# Curriculum Vitae

Name: Khadiga Ahmed Ismail

(First) (Middle) (Last)

**Sex:** Female

**Marital Status**: Married – two children

**Nationality:** Egyptian

**Date of Birth:** October 1<sup>st</sup>, 1959

**Present Post:** Professor, Department of Pharmaceutical

Chemistry, Faculty of Pharmacy, University of

Alexandria, Alexandria, Egypt since 2002.

Languages Spoken: Arabic, English and French

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Alexandria, Egypt. P.O. Box: 21215.

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**Qualifications:** 1- Bachelor of Pharmaceutical Sciences, June,

1982. Grade "Very Good, Honor", Faculty of

Pharmacy, University of Alexandria,

Alexandria, Egypt.

2- Master Degree in Synthetic Pharmaceutical

Chemistry. October, 1985.

**Thesis Title:** Design and Synthesis of Some

Novel Potential Anticancer and Antimicrobial

Agents Containing thiosemicarbazone

Functions and Heterocyclic Systems.

3- Ph. D. Degree in Synthetic Pharmaceutical Chemistry. November, 1990.

**Thesis Title :** Synthesis and Structure Activity Relationship study of a Novel Series of Modified Female Hormones.

- 4- Assistant Professor in Pharmaceutical Chemistry, September, 1995.
- 5- Professor in Pharmaceutical Chemistry, March 2002.

### **Career Development:**

- Demonstrator, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Alexandria, 1982-1985.
- Assistant Lecturer, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Alexandria, 1985-1990.
- Lecturer, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Alexandria, 1990-1995.
- Assistant Professor, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Alexandria, 1995-2002.
- Professor, Department of Chemistry, Faculty of Pharmacy, ABU, Beirut, Libanon, as visitor (1996, 1998, 2000, 2005).
- Professor, Department of Pharmaceutical
   Chemistry, Faculty of Pharmacy, University of Alexandria, 2002 till now.

- Professor, Department of Chemistry, Faculty of Medicine, King Abdel Aziz University, Gedah, Saudia Arabia, 2002-2004.
- Professor, Department of Chemistry, Faculty of pharmacy, King Abdel Aziz University, Gedah, Saudia Arabia, 2007-2009.

## **Scholarship:**

A six month scholarship for post doctoral studies at OSU, Columbus, Ohio, USA during 29/6/1999 – 1/1/2000.

# **Memberships:**

- 1- Syndicate of Pharmacists since 1982.
- 2- Egyptian Pharmaceutical Society since 1985.
- 3- Association des Medicines Francophones since1985.

# **Meeting Participations:**

- 1- First Anglo-Egyptian Conference of Pharmaceutical Sciences, Sheraton-Montazah-November 15-17, 1988, Alexandria-Egypt.
- 2- Second Anglo-Egyptian Conference of Pharmaceutical Palestine-Hotel-Montazah-November 9-12, 1991, Alexandria-Egypt.
- 3- The International Conference of Pharmaceutical Sciences and Technology, Palestine-Hotel, Montazah-March, 22-25, 1995, Alexandria-Egypt.
- 4- The 6<sup>th</sup> Ibn-Sina International Conference on Pure and Applied Heterocyclic Chemistry, Cairo, Egypt, December 13-16 1997.

- 5- The 30<sup>th</sup> Annual Meeting of the Society for Neuroscience New Orland, L.A., U.S.A. November, 2000.
- 6- The 9<sup>th</sup> Cyprus Conference on New Methods in Drug Research, Limasol, Cyprus, May 17-22, 2001.

# **Teaching Experience:**

- 1- Supervising the practical courses of organic chemistry for undergraduate students.
- 2- Lecturing theoretical courses of organic chemistry for undergraduate students.
- 3- Lecturing theoretical courses of advanced organic chemistry and synthetic organic chemistry for graduate students.

# Supervision of Researches for Attainment of degrees : Master Degree :

- Candidate : Nagwa Mohamed Yehia Moustafa Afifi.
  - "Synthesis of some Quinoxaline Derivatives of Potential Biological Activities".
- Candidate: Marwa Taha Mostafa Sarg
   "Synthesis of Novel Pyrimidine-2,4-diones as potential anticancer and antimicrobial agents".
- Candidate: Heba Atia Hamed
   "Synthesis of some heterocycles attached or fused to phthalazine ring system for their antimicrobial

and anticancer activities".

