medicinal Plant and Natural Product Research              | 20,         |
|                |   | 2009        |
| Portugal,      | 6 <sup>th</sup> European Conference on Marine Natural Products,       | July 19-23, |
| Porto          | http://www.cgmdesign.net/6ECMNP/conference.htm                        | 2009        |
| Germany,       | Jahrestagung 2009, DPhG   | October 8-  |
| Bonn           |   | 11,         |
|                |   | 2008        |
| Greece,        | 7 <sup>th</sup> Joint Meeting of AFERP, ASP, GA, PSE & SIF on natural | August 3 –  |
| Athens         | products with pharmaceutical, nutraceutical, cosmetic and             | 8,          |
|                | agrochemical interest   | 2008        |
| Italy, Trieste | "RNA structure and function" by ICGEB and co-sponsored by             | April 6 –   |
|                | CEI (Central European Initiative)                                     | 11,         |
|                |   | 2008        |
| Egypt,         | Advanced biotechnological methods in organic wastes                   | May 15 –    |
| Alexandria     | treatment   | 20,         |
|                |   | 2002        |

## Research experience

Chemistry and biology of natural products including: all methods of extraction of natural products; chromatographic isolation and identification of the natural products using different types of chromatography such as VLC, HPLC, TLC, preparative HPLC, gel filtration chromatography, electrophoresis chromatography; structural elucidation of the isolated pure secondary metabolites using 1D and 2D NMR, UV, IR, optical rotation, LCMS, HRMS, elemental analysis, GCMS, X-ray crystallography and circular dichroism (CD); stereochemistry of natural products; biosynthesis of natural products, feeding experiments using <sup>13</sup>C labeled acetate units; semisynthesis; biological assays such as antimicrobial, antioxidant, cytotoxicity, assays towards protease enzymes, assays towards cannabinoid receptors; PCR, and gel electrophoresis; biotransformation; biocatalysis; plant tissue culture; metabolomics.

The teaching stuffs for the undergraduate, diploma, master and doctoral students including the following courses: spectroscopic methods for the characterization of organic and natural compounds (as NMR, HRMS, UV, IR, optical rotation,...etc), herbal medicine including Chinese herbal medicine, Egyptian herbal medicine; Alternative and

complementary medicine such as detoxification therapy, thermotherapy, Ayruvedic medicine, yoga, sauna, food supplements....etc; pharmacognosy courses of herbs, flowers, barks, leaves, woods, galls, subterranean drugs, seeds and fruits; contamination of herbal products by common contaminants such as heavy metals contamination, microbial contaminants. pesticides. chemical toxins. and chemical solvents: pharmaceutical microbiology; pharmaceutical biotechnology; chromatography; instrumental analysis; quality control of herbal products; phytochemistry including alkaloids, flavonoids, glycosides, carbohydrates, vitamins, hormones, volatile oils, .... etc; applied pharmacognosy; stereochemistry of natural products; biosynthesis of natural products, feeding experiments using <sup>13</sup>C labeled acetate units; semisynthesis; industrial microbiology; biotransformation; biocatalysis; plant tissue culture....

# **Training courses**

- 1- Credit hours system (University of Mansoura).
- 2- Communication Skills (University of Mansoura).
- 3- International Publishing of Research (University of Mansoura).
- 4- Legal and Financial Aspects in University Environment (University of Mansoura).
- 5- Code of Ethics (University of Mansoura).
- 6- Use of Technology in Teaching (University of Mansoura).
- 7- Competing for research funding (University of Mansoura).
- 8- Exams and students' evaluation system (University of Mansoura).
- 9- Managing research team (University of Mansoura).