

# **Curriculum Vitae**

## Prof. Dr. Aly Abdel-Zaher Abdel Rahman Yousef

Emeritus Professor of Industrial Pharmacy and Ex Vice Dean for Postgraduate Studies and Researches, Faculty of Pharmacy, Assiut University.

Egypt

Name : Aly Abdel Zaher Abdel Rahman Yousef

**Birth Date** : 6/4/1951

**Birth place**: Sohag, Upper Egypt.

**Social State**: Married with five daughters.

Jop : Professor of Industrial Pharmacy, Faculty of Pharmacy, Assiut

University, Egypt.

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# Experiences:

1-Emeritus professor of Industrial Pharmacy from 1.8.2011 till now.

- 2- Vice Dean for Postgraduate studies and Researches from 1.8.2009 till 31.7.2011
- 3- Chairman of Industrial Pharmacy Dept., Faculty of Pharmacy, Assiut University from 19 th September, 2008 till 30/7/2009.

- 4- Professor of Pharmaceutics and Industrial Pharmacy, Dept. of Pharmaceutics, Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia from 5/2/2005 till 5 July 2008.
- 5- Chairman of the Industrial Pharmacy Dept., Faculty of Pharmacy, Assiut University, Assiut, Egypt, from September 2002 till 4/2/2005.
- 6- General supervisor of the Student Union, Faculty of Pharmacy, Assiut University, 1999-2002.
- 7- Dean Assistant for student affairs, Faculty of Pharmacy, Applied sciences University, Amman, Jordan, from September 1998 till September 1999.
- 8- Head of Pharmaceutics and Industrial Pharmacy Dept., Faculty of Pharmacy, Applied Sciences University, Amman, Jordan, from September 1994 till September 1998.
- 9- Professor of Industrial Pharmacy from 11th July 1993 till now.
- 10- Head of Industrial Pharmacy Dept. Faculty of Pharmacy, Assiut University from February 1990 till November 1991 and from April 1991 till September 1992.
- 11- Associate professor of Industrial Pharmacy from October 1987 till July 1993.
- 12- Visitor Assistant research professor in Pharmaceutics Dept., Faculty of Pharmacy, Connecticut University, Storrs USA from August 1982 till June 1983.
- 13- Assistant professor in industrial pharmacy Dept., Faculty of Pharmacy, Assiut University from March 1982 till October 1987.
- 14- Assistant lecturer in industrial pharmacy Dept. Faculty of Pharmacy, Assiut University from July 1978 till March 1982.
- 15- Demonstrator in industrial pharmacy Dept., Faculty of Pharmacy, Assiut, University from September 1974 till July 1978.

#### **Education:**

- 1- Bachelor of pharmaceutical sciences in May 1974 with excellent grade.
- 2- Master of Pharmaceutical sciences (Industrial Pharmacy) in June 1978, entitled "Investigation of chloramphenical solubilized systems"
- 3- Philosophy Degree in Pharmaceutical Sciences (Industrial Pharmacy), Ph.D., in December 1981, entitled "Solubilization and stability of certain tranquilizers".

#### Patents:

 Patent entitled "Formulation and clinical evaluation of buccoadhesive films containg kererolac in treating dental and postoperative pain surgery, Accepted by King Abdel Aziz City for Science and Technology, Riyadh, King Saudi Arabia, 2007.

#### Language Examinations successfully administered:

- 1-TOEFL (test of English as a foreign language), American University, Cairo, 1981, 1982.
- 2-GRE (Graduate record examination) aptitude and advanced, American University, Cairo, 1982.

# Conferences:

- 1- Egyptian Pharmaceutical Sciences conferences in all years nearly.
- 2- American Pharmaceutical Association conference in New Oreleans, USA, April 1983.
- 3- The first Egyptian Italian Symposium in Biotechnology, Assiut University, 1992.
- 4- The First National Symposium in Herbal Medicine, Faculty of Pharmacy, Assiut University, 1992.
- 5- International Hospital Pharmacy conference, Cairo, November 1993.
- 6- The Seventh Jordanian Pharmaceutical Conference, Amman-Jordan, May, 1994.

