Curriculum Vitae

I-Information:

Personal Information:

Name: Alshymaa Abdel-Rahman Abdel-Latif Gomaa
Current position: Lecturer of Pharmacognosy, Faculty of Pharmacy, Minia University, Egypt.
Nationality: Egyptian
Address: Department of Pharmacognosy, Faculty of Pharmacy, Minia University, Egypt.
Marital Status: Married
General specialization: Pharmacognosy
Specific specialization: Chemistry of Natural Products

Contact Information:

E-mail: alshymaa.abdalrahman@mu.edu.eg
Telephone: Mobile: 002-01016340962
Work: 002-086-2369075
Fax: 002-086-2369075

II- Qualifications:

1- B.Sc. of Pharmaceutical Sciences, excellent with the degree of honour, Faculty of Pharmacy, Minia University, Egypt, May 2010.

2- M.Sc. of Pharmacognosy, Faculty of Pharmacy, Minia University, September 2015, entitled "**A Pharmacognostical Study Of *Abutilon hirtum* (Lam.) Sweet Family Malvaceae cultivated in Egypt.**"

3- Ph.D of Pharmacognosy, Faculty of Pharmacy, Minia University, June 2019, entitled "**Phytochemical and biological studies of *Zinnia elegans* Jacq. and *Gazania rigens* (L.) Gaertn., Family: Asteraceae, cultivated in Egypt**. "

III- Occupations:

1- Demonstrator in Pharmacognosy Department, Faculty of Pharmacy, Minia University, October 2011- September 2015.

2- Associate Lecturer in Pharmacognosy Department, Faculty of Pharmacy, Minia University, September 2015-June 2019.

3- Lecturer in Pharmacognosy Department, Faculty of Pharmacy, Minia University, June 2019 till now.

IV-Teaching Experience:

2011-2013:

1) Practical course of Phytochemistry for third year students, Faculty of Pharmacy, Minia University.
2) Practical course of General Pharmacognosy for first semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University

2013-2014:

1) Practical course of Botany and medicinal plants for first year students, Faculty of Pharmacy, Minia University.
2) Practical course of Quality control of medicinal plants, for sixth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.
3) Practical course of Pharmacognosy (I) for second semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.
4) Practical course of Phytochemistry (II) for fifth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.
5) Practical course of Phytotherapy for eighth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

2014-2019:

1) Practical course of Pharmacognosy and Medicinal plants for second year students, Faculty of Pharmacy, Minia University.
2) Practical course of Pharmacognosy (II) for third semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

3) Practical course of Phytochemistry (I) for fourth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

2019 till now:

1- Lectures of Pharmacognosy and Medicinal plants for second year students, Faculty of Pharmacy, Minia University.

2- Lectures of Phytochemistry for third year students, Faculty of Pharmacy, Minia University.

3- Lectures of spectroscopy and its applications in natural product analysis for fourth year students, Faculty of Pharmacy, Minia University.

4- Lectures of Marine Pharmacognosy for second year students, Faculty of Pharmacy, Minia University.

V-Research Interests:

- Isolation of bioactive metabolites from different natural sources
- Pharmacognostical and phytochemical studies of medicinal Plants
- Natural product chemistry including:
  - Isolation, purification and identification of different natural compounds from their natural sources using different chromatographic techniques (HPLC, LC/MS and GC/MS) and stationary phases (Diaion Hp20, Silica gel, Sephadex LH – 20 and RP -18)
  - Structure elucidation of the isolated compounds using different spectral techniques (UV, ^{1}H-NMR, ^{13}C-NMR, H, H-COSY, HMQC, HMBC, H- NOESY, EI-MS and ESI-MS).
  - Biological investigation the isolated compounds to determine their biological activities, toxicity or side effects.

VI-Research Accomplished:

Master Thesis: "**A Pharmacognostical Study Of *Abutilon hirtum* (Lam.) Sweet Family Malvaceae cultivated in Egypt.**"
including:

1. **Botanical study of *Abutilon hirtum* (**Macromorphology **and** Micromorphology of the leaf, stem, root and flower**)**
2. **Phytochemical Study of *Abutilon hirtum* (**Isolation of 8 compounds from the plant leaves and identified as: Triacontanol, β-sitosterol and stigmasterol, β-Sitosterol 3-*O*-(6'-O-heptadecanoyl)-β-D-glucopyranoside, *β*-sitosterol 3-*O*-*β*-glucopyranoside, 3,5-Dihydroxyfuran-2(5H)-one, *trans*-Tiliroside, Salicylic acid and *cis*/*trans*- Tiliroside.
3. **Biological studies of *Abutilon hirtum* (**Determination of acute toxicity, anti-inflammatory, antipyretic, analgesic and anti-diabetic activities, in addition to, evaluation of antibacterial, antifungal, anti-malarial and anti-leishmanial activities.

Ph.D Thesis: "**Phytochemical and biological studies of *Zinnia elegans* Jacq. and *Gazania rigens* (L.) Gaertn., Family: Asteraceae, cultivated in Egypt.** " Including

1. **Phytochemical Study of *Zinnia elegans*** (Isolation of 24 compounds, the isolated compounds from *Z. elegans* were, eight flavonoids, four triterpenes, one sterol, one amide, one phenolic acid, one coumarin, one sesquiterpene, one nucleoside, one phenylpropanoid derivatives, three lignans and two phenylethanoids).
2. **Metabolomics analysis** of the total ethanolic extracts and different fractions of different organs (leaves & stems) and roots of *Z. elegans* and the whole plant of *G. rigens*.
3. **Biological study of** *Zinnia elegans* Jacq and *Gazania rigens* (L.) Gaertn. ((**(**Determination of Antioxidant activity, Anti-infective activities such as anti-malarial, anti-tyrpanosomal, anti-leishmanial, antibacterial, antifungal activities and Hepatoprotective and nephroprotective activities).

