
CURRICULUM VITAE

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Scopus *h* index: 24 (14-October-2021)

Scopus publications: 131

Scopus citations: 2508

<https://www.scopus.com/authid/detail.uri?authorId=51261031200>

Google Scholar *h* index: 27 (14-October-2021)

Google Scholar publications: 177

Google Scholar citations: 3113

<https://scholar.google.com/citations?user=WiD8Y1oAAAAJ&hl=en&authuser=1>

Education

- PhD** 2009. Synthesis of natural products and pharmaceutical intermediate, Faculty of Science and Engineering, Jacobs University, Bremen, Germany.
Thesis title:
"Improved Methodology for the Preparation of Chiral Amines (Important Chiral Building Blocks in Pharmaceutical Drugs and Natural Products Synthesis)"
- MSc** 2006. Nanomolecular Science, Faculty of Science and Engineering, Jacobs University, Bremen, Germany, graduated with a general grade Very Good, GPA 1.67.
- Post Graduate Diploma** 2004. Chemistry of Natural Products, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt, graduated with a general grade Excellent.
- BSc** 2000. Pharmaceutical Science, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt, graduated with a general grade Excellent with Honor (*Magna Cum Laude*, among the top 5% of the graduates).

Professional Experience

- 2021-Present **Professor**, Head of Pharmaceutical Biology Department, Faculty of Pharmacy and Biotechnology, the German University in Cairo, Cairo, Egypt.
- 2017-2021 **Associate Professor**, Head of Pharmaceutical Biology Department, Faculty of Pharmacy and Biotechnology, the German University in Cairo, Cairo, Egypt.
- 2016-2017 **Associate Professor (visiting, part-time)**, Department of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, Heliopolis University, Cairo, Egypt.
- 2015-2017 **Associate Professor**, Department of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- 2014-2015 **Lecturer (visiting, part-time)**, Department of Pharmacognosy and Natural Products Chemistry, Egyptian Russian University, Badr City, Egypt.
- 2013-2015 **Lecturer**, Department of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- 2011-2013 **Postdoctoral Fellow**, Graduate Institute of Natural Products, College of Pharmacy Kaohsiung Medical University, Kaohsiung, Taiwan.
- 2009-2011 **Lecturer**, Department of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- 2004-2009 **Teaching and Research Assistant**, Faculty of Science and Engineering, Jacobs University, Bremen, Germany.
- 2000-2004 **Teaching and Research Assistant**, Department of Pharmacognosy and Natural Products Chemistry, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- 2000-2004 **Part-time community pharmacist**, Osman, and El-Mahaba pharmacies.

Teaching Concepts and Methods (for a detailed description of each method, please check my teaching philosophy)

1. **Guided Inquiry-Based Learning**
2. **Predict-Discuss-Explain-Observe-Discuss-Explain (PDEODE) Strategy**
3. **Inquiry-Discovery Teaching Approach**
4. **Computer-Assisted Instruction (CAI)**
5. **Dual-Situated Learning Model (DSLML)**
6. **Hybridization Cognitive Strategy**
7. **Constructivist-Based Hands-On Activities**
8. **Process-Oriented Guided-Inquiry Learning (POGIL)**
9. **The Flipped Classroom**
10. **Animation-Based Instruction**

Courses Taught

Undergraduate courses:

1. Medical Botany
2. Pharmacognosy
3. Phytochemistry
4. Herbal Quality Control
5. Phytotherapy
6. Complementary Medicine
7. Herbal Medicine
8. Forensic Medicine
9. Pharmacy History and Pharmacy Law
10. Biotechnology
11. Tissue Culture
12. Organic Synthesis
13. Organic Methodology
14. Spectroscopy
15. Supramolecular Chemistry

Postgraduate Courses:

1. Advanced Analytical Techniques
2. Advanced Gas Chromatography
3. Advanced Spectroscopy
4. Advanced Complementary Medicine
5. Advanced High-Performance Liquid Chromatography
6. Advanced Spectroscopy
7. Research Writing and Research ethics
8. Research Methodology
9. CV, Cover Letter, and Motivational Letter Writing

Academic Accreditation Activities

- 1. Head of Database Committee, Faculty of Pharmacy, Ain-Shams University**

For the preparation of a digitalized database for all faculty and administrative members of the Faculty of Pharmacy, Ain-Shams University. This database was connected to the central database of Ain-Shams University. Important information was extracted from this database which allowed decision-makers to plan future goals based on solid evidence and monitor the progression of their implementation processes.
- 2. Member of Quality Assurance and Accreditation Unit, Faculty of Pharmacy, Ain-Shams University**