- 7- Treatement with Medicinal Herbs Conference, held in Faculty of Pharmacy, Applied Sciences University, Amman, Jordan, 1998.
- 8- The 27<sup>th</sup> Pharmaceutical conference held in Mredian Hotel Cairo, Egypt, 2-4 January, 2001.
- 9- The Third Pharmaceutical Conference held in Faculty of Pharmacy, Assiut University, March, 2001.
- 10- The Fifth Scientific Congress of the Association of the Colleges of Pharmacy in the Arab World & The Second International Conference of the Faculty of Pharmacy, Jordan University, Amman, Jordan, October 16-18/2001.
- 11- The Fourth conference of Pharmaceutical Sciences of Assiut University, March 6, 7, 2004.
- 12- Al-Azhar International Conference of Pharmaceutical Sciences, Dar El Deffa El Gaweey, Cairo, December, 2004.
- 13- Saudi Pharmaceutical Society conference about COX-2 Inhibitors: New drugs with recent concerns, Riydah Intercontinental Hotel, April 4, 2005.
- 14- Saudi Pharmaceutical Society conference about Drug-Drug interactions, Riydah Intercontinental Hotel, May 2005.
- 15- The 9th International Pharmaceutical Conference held in King Saud University, Faculty of Pharmacy, Riydah, Saudi Arabia, 17-21 December, 2005.
- 16- The 7<sup>th</sup> International Saudi Pharmaceutical Conference held in Al-Faisaliah Hotel, Riyadh, Saudi Arabia, 19-21 March 2007.
- 17- The XXXI Egyptian Pharmaceutical Conference held in Dar El Defaa Al Gawwy, Cario, Egypt, 23-25 December, 2008.
- 18- The General Secretary for Assiut Seventh International Pharmaceutical Sciences Conference, which held in Assiut University, 17<sup>th</sup> 18<sup>th</sup> March, 2010.

- 19-The 13 th conference for Scientific Society of Faculties of Pharmacy in the Arab World held in Faculty of Pharmacy and Industrial manufacturing, Misr University for Science and Technology,6 October city, Egypt 25-27 May 2010
- 20-The Egyptian Pharmaceutical Society conference, held in Cairo University, Conferences center, December 2011.
- 21-The Future University Pharmaceutical Technologies, Future University and City Star Intercontennental Hotel, Cairo, Feb.6-9,2012.
- 22-Assiut University International Pharmaceutical conference, Faculty of Pharmacy, Assiut University, March 2012.

#### Workshops:

- 1- HPLC Workshop Held in Faculty of Pharmacy, Assiut University, 1985.
- 2- DOS Computer Workshop held in school of Pharmacy Connecticut University, USA, 1982.
- 3- Microincapsulation Workshop held in School of Pharmacy, Connecticut, University, USA, 1983.
- 4- Workshop on the Methods and Modes of Education held in the Faculty of Education, Assiut University 1981.
- 5- Workshop on Pharmacokinetics and Biopharmaceutics, Faculty of Pharmacy, Assiut University, 1982.
- 6- Workshop on New Concepts in Dosage form Technology and their Therapeutic Implications, School of Pharmacy, University of Connecticut, USA, 1983.
- 7- Workshop on Biopharmaceutics and Pharmacokinetics held in Assiut University, Faculty of Pharmacy, 1985.

- 8- Workshop on the use of Herbal Medicine, Assiut University, Faculty of Pharmacy, 1987.
- 9- Rorkshop on the Herbal Flora present in Jordan and the Medicinal Uses, Applied Sciences University, Amman, Jordan, 1995.
- 10- Workshop on Using the Computer and the Internet in Developing Scientific Skills of the Faculty Members in Assiut University, 2003.
- 11- Workshops on the Training of the University Leaderships in Assiut University, March and April, 2004.
- 12- Workshop in the Lawyal Aspects in the University Work, Assiut University, 2005.
- 13- The First Workshop on Nano Researches at Universities, the road toward fulfilling the vision of Custodian of the two Holly Mosques, King Saud University, Riyadh, 28-29 October 2007.
- 14- Workshop on Evaluation and Quality Assurance of University Education in Saudi Arabia, King Saud University, 11-13 November 2007.
- 15- Workshop on Self Evaluation for the Higher Education Foundations, which is supported by National Authority for Quality Assurance and Accreditation of Education, Headed by Professor Magdy Abdel-Wahab Kasem, 7-11 November 2009.
- 16- Workshop on Practice as an External Evaluator for the Higher Education Foundations, which is supported by National Authority for Quality Assurance and Accreditation of Education, Headed by Professor Magdy Abdel-Wahab Kasem, 15-19 November 2009.
- 17-Workshop on the Arts of External Evaluation for the Higher Education Foundations Held in the National Authority or Quality Assurance and Accredation of Education center in El Nasr city, Cairo ,22/11/2010 administered by the Director of NAQAAE Prof. Magdy Abdel Wahab Kasem.