## Ph. D. Degree

Candidate: Marwa Taha Mostafa Sary
 "Synthesis of biological evaluation of some pyrimidine and fused pyrimidine derivatives".

#### **Social Activities:**

- Member of the Egyptian National Selected Volly Ball Team (197-1980).
- Supervisor of Sporting Club Volly Ball team (1980 till now).

#### **Research Field Interests:**

In the field of Organic and Medicinal Chemistry. The studies in this area concerned with the synthesis of various groups of compounds of anticipated biological activities. Their evaluation for the respective potential activity and correlation of the obtained activity and the structure are handled. The groups studied include the following:

- 1- Antimicrobial agents: which utilize the thiourea, thiosemicarbazide, thiosemicarbazone moieties as the vital center carried on various heterocyclic nuclei. They were evaluated for in-vitro antibacterial and antifungal activities.
- 2- Anticancer agents: Synthesis and Evaluation of anticancer activities of some Chalcones and diketones and their heterocyclic derivatives.

3- Endocrinological studies: in which natural estrogens are subjected to various structural modifications with the aim of reducing estrogenicity and production of antiestrogens.

These were evaluated for binding to estrogen receptor, uterotrophic and postcoital antiimplantation activities.

# LIST OF PUBLICATIONS

### **Publications abstracted from M. Pharm. Thesis:**

- Synthesis and evaluation of antitumor and antimicrobial activities of 4-phenyl-2-oxo-3-butenal-1,2-bisthiosemicarbazone derivatives:
   A.-Mohsen M.E. Omar, I. Chaaban, Ahmed M.M. Hassan, Khadiga
   A. Ismail and Hamida Abou-Shleib, Alex. J. Pharm. Sci., 1, 17 (1987).
- 2- Novel thiosemicarbazone, thiazolines and thiazolidinones derived from chalcones: Synthesis, antimicrobial and anticancer properties: A.-Mohsen M.E. Omar, I. Chaaban, Omaima M. Aboul Wafa, Ahmed M.M. Hassan, Hamida Abou-Shleib and Khadiga A. Ismail. Alex. J. Pharm. Sci., III (2), 211 (1989).
- 3- Synthesis and evaluation for Antimicrobial and antifungal activities of new 5-dimethylamino-1-aryl [and 1-(2-furyl)]-1-penten-3-one-3-substituted thiosemicarbazone derivatives:

  A.-Mohsen M.E. Omar, I. Chaaban, Ahmed M.M. Hassan, Omaima M. Aboul Wafa, Hamida Abou-Shleib and **Khadiga A. Ismail.** *Alex*.
- 4- Synthesis and evaluation for antimicrobial and antifungal activities of new 1-phenylhydrazono-2-(substituted thiocarbamoyl)hydrazono-pyruvaldehyde and the corresponding thiazoline and thiazolidinone derivatives:

J. Pharm. Sci., III (2), 244 (1989).

A.-Mohsen M.E. Omar, Ibrahim C. Ahmed, Ahmed M.M. Hassan, Omaima M. Aboul Wafa, Hamida Abou-Shleib and **Khadiga A.** Ismail. *Alex. J. Pharm. Sci.*, 4(2), 182 (1990).

## Publications abstracted from Ph. D. Thesis:

5- Synthesis, binding affinities and uterotrophic activity of some 2-substituted estradiol and ring A-fused pyrone derivatives :

A.-Mohsen M.E. Omar, I. C. Ahmed, Omaima M. Aboul Wafa, Ahmed M.M. Hassan, **Khadiga A. Ismail** and Hamida Abou-Shleib. *Eur. J. Med. Chem.* 29, 25 (1994).