Responsible for auditing and revising all course specifications and reports of all departments at the Faculty of Pharmacy, Ain-Shams University. I organized educational sessions and seminars on how to prepare course specifications and reports according to National Academic Reference Standards. I headed a team of young academics who collected, revised, and organized a complete booklet of all course specifications and reports of all departments at the Faculty of Pharmacy, Ain-Shams University.
- 3. Head of Students Grades Committee, Faculty of Pharmacy, Ain-Shams University**

This committee oversees the process of collecting, arranging, and announcing students' grades. I was responsible for assuring that each process is done according to the accreditation regulations with the highest possible quality.
- 4. Head of Educational Development Committee, Faculty of Pharmacy, Ain-Shams University**

I was responsible for reviewing the current undergraduate pharmaceutical curriculum and suggesting future development to match current market needs and equip pharmacists with the most updated knowledge.
- 5. Head of Books Development Committee, Pharmacognosy Department, Faculty of Pharmacy, Ain-Shams University**

I was responsible to evaluate the current educational books produced by Pharmacognosy Department and suggest improvements. I was also responsible for assuring that each book fulfills all the Intended Learning Outcomes (ILOs) of each course.

Funded Projects

1. **Chemical biology on innovative biologically active metabolites from endosymbionts in Egyptian marine invertebrates**, Joint Egyptian-Japanese Scientific Cooperation, in collaboration with **Associate Professor Dr. Tomohisa Kuzuyama**, The Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan. The duration of the project is two years (2017-2019) with a budget of 300,000 Egyptian pounds for the Egyptian researchers.
2. **Gastroprotective, Hepatoprotective and Anti-Colitis Agents from Certain Medicinal Plants**, Ain-Shams Scientific Projects. The duration of the project is three years (2016-2019) with a budget of 60,000 Egyptian pounds.
3. **Master in Health Informatics / HEAL+**, in collaboration with Universidad de Alcalá, Al-Quds University, University van Amsterdam, University of Jordan, Birzeit University, University of Stockholm, Jordan University of Science and Technology, University of Cairo. The duration of the project three years (2015-2018) with a budget of 400,000 Egyptian pounds for the Egyptian researchers supported by the European Union.
4. **Industrial Pharmaceutical Alliance** in collaboration with 13 universities and research institutes in Egypt. The duration of the project three years (2017-2020) with a total budget of **10 million Egyptian pounds** and 400,000 Egyptian pounds for our group.

Selected Publications

1. Heteronemin, a Marine Sesterterpenoid-Type Metabolite, Induces Apoptosis in Prostate LNCap Cells via Oxidative and ER Stress Combined with the Inhibition of Topoisomerase II and Hsp90 Lee, M.-G.; Liu, Y.-C.; Lee, Y.-L.; **El-Shazly, M.**; Lai, K.-H.; Shih, S.-P.; Ke, S.-C.; Hong, M.-C.; Du, Y.-C.; Yang, J.-C.; Sung, P.-J.; Wen, Z.-H.; Lu, M.-C. *Mar. Drugs* **2018**, *16*, 204.
2. Breaking down Leukemia Walls: Heteronemin, a Sesterterpene Derivative, Induces Apoptosis in Leukemia Molt4 Cells through Oxidative Stress, Mitochondrial Dysfunction, and Induction of Talin Expression, Chen, Y.-C.; Lu, M.-C.; **El-Shazly, M.**; Lai, K.-H.; Wu, T.-Y.; Hsu, Y.-M.; Lee, Y.-L.; Liu, Y.-C. *Mar. Drugs* **2018**, *16*, 212.
3. GC-MS and GC-FID analyses of the volatile constituents of *Brachychiton rupestris* and *Brachychiton discolor*, their biological activities, and their differentiation using multivariate data analysis, Amany A. Thabet, Fadia S. Youssef, **Mohamed El-Shazly** & Abdel Nasser B. Singab, *Nat. Prod. Res.* **2018**, DOI: 10.1080/14786419.2018.1490908.