18-Workshop on Tablet Technologies and Manufacturing, Future University conference, City Star Intercontenntal Hotel, February 2012.

## Teaching Experiences:

- 1- Teaching the undergraduate pharmacy students the following courses:
  - A- Industrial Pharmacy, Theoretical and Practical.
  - B- Good Manufacture Practice.
  - C- Validation.
  - D- Physical Pharmacy, Theoretical and Practical.
  - E- Pharmacy Practice, Theoretical and Practical.
  - F- Pharmaceutical Preparations Theoretical and Practical.
  - G- Advanced Pharmaceutical Technology, Theoretical and Practical.
  - H- Over the Counter Drugs.
  - I- Hospital Pharmacy.
  - J- Pharmaceutical Administration.
  - K- Pharmaceutical Legislation.
  - L- Introduction to Pharmacy.
  - M- Solid Dosage Forms.
  - N- Cosmetics, Preparation and Evaluation.
  - O- Evaluation of Pharmaceutical Preparations.
  - P- Basis of Industrial Pharmacy.
  - Q- Quality Control and GMP of Pharmaceutical Products.
  - R-Chemical kinetics abd drug stability
- 2- Teaching the pharmacy graduate students the following courses:
  - A- Advanced industrial pharmacy and Pharmaceutical Technology.
  - B- Stability.
  - C- Solubilization.
  - D- Tablet Technology.
  - E- Powder Technology.
  - F- Advanced Pharmaceutical Technology.

- G- Recent Approaches in Drug Delivery Systems.
- H- Mucoadhesive Polymers and Mucoadhesion.
- I- Chemical Engineering.
- J- Pharmaceutical Industerialization.
- K- Laboratory Safety Measures.
- L- Pharmaceutical Manufacturing I & II.
- M- Evaluation of Pharmaceutical Preparations.
- N- Kinetics and Stability for Master Students.
- 3- The last courses have been administered in the following universities:
  - A- Assiut University, Assiut, Egypt.
  - B-University of connectut, USA.
  - C-Tanta University, Tanta, Egypt.
  - D-Al-Minia University, Al-Minia, Egypt,
  - E-Al-Azhar University, Assiut, Egypt.
  - F-Misr International University (MIU), Cairo, Egypt.
  - G-Applied Sciences University, Amman, Jordan.
  - H-The University of Jordan, Amman, Jordan.
  - I-King Saud University, Riyadh, King Saudi Arabia.
  - J-Future University, New Cairo, Egypt,

# The author of the following books and practical manuals:

- 1- The book entitled "Bases of Industrial Pharmacy", El-Kyyali Scientific Chair, Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia, June, 2008.
- 2- The book entitled "Lecture Notes on Industrial Pharmacy", Dar Honein for publication, Amman, Jordan, 1995.
- 3- Practical industrial Pharmacy Manual.
- 4- Practical Physical Pharmacy Manual.
- 5- Practical Pharmacy Practice Manual.

- 6- Practical Pharmaceutical Preparation Manual.
- 7- Practical Advanced Pharmaceutical Technology Manual.
- 8- Industrial Pharmacy Books Theoretical and Practical, Faculty of Pharmacy, Assiut University and El-Minia University, Egypt, the years 1999-2000, 2000-2001, 2001-2002, 2002-2003 and 2003-2004.