# <u>Publications after appointment as lecturer of Pharmaceutical</u> <a href="#">Chemistry</a>:</a>

- 6- Synthesis and antimicrobial activity of some thiazolinyl tetrahyrobenzo [b]thiophenes and thiazolinyl tetrahydrobenzothieno[2,3-d]pyrimidine-4-ones:
  - Omaima M. Aboul Wafa, **Khadiga A. Ismail** and Essam A. Koreish. *IL Farmaco*, 47(5), 631 (1992).
- 7- Synthesis of 3-arylamino-1,2,4-triazolo[3,4-c]pyrimidino[4,5-b]tetra-hydrobenzothiophenes by cyclodesulfurization of the corresponding thiocarbamoylhydrazinothieno[2,3-d]pyrimidine Derivatives:
  - Khadiga A. Ismail and Omaima M. ABoul Wafa, Sulfer Letters, 15(3), 111 (1992).
- 8- Synthesis and unterotrophic activity of 2-substituted estradiol and ring A. Fused pyranone and furanone derivatives.
  - Khadiga A. Ismail and Azza El-Medany, Alex. J. Pharm. Sci., 8(2), 95 (1994).

- 9- Synthesis and biological evaluation of some novel 2-(pyrimidin-4-yl) estradiol derivatives :
  - Khadiga A. Ismail, Alaa A. El-Tombary, A.-Mohsen M.E. Omar, Omaima M. Aboul Wafa, Naglaa I. Madi, *Eur. J. Med. Chem.*, 30, 423 (1995).
- 10- Synthesis and antimicrobial activity of some tetramethylenethieno [2,3-d]pyrimidine derivatives :
  - Khadiga A. Ismail, Omaima A. Aboul Wafa, Essam A. Koreish, *IL Farmaco*, 50(9), 611 (1995).
- 11- Synthesis of novel estradiol thiosemicarbazone derivatives as potential antiestrogens :
  - Alaa A. El-Tombary, **Khadiga A. Ismail**, Omaima M. Aboul Wafa, A.-Mohsen, M.E. Omar and Safaa H. El Reyini, Presented at the International Conference of Pharmaceutical Sciences and Technology, held in Alexandria, Egypt, on March 22-25, *Alex. J. Pharm. Sci.*, *9*(2), *147* (*1995*).
- 12- Novel steroidal 1,4-diketone and pyridazine derivatives as potential antiestrogens :
  - **Khadiga A. Ismail**, Alaa A. El-Tombary, M. Aboul Wafa, A.-Mohsen, M.E. Omar and Safaa H. El Reyini, Presented at the International Conference of Pharmaceutical Sciences and Technology, held in Alexandria, Egypt, on March 22-25, 1995, *Arch. Pharm. Med. Chem.*, 329, 433 (1996).

# Publications after appointment as Ass. Prof. of Pharmaceutical Chemistry

- 13- Synthesis and antimicrobial activity of some quinoxaline derivatives. The cyclodesulfurization of thio-compounds: Part XXVI: Alaa A. El-Tombary, **Khadiga A. Ismail**, Omaima M. Aboul Wafa and Essam A. Koreish, *Alex. J. Pharm. Sci.*, *12*, *27* (*1998*).
- 14- Novel triazolo[4,3-a]quinazolines and bis-triazolo[4,3-a:4,3`-c] quinazolines: Synthesis and antioxo-plasmosis effect:

  Alaa A. El-Tombary, **Khadiga A. Ismail**, Omaima M. Aboul Wafa, A,-Mohsen M.E. Omar, Mervat Z. El-Azzouni and Salwa T. El-Mansoury, *IL Farmaco 54, 486-495 (1999)*.
- 15- Antilipidemic agents, Part IV; Synthesis and Antilipidemic testing of some heterocyclic derivatives of hexadecyl and cyclohexyl hemisuccinate esters:
  - N.S. Habib, **Khadiga A. Ismail**, A.A. Tombary and T. Abdel Aziem, *Pharmazie* 55, 495 (2000).
- 16- Synthesis of monosubstituted succinic acids from tert-butylsuccinate: Stephen C. Bergmeier and Khadiga A. Ismail. Synthesis 10, 1369 (2000).
- 17- Synthesis of 9-{4-[2-(substituted amino)ethoxy]-phenoxy}2-methoxy-acridine as potential antimicrobial and antitumor agents:

  Khadiga A. Ismail and Tarek Abd El Aziem, *Alex. J. Pharm. Sci.*, 14(2), 161 (2000).
- 18- Synthesis and biological evaluation of some novel 4H-benzopyran-4-one derivatives as nonsteroidal antiestrogens:
  Khadiga A. Ismail, Abd El Aziem T. Eur. J. Med. Chem., 36, 243

(2001).