4. Comprehensive review on flavonoids biological activities of *Erythrina* plant species, Nouran M. Fahmy, Eman Al-Sayed, **Mohamed El-Shazly**, Abdel Nasser Singab, *Ind. Crops Prod.* **2018**, 123, 500-538.
5. Study of the anti-allergic and anti-inflammatory activity of *Brachychiton rupestris* and *Brachychiton discolor* leaves (Malvaceae) using *in vitro* models, Amany A Thabet, Fadia S Youssef, Michal Korinek, Fang-Rong Chang, Yang-Chang Wu, Bing-Hung Chen, **Mohamed El-Shazly**, Abdel Nasser B Singab, Tsong-Long Hwang, *BMC Complement Altern. Med.* **2018**, 18, 299, doi:10.1186/s12906-018-2359-6.
6. *Antrodia cinnamomea*, a Treasured Medicinal Mushroom, Induces Growth Arrest in Breast Cancer Cells, T47D Cells: New Mechanisms Emerge, Chen, Y.-C.; Liu, Y.-C.; **El-Shazly, M.**; Wu, T.-Y.; Chang, J.-G.; Wu, Y.-C., *Int. J. Mol. Sci.* **2019**, 20, 833.
7. The Antioxidant from Ethanolic Extract of *Rosa cymosa* Fruits Activates Phosphatase and Tensin Homolog *In Vitro* and *In Vivo*: A New Insight on Its Antileukemic Effect, Wang, K.-C.; Liu, Y.-C.; **El-Shazly, M.**; Shih, S.-P.; Du, Y.-C.; Hsu, Y.-M.; Lin, H.-Y.; Chen, Y.-C.; Wu, Y.-C.; Yang, S.-C.; Lu, M.-C., *Int. J. Mol. Sci.* **2019**, 20, 1935.
8. Cytotoxicity of *Anchusa arvensis* Against HepG-2 Cell Lines: Mechanistic and Computational Approaches, Sajid Hussain, Farhat Ullah, Abdul Sadiq, Muhammad Ayaz, Azhar-ul-Haq Ali Shah, Syed Adnan Ali Shah, Syed Majid Shah , Akhtar Nadhman, Farman Ullah, Abdul Wadood, **Mohamed El-Shazly**, *Current Topics in Medicinal Chemistry* **2019**, 19, 1, <https://doi.org/10.2174/1568026619666191105103801>.
9. Alkaloids of genus *Erythrina*: An updated review, Nouran M. Fahmy, Eman Al-Sayed, **Mohamed El-Shazly** & Abdel Nasser Singab (2019), *Nat. Prod. Res.* **2019**, DOI: 10.1080/14786419.2018.1564300.
10. Biological and phytochemical review on the genus *Coccoloba* (Polygonaceae), Fatma Abdel Hakim, Haidy A Gad, Rasha Ali Radwan, Nahla Ayoub, **Mohamed El-Shazly**, *Archives of Pharmaceutical Sciences Ain Shams University* **2019**, 3, 180-194.
11. Quantification and Simplified Detoxification Investigation on Fuzi, Root of *Aconitum carmichaelii*, Yun-Chien Lai, Chi-Jung Tai, **Mohamed El-Shazly**, Yu-Che Chuang, Shu-Tuan Chiang, Yi-Hong Tsai, Dezső Csupor, Judith Hohmann, Yang-Chang Wu, Fang-Rong Chang, *Nat. Prod. Comm.* **2019**, <https://doi.org/10.1177/1934578X19881548>.
12. Protective Role of Casuarinin from *Melaleuca leucadendra* against Ethanol-Induced Gastric Ulcer in Rats, Eman Al-Sayed, Haidy E. Michel, Mohamed Abdelrazik Khattab, **Mohamed El-Shazly**, Abdel Nasser Singab, *Planta Med.* **2020**, 86, 32-44, DOI: 10.1055/a-1031-7328.

Laboratory Skills

- Multistep synthesis of complex organic molecules.
- Air sensitive reactions (Schlenk line and glove box).
- GC, GC-MS, HPLC, LC-MS, NMR Spectroscopy, UV, FTIR Spectroscopy.
- Micro and multigram reactions (50-100 G).
- High-pressure hydrogenator (Parr reactor).
- Multiple synthesizers.
- Small- and large-scale purification techniques, e.g. fractional crystallization and KugelRohr distillation.
- Isolation and structural elucidation of complex natural products.
- Determination of the pharmacological activities of natural products utilizing several *in vitro* and *in vivo* techniques.