### Theses Supervision:

The following theses have been supervised with the following titles:

- 1- Mahrous Osman Ahmed, M.Sc. thesis entitled "Pharmaceutical Investigation of Certain Directly Compressed Benzodiazepine Tablets", Assiut University, 1986 (Completed).
- 2- Eman Mostafa Samy, M.Sc. thesis entitled "Interaction of N-desmethyldiazepam and Chlordiazepoxide in Certain Pharmaceutical Systems", 1986 (Completed).
- 3- Gamal Mohamed Mahrous Rammah, M.Sc. thesis entitled "Preparation and Evaluation of Clonazepam Solid Dispersions", 1999 (Completed).
- 4- Sayed Mohamed Ahmed, Ph.D. thesis entitled "Interaction of Temazepam with Certain Macromolecules, Assiut University, 1987 (Completed).
- 5- Mahrous Osman Ahmed, Ph.D. thesis entitled "Interaction of Certain Benzodiazepines with Cyclodextrins, Assiut University, 1990 (Completed).
- 6- Eman Mostafa Samy, Ph.D. thesis entitled "Formulation and Evaluation of Some Sustained Release Anti-Inflammatory Dosage Forms", Assiut University 1991 (Completed).
- 7- Gamal Mohamed Soltan, M.Sc. thesis entitled "Formulation and Evaluation of Some Pharmaceutical Dosage Forms Containing Azapropazone", 2001 (Completed).

- 8- Osama Salama Abou-Uwaida. M.Sc. thesis entitled "A Study on the Formulation and Availability of Meclozine HCl from Certain Pharmaceutical Dosage Forms, 2002 (Completed).
- 9- Amany Abdel-Kader Abdel-Raheem, M.Sc., 2000, thesis entitled "Formulation and Evaluation of Certain Pharmaceutical Dosage Forms Containing Antiplatelet Drugs, 2004 (Completed),
- 10- Abdallah Mahmoud Makhlof, M.Sc., thesis entitled "Formulation and Evaluation of Certain Pharmaceutical Dosage Forms Containing Oral Hypoglycemic Drug, Glpizide", July 2004 (Completed).
- 11- Jelan Abd-El-Razek, M.Sc. thesis, entitled "Formulation and Evaluation of the Antifungal Drug Ketoconazole in Certain Pharmaceutical Dosage Forms", June 2004 (Completed).
- 12- Hesham Mohamed Tawfeek M.Sc. thesis entitled "Formulation and Evaluation of Certain Dosage Forms Containing Antiinfammatory Drugs Refecoxib, 2005 (Completed).
- 13- Gamal Mohamed Mahrous Rammah Ph.D. thesis entitled "Formulation and Evaluation of Keterolac and Floconazole Mucoadhesive Buccal Delivery Systems", 2006 (Completed).
- 14- Mohammed Ehab Aly Hassan M.Sc. thesis entitled "Formulation and Evaluation of Certain Dosage Forms Containg Loratidine", 2007 (Completed).
- 15- Yasser Abdel-Aleem Hassan, M.Sc. thesis entitled "Formulation and Evaluation of Certain Dosage Forms Containing Celecoxib", 2007 (Completed).
- 16- Marwa Galal El-Nagar, M.Sc. thesis enttled "Formulation and Evaluation of Verapamil Hydrochloride Buccoadhesive Dosage Forms", 2009, Undergoing.
- 17- Hassan Abdel-Hamid Tamam, M.Sc. thesis entitled "Formulation of Certain Drugs in Certain Dosage Forms", 2009, Undergoing.

- 18-Omayah Aly Hassan, M.Sc. Thesis entitled "Preparation and Evaluation of Sustained release Verapamil hydrochloride tablets", Completed 2011.
- 19-Gamal Salah El-Deen Tawfeek, M.Sc. Thesis entitled "Formulation and Evaluation of certain dosage forms containing Glipizide", 2010,undergoing.
- 20-Marwa Ahmed Sayed Mohammed, M.Sc. Thesis entitled "Preparation and Evaluation of Yeast Tablets "2009, Undergoing.
- 21-Mahmoud Mohamed Omar Hassan,M.Sc. Thesis entitled "Formulation and Evaluation of Indomethacin in certain pharmaceutical dosage forms" 2010, undergoing.
- 22-Ehab Mostafa Saad El-Zyyat, King Saud University with cojuction with Assiut University, Ph.D. Thesis entitled "Development of modified rtelease solid oral dosage forms using various technologies" 2011, undergoing.