- 19- Structure-activity studies with ring E analoge of methyllycaconitine. II Substitution on the imide ring.
  - **Khadiga A. Ismail**, S.C. Beergmeier, D.L. Bryant. Presented in the 9<sup>th</sup> Cyprus Conference on New Method in Drug Research, Limassol, Cyprus 17-22 May 2001. (under publication in the *Bioorg. Med. Chem. Lett*).
- Structure-activity studies on N-(3-phenyl)-propyl)piperidine derivatives of methyllycaconitine on nicotinic receptor subtypes:
  D.L. Bryant, S.C. Bergmeier, Khadiga A. Ismail, S.M. Thomasy, G.W. Danial, D.B. Mckay. Presented in part at the 30<sup>th</sup> Annual Meeting of The Society For Neuroscience, New Orieans, LA, November 4-9, 2000.
- 21- Structure-activity studies with ring E analogues of methyllycaconitine. Synthesis and evaluation of enantiopure isomers of selective antagonist at the alpha3 nicotinic receptor.

Ismail KA, Bergmeier SC: *Eur J Med Chem*; 2002 Jun; 37(6) 469-74

- . Presented in the 9th Cyprus Conference on New Method in Drug Research, Limassol, Cyprus 17-22 May 2001.
- 22- Structure-activity studies with ring E analoge of methyllcaconitine on bovine adrenal  $\alpha 3$   $\beta 4$  nicotinic receptor

Darrall L. Bryant. R. Benjammin Free Sara M. Thomasy, Darid J. Lapinsky, **Khadiga A. Ismail**, Susan B. Mckay. *Neuroscience Research*, 42, 57-63 (2002)

23- Effects of methyllycaconitine and related analogues on bovine adrenal alpha3beta4\* nicotinic acetylcholine receptors.

Bryant DL, Free RB, Thomasy SM, Lapinsky DJ, **Ismail KA**, Arason KM, Bergmeier SC, McKay DB

Ann N Y Acad Sci; 2002 Oct;971:139-41

- 24- Synthesis of novel pyrimidine 2,4-diones and 2-thioxopyrimidine-4-ones as potential anticancer and antimicrobial agents.
- R. Soliman, N.S. Habib, **Khadiga A. Ismail**, A. Moustafa, M.T. Sarg and N.H. Fanaki. *Boll. Chim. Farmac.*, *142-4* (2003).
- 25- Pyrimidines Part II: Synthesis of novel pyrimidines, 1,2,4-triazolo [4,3-a]pyrimidin-7-ones and pyrimidino[2,1-c][1,2,4]triazin-8-ones for their antimicrobial and anticancer activities.
- N.S. Habib, R. Soliman, **Khadiga A. Ismail**, A.M. Hassan and M.T. Sarg. *Boll. Chim. Farmac.*, *142*, *9* (2003).
- 26- Bergmeier SC, **Ismail KA**, Arason KM, McKay S, Bryant DL, McKay DB: Structure activity studies of ring E analogues of methyllycaconitine. Part 2: Synthesis of antagonists to the alpha3beta4\* nicotinic acetylcholine receptors through modifications to the ester. *Bioorg Med Chem Lett*; 2004 Jul 16;14(14):3739-42
- 27- Synthesis of some heterocycles attached or fused to phthalazine ring system for their antimicrobial and anticancer activities.
- N.S. Habib, A.M. Farghaly, F A Ashour, **Khadiga A. Ismail**, H.A. Abd El Razik and A. Nour El Din. *Boll. Chim. Farmac.*, *145*, *2*, *2005*.

28- Synthesis of some heterocycles attached or fused to phthalazine ring system of possible antihypertensive activity.

N.S. Habib, A.M. Farghaly, F.A. Ashour, **Khadiga A. Ismail**, H.A. Abd El Razik and A. Nour El Din. *Bollettino Chimico Farmaceutico* 2006