Academic Awards/Honors

- **Best Undergraduate Thesis Award** (Development of Analgesic Herbal Tea from Egyptian Folk Medicine), Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- **Ain-Shams Teaching and Research Fellowship** Department of Natural Product Chemistry, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt.
- **Best Teaching Award** Ain-Shams University, Cairo, Egypt.
- **Best Presentation Skills** Ain-Shams workshop for presentation skills, Ain-Shams University, Cairo, Egypt.
- **Outstanding Social Commitment Teaching Assistant Award** Ain-Shams and Ministry of Social Affairs workshop, Ain-Shams University, Cairo, Egypt.
- **Nanomolecular Science Master Fellowship** Faculty of Science and Engineering, Jacobs University, Bremen, Germany.
- **Jacobs PhD Fellowship** Faculty of Science and Engineering, Jacobs University, Bremen,

Germany.

- **National Science Council Postdoctoral Fellowship** Kaohsiung Medical University, Kaohsiung, Taiwan.

Selected Posters (p) and Oral Presentation (o)

- **Mohamed El-Shazly (p)**, Jing-Ru Liou, Ying-Chi Du, Da-Wei Chuang, Michal Korinek, Balaji D. Barve, Kuei-Hung Lai, Yu-Ming Hsu, Yu-Ming Chung, Yu-Chi Tsai, Fang-Rong Chang, Yang-Chang Wu, *Isolation and synthesis of anti-inflammatory compounds from Lawsonia inermis*, International Conference of Traditional and Complementary Medicine on Health 2013 (ICTCMH 2013), Taipei, Taiwan, May 24-26, 2013.
- Balaji D. Barve (p), **Mohamed El-Shazly**, Jing-Ru Liou, Da-Wei Chuang, Michal Korinek, Tsong-Long Hwang, Jeh-Jeng Wang, Fang-Rong Chang, Yang-Chang Wu, *Antiinflammatory compounds from Lawsonia inermis Isolation and Synthesis*, 9th AFMC International Medicinal Chemistry Symposium Taipei, Taiwan, October 15-18, 2013.
- Balaji D. Barve (p), Da-Wei Chuang, **Mohamed El-Shazly**, Chin-Chau Chen, Yu-Ming Chung, Ming-Jung Wu, Fang-Rong Chang, Jeh-Jeng Wang, Yang-Chang Wu, *An aqueous B-alkyl Suzuki cross coupling reaction for the synthesis novel 1,5-diphenylpent-3-en-1-yne derivatives*, Annual Meeting of Chemical Society Located in Taipei (CSLTAM), National Chi Nan University, Nantou County, Taiwan, November 22-24, 2013.
- Balaji D. Barve (p), Da-Wei Chuang, **Mohamed El-Shazly**, Chin-Chau Chen, Yu-Ming Chung, Ming-Jung Wu, Fang-Rong Chang, Jeh-Jeng Wang, Yang-Chang Wu, *Utilization of an aqueous B-alkyl Suzuki cross coupling reaction for the synthesis of 1,5-diphenylpent-3-en-1-yne derivatives*, 9th Junior National Organic Chemistry Symposium Trust (J-NOST), Indian Institute of Science Education and Research (IISER), Bhopal, India, December 04-06, 2013.
- **Mohamed El-Shazly (o)**, Abdel Nasser B. Singab, Yu-Ming Chung, Fang-Rong Chang, Yang-Chang Wu, *En route to a new skin care product: isolation of potent antioxidant and tyrosinase inhibitory constituents from a desugared sugar cane extract*, The 3rd International Euro-Med Conference on Natural Products, Cairo, Egypt, January 4-6, 2014.
- Balaji D. Barve (o), Yang-Chang Wu, **Mohamed El-Shazly**, Da-Wei Chuang, Michal Korinek, Jeh-Jeng Wang, Fang-Rong Chang, *Copper-catalyzed synthesis of Carbamates by direct C-H bond activation of Formamides*, 247th ACS National Meeting & Exposition, Dallas, TX, USA, March 16-20, 2014.
- **Mohamed El-Shazly (o)**, Jing-Ru Liou, Da-Wei Chuang, Balaji Barve, Michal Korinek, Fang-Rong Chang, Yang-Chang Wu, *Synthesis of novel enyne compounds isolated from Henna (Lawsonia inermis) with potent anti-inflammatory activity*, 1st International Conference of

the Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt, October 14-17, 2014.