#### Theses Examination:

- 1- Member of Jury Committeae of the thesis "Interaction of Certain Benzodiazepines with Cyclodextrins", (M.O. Ahmed, Ph.D. thesis, Assiut University, 1990).
- 2- Member of the Jury Committee of the thesis "Formulation and Evaluation of Some Sustained Release Antiinflammatory Dosage Forms", (E.M. Samy, Ph.D. thesis, Assiut University, 1991).
- 3- Member of the Jury committeae of the thesis "Preparation and Evaluation of Clonazepam Solid Dispersions", (G.M. Mahrous, M.Sc. thesis, Assiut University, 1999).
- 4- Member of the Jury committee of the thesis "Formulation and Evaluation of Certain Pharmaceutical Dosage Forms Containing Aceclofenac" (G. A. Shazly, M.Sc. thesis, Assiut University, 2001).

- 5- Member of the Jury committee of the thesis "Formulation and Evaluation of Some Pharmaceutical Dosage Forms Containing Azapropazone", (G.M. Sultan, M.Sc. thesis, Assiut University, 2001).
- 6- Member of the Jury committeae of the thesis "A Study on the Formulation and Availability of Meclozine HCl from Certain Pharmaceutical Dosage Forms", (U.S.S. Abou-Uwadia M.Sc. thesis, Assiut University, 2002).
- 7- Member of the Jury committee of the thesis "Formulation and Evaluation of Certain Pharmaceutical Dosage Forms Containing Antiplatelate Drugs", (Amany Abdel-Kader Abdel-Raheem, M.Sc. thesis, Faculty of Pharmacy, Assiut University, 2004).
- 8- Member of the Jury committeae of the thesis "Formulation and Evaluation of Ketoconazole Vaginal Pessaries" (Gelan Abdel-Razek M.Sc. thesis, Faculty of Pharmacy, Assiut University, 2004).
- 9- Member of the Jury committee of the thesis "Formulation and Evaluation of Oral Hypoglycemic Agent, Glipizide", (Abdella Makholuf M.Sc. thesis, Faculty of pharmacy, Assiut University, 2004).
- 10- Member in the Jury committee of the thesis "Formulation and Evaluation of Ketoconazole Transdermal Delivery Systems", (Mohammed Mohammed Badran, M.Sc., thesis Al-Azhar University, Faculty of Pharmacy for boys, Cairo, 2004).
- 11- Member in the Jury committee of the thesis "Processing Parameters Affecting the Release of Gliclazide from Tableted Microspheres", (Munirah Mohammed Al-Faadhel M.Sc. thesis, Dept. of Pharmaceutics, Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia, December, 2005).
- 12- Member in the Jury committee of the thesis "Formulation and Evaluation of Buccoadhesive Films Containing Ketorolac and Floconazole", Gamal Mohammed Mahrous Rammah, Ph.D. thesis, Faculty of Pharmacy, Assiut University, Egypt, August 2006).

- 13- Member in the Jury committee of the thesis "Metronidazole Buccoadhesive Films for the Treatment of Periodontal Diseases", Lubna Yousef Ashri M.Sc. thesis, Dept. of Pharmaceutics, Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia, May, 23<sup>rd</sup>, 2007).
- 14- Member in the Jury committee of the thesis by Omayah Aly Hassan, M.Sc. Thesis entitled "Preparation and Evaluation of Sustained release Verapamil hydrochloride tablets" 2011
- 15- Member in the Juree comitteae of the thesis by Mahmoud Mohamed Omar Hassan, M.Sc. Thesis entitled "Formulation and Evaluation of Indomethacin in certain pharmaceutical dosage forms", 2012.
- 16-Member in the juree committeae of the thesis by Neveen Gamal El Deen Al-Gindy entitled"Formulation and evaluation of Nimesulide suppositories.,2012.