VII-Conferences Attendance:

Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. Botanical investigation of the leaves and stems of Abutilon hirtum, F. Malvaceae. 9th International Pharmaceutical Sciences Conference, Faculty of Pharmacy, Assiut University, Egypt, March, 12nd, 2013.

VIII-Publications :

1- Alshymaa Abdel-Rahman Gomaa, Mamdouh Nabil Samy, Usama Ramadan Abdelmohsen, Markus Krischke, Martin J. Mueller, Amira Samir Wanas, Samar Yehia Desoukey & Mohamed Salah Kamel (2018) .Metabolomic profiling and anti-infective potential of *Zinnia elegans* and *Gazania rigens* (Family Asteraceae). **Natural product research 34(18): 2612-2615.**

2-Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. Pharmacognostical studies of leaf, stem, root and flower of *Abutilon hirtum* (Lam.) Sweet (2016) .**International Journal of Pharmacognosy and Phytochemical Research 8(1):199-216.**

3-Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. Anti-inflammatory, analgesic, antipyretic and antidiabetic activities of *Abutilon hirtum* (Lam.) Sweet (2018). **Clinical Phytoscience 4(1): 11.**

4-Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. Phytochemistry and pharmacological activities of genus Abutilon: a review (1972-2015). **Journal of Advanced Biomedical and Pharmaceutical Sciences 1(2018): 56-74.**

5-Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. A comprehensive review of phytoconstituents and

biological activities of genus *Zinnia*. **Journal of Advanced Biomedical and Pharmaceutical Sciences 2(2018): 29-37.**

6- Alshymaa A. Gomaa, Mamdouh N. Samy, Samar Y. Desoukey and Mohamed S. Kamel. GC-MS Analysis of Volatile Oil and Fatty Acids Composition of *Abutilon hirtum* (Lam.) Sweet Leaves. **Journal of Advanced Biomedical and Pharmaceutical Sciences 4 (2021): 119-123.**

7- Alshymaa A. Gomaa, Mamdouh N. Samy, Amira S. Wanas, Rehab M. Abdel-Baky**,** Samar Y. Desoukey and Mohamed S. Kamel. Antimicrobial, Antimalarial and Antileishmanial Activities of *Abutilon hirtum*. **Journal of Advanced Biomedical and Pharmaceutical Sciences 4 (2021): 177- 181.**

8- Mamdouh N. Samy, Alshymaa A. Gomaa, Attia, E. Z., Ibrahim, M. A., Samar Y. Desoukey and Mohamed S. Kamel. Flavonoids of *Zinnia elegans*: Chemical profile and, in vitro antioxidant and in silico anti-COVID-19 activities. **South African Journal of Botany, 147**(2022): **576-585.**

9- Alshymaa A. Gomaa, Mamdouh N. Samy, Rehab M. Abdel-Baky**,** Samar Y. Desoukey and Mohamed S. Kamel. Chemical Constituents of the Leaves of *Abutilon hirtum* and Their Antimicrobial Activity. **Chemistry of Natural Compounds, 58(2022):368-370.**

10- Abdel-Wahab NM, Alshymaa A. Gomaa, Mostafa YA, Hajjar D, Makki AA, Alaaeldin E, Refaat H, Bringmann G, Zayed A, Abdelmohsen UR, Attia EZ. Diterpenoids profile of the marine sponge *Chelonaplysilla erecta* and candidacy as potential antitumor drugs investigated by molecular docking and pharmacokinetic studies. **Natural product research**. 2022 Apr 10:1-5

11-Alshymaa Abdel-Rahman Gomaa1, Mamdouh Nabil Samy1, Eman Zekry Attia, Mina Ezzat Attya, Michael Atef Fawzy, Samar Yehia Desoukey, Mohamed Salah Kamel. Antioxidant, hepatoprotective and nephroprotective activities of *Gazania rigens* against carbon

tetrachloride-induced hepatotoxicity and nephrotoxicity in rats.***Traditional Medicine Research*** 2022;7(5):44.

12-Younis, N. A. M., Gomaa, A. A., Ibrahim, A. H., Abdelkader, M. S., & Desoukey, S. Y. (2022). The genus Agapanthus: A review on traditional uses, pharmacological and phytochemical attributes. ***South African Journal of Botany***, *150*, 1168-1183

13-Mustafa, A., El-Kashef, D. H., Abdelwahab, M. F., Gomaa, A. A. R., Mustafa, M., Abdel-Wahab, N. M., & Ibrahim, A. H. (2023). Investigation of antiviral effects of essential oils. *Essential Oils: Extraction Methods and Applications*, 99-123.

14- Abdelaleem, E. R., Abdelwahab, M. F., Abdel-Wahab, N. M., Abu-Baih, D. H., Zaher, A. M. A., Altemani, F. H., ... & Gomaa, A. A. R. (2024). Apple extract protects against indomethacin-induced gastric ulcers in rats by suppressing oxidative stress–The implication of Nrf-2/HO-1 signaling pathway: In silico and in vivo studies. *Journal of **Functional Foods***, *112*, 105926.

IX- Workshops:

Attended and successfully completed the following workshops within the Faculty and Leadership Development Project (FLDP) in Egypt:

1- Skills of Effective Communication.
2-Skills of Effective Presentation
3-Quality Assurance and Accreditation
4-Applying Technology in Teaching
5-Endnote
6-International Scientific Publishing