- **Mohamed El-Shazly (o)**, Yu-Ming Chung, Yang-Chang Wu, and Fang-Rong Chang, *Unearthing the Potential of Epigenetic Modifiers in Stimulating the Production of New Secondary Metabolites from Fungi*, 3rd FUE International Conference of Pharmaceutical Sciences (3rd FUE-ICPS), Cairo, Egypt, February 9-11, 2015

Internships

- **El Fatooh Pharmaceutical Corporation, Cairo, Egypt** (Marketing and Product Management section, Jun-Sep. 1996).
- **Memphis Pharmaceutical Company, Cairo, Egypt** (Sterile Products Section Jun.-Sep. 1997).
- **Faculty of Pharmacy, Sofia, Bulgaria** (Natural Product Department Jul.-Aug. 1998).
- **Drug Analysis and Development Unit (DAAU), Cairo, Egypt** (Herbal Drugs Quality Control Section Jun.-Sep. 1999).

Memberships

- American Chemical Society (ACS).
- German Chemical Society
- Asian Chemical Society
- The Egyptian Federation of Red Cross and Red Crescent Societies.
- International Pharmaceutical Federation (FIP).
- Egyptian Pharmacists Syndicate (EPS).

Computer Skills

- MDL CrossFire, SciFinder, and ISI Web of Knowledge.
- ISIS draw, Chem-Sketch, ChemPen, and ChemDraw.

- Windows, Linux, Mac OS operating systems, Microsoft Office, Adobe Photoshop, Adobe Illustrator, and LATEX.
- MastReC (NMR software), Endnote, JabRef, Origin, and SPSS.

Organized Workshops

- ***Green tea as a super nutraceutical for the treatment of neurodegenerative diseases***, Faculty of Pharmacy and Biotechnology, the German University in Cairo, 2017.
- ***Medicinal plants and organic farming***, Nuweiba, the Red Sea, Faculty of Pharmacy and Biotechnology, the German University in Cairo, 2018.
- ***Marine wonders of the Red Sea***, Hurghada, the Red Sea, Faculty of Pharmacy, and Biotechnology, the German University in Cairo, 2019.

Language Skills

- **English:** Excellent (written and spoken).
- **German:** Working knowledge (written and spoken).
- **Arabic:** Mother tongue, excellent (written and spoken).

Societal Services:

- Organized a ***Medical Convoy*** to rural junior high schools, teaching students the importance of personal hygiene 2016.
- Organized a ***Public Lecture*** on the importance of antioxidants in our daily diet, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt, 2015.
- Organized a ***Public Lecture*** on how to avoid toxic substances in our daily diet, Faculty of Pharmacy, Ain-Shams University, Cairo, Egypt, 2014.

Professional Development Courses Attended:

Course Name	Location
<i>Scholarly Publishing in Indexed Journals</i>	Ain-Shams University, Cairo, Egypt December 2020
<i>Self-Management and Self Marketing</i>	Ain-Shams University, November 2020
<i>Application of Quality Measures in Education Settings</i>	Ain-Shams University, Cairo, Egypt September 2020
<i>Effective Communication Skills</i>	Ain-Shams University, Cairo, Egypt August 2020
<i>Problem Solving and Decision Making in Academic Settings</i>	Ain-Shams University, Cairo, Egypt July 2020
<i>Fighting Corruption in Academic Settings</i>	Ain-Shams University, Cairo, Egypt June 2020
<i>Development of Academic Databases</i>	Ain-Shams University, Cairo, Egypt May 2020
<i>Development of Modern Curricula for Continuously Changing Pharmaceutical Education</i>	Ain-Shams University, Cairo, Egypt April 2020
<i>Building Effective Research Teams</i>	Ain-Shams University, Cairo, Egypt April 2016
<i>Development of New Industrial of Processes to Produce Chinese Traditional Medicine</i>	Kaohsiung Medical University, Kaohsiung, Taiwan January 2013
<i>Development of New Products from Traditional Chinese Medicine</i>	Kaohsiung Medical University, Kaohsiung, Taiwan September 2012
<i>Interactive New Teaching methods</i>	Kaohsiung Medical University, Kaohsiung, Taiwan September 2011
<i>How to Move from Laboratory Scale to Industrial Scale for Pharmaceutical Products</i>	Jacobs University, Bremen, Germany, August 2008
<i>How to Write and Academic Paper</i>	Jacobs University, Bremen, Germany, August 2007
<i>How to Write a Wining Funding Proposal</i>	Jacobs University, Bremen, Germany, August 2006