### Member in the following Promotion committeae:

- 1- The promotion of Dr. El-Suweyah S.A., the Assistant Professor of Pharmaceutics, Faculty of Pharmacy, King Saud University, El-Riyadh, Saudi Arabia, from Assistant to Associate Professor, March, 2003.
- 2- The promotion of Dr. Eman Saddar Ibraheem El-Lithy, the Assistant Professor of Pharmaceutics, Faculty of Pharmacy, Helwan University, Egypt from Assistant to Associate Professor, April, 2004.
- 3- The promotion of Dr Mona Hassan Abo-Alainain, Assistant Professor, Dept. of Pharmacy, Cairo University to Associate Professor, July, 2009.
- 4- The Promotion of Dr. Maher Mustafa Shourabji, the Assistant Professor of Pharmaceutical Technology, Faculty of Pharmacy and Medical Sciences, Al-Ahliyya Amman Private University, Amman Jordan, March, 2010.

- 5-The Scientific Prize of Excellency for The scientists of Alexandria University for Prof Nazic Abdel Latif Al Gindy, Prof of Industrial Pharmacy, Faculty of Pharmacy, Alexandria University, April 2010.
- 6-The promotion of Dr Doaa Ahmed Al-Sutohi, Assistant Professor, Dept. of Pharmacy, Cairo University to Associate Professor, 2011.
- 7-The promotion of Dr Hatem Ahmed Abel Monsef Sarhan, Assistant professor of Pharmaceutics and Industrial Pharmacy, Faculty of pharmacy, Al Minia University, 2012

# Reviewer and Reviser of the following books:

- 1- Extemporaneous Pediatric preparations, by Pharmacist Yasser Al Mokbel, Maternity Hospital, Buraydah, Al Quassim, KSA, and published by the Saudi Pharmaceutical Society, 2006.
- 2- Extemporaneous Pharmaceutical Preparations, by Pharmacist Abdul Rahman Al Homeidan, Assistant Director of Pharmacy Services, King Fahad Specialist Hospital, Buraidah, Al-Qassim, KSA.

### Consultant for:

- 1- The techanical director of the center of medical researches, Assiut University.
- 2- Providing consultance for certain pharmaceutical companies in Egypt as chemical Industries Development (CID), Egypt and T3A company, Assiut.

#### Experimenral Techniques:

• Thermal analysis: differential thermal analysis, differential scanning calorimetery.

- Powder Technology:Scanning electron microscopy, X –Ray diffractometry, particle size analysis, viscometry, spray drying, freeze drying.
- Solid dispersion technology including preparation with different carriers and evaluation of the pharmaceutical systems produced.
- Dosage form technology-preformulation and formulation techniques; dissolution and bioavailability evaluation, in vivo/in vitro correlation, stability testing, tableting technology.
- Chemical analysis: various spectrophotometric and chromatographic methods (IR, UV, TLC and HPLC).

#### Memberships:

- 1- Member in the Egyptian Pharmaceutical Association.
- 2- Member in the American Pharmaceutical Association.
- 3- Member in the Egyptian Pharmacists Syndicate.
- 4- Member in the Hospital Pharmacy Association.
- 5- Member of Assiut University Staff Member.
- 6- Faculty staff supervisor of the student union social activities.
- 7- Faculty staff general supervisor of the student union activities.
- 8- Member in the permanent scientific committee for the promotion of Assistant professors to Associate professors, The Ninth Round, Egypt, 2004, 2005.
- 9- Member in the Editorial board of the Bulletin of the Pharmaceutical Sciences, Assiut University.
- 10- Member in the Juries committee in the permanent scientific for the promotion for faculty staff members, the Tenth Round, Egypt, 2009-2012.
- 11- The General Scientific Secretary of the Bulletin of Pharmaceutical Sciences, Assiut University, 2009-2011.

# Courses administered through the graduate period before Ph.D.:

## A) General Courses:

1- Instrumental Methods of Analysis: -NMR -IR -UV

- Chromatography
- Mass Spectroscopy
- Polarography.
- Potentiometry.
- Conductiometry.

#### 2- Physical Pharmacy:

- Colloids.
- Kinetics, half-lives and orders of reactions.
- Phase rule and Phase diagrams.
- Thermodynamics.
- Diffusion and dissolution.
- Rheology.
- Complexation.

#### 3- Statistics and Mathematics:

- Central tendency
- Least square square line and parabola.
- Probability.
- Degree of confidence and confedence intervals.
- Regression and correlation coefficient.

# **B. Special Courses:**

- 1- Advanced Industrial Pharmacy:
  - Heat flow
  - Material of construction.
  - Corrosion.
  - Evaporation.
  - Sedimenation
  - Filtration.
  - Centrifugation
  - Tablet and Tabletting.

- Size reduction
- Drying.
- Crystallization.
- Lyophilization
- Fluidization
- Classification
- Atomization.
- Extraction.
- Emulsification.

#### 2- Solubilization:

- Theory of micellar solubilization.
- Types of solubilizers.
- Factors acceeding solubilization of meicaments.
- Pharmaceutical application of solubilization.

#### 3- Stability:

- order of reactins
- Predection of shelf life.
- Factors affecting the stability of pharmaceutical formulations

# List of Published Research Articles

### I- Research articles published in reviewed scientific journals:

- 1- Determination of the CMC of selected surfactant solutions in systems containing chloramphenicol, Bull. Pharm. Sci., Assiut University, 2, 14 (1979).
- 2- A study on the solubilization of chloramphenicol, Pharmazie, 39, 102 (1981).
- 3- Effect of different additives on the micellar solubilization of chloramphenicol, Bull. Pharm. Sci., Assiut University, 3, 87 (1980).

- 4- The use of molecular sieve technique for stuying unersaturated systems containing chloramphenicol, Bull. Pharm. Sci., Assiut University, 4, 133 (1980).
- 5- Application of dialysis under pressure for investigating the interction between chloramphenical and non-ionic surfactants, Bull. Pharm. Sci., Assiut University, 4, 120 (1981).
- 6- Micellar solubilization of diazepam and nitrazepam by non-ionic surfactants, Bull . Pharm. Sci., Assiut University, 6, 69 (1983).
- 7- Effect of hydroxylated additives on the micellar solubilization of methotrimeprazine, Bull. Pharm. Sci., Assiut University, 7, 97 (1984).
- 8- Formulation and stability of certain mixtures containing methotrimeprazine, Pharmazeutische Industrie, 12, 1295 (1985).
- 9- Factors affecting the release of diazepam from directly compressed tablets:I-Interaction of diazepam with certain directly compressible vehicles, S.T.P.Pharma, 2 (12), 23 (1986).
- 10- Solubilization and stability of pyridine-3-carboxyaldhyde by different micellar forming materials, Bull. Pharm. Sci., Assiut University, 7 (2), 322 (1984).
- 11- Solubilization and stability of clonazepam by different classes of surfactants, Bull. Pharm. Sci., Assiut University, 7 (2), 363 (1984).
- 12- Studies of cyclodextrin inclusions:Inclusion between and cyclodextrins and chloramphenicol in aqueous solution, S.T.P.Pharma, 2, (13), 116 (1986).
- 13- Preparation and evaluation of directly compressed medazepam hydrochloride tablets, Bull. Pharm. Sci., Assiut University, 8 (2), 104 (1985).
- 14- Dissolution behaviour of tolazamide in the presence of certain non-ionic surfactants, J.Pharm. Belg., 41 (5), 308 (1986).

- 15- Interaction of 1, 4-Benzodiazepine with macromolecules:I-Effect of non-ionic surfactants on the dissolution behaviour of temazepam, Bull. Pharm. Sci., Assiut University, 8 (2), 158 (198)
- 16- Interaction of 1, 4-Benzodiazpine with certain macromolecules: II-Crystallization of temazepam in presence of different hydrophilic macromolecules, Bull. Pharm. Sci., Assiut University, 8 (2), 171 (1985)
- 17- Effect of coprecipitate formation and certain non-ionic surfactants on chlordiazepoxide release from capsules, Bull. Pharm. SCI., Assiut University, 9 (1), 40 (1986).
- 18- Interaction of 1, 4-Benzodiazepines with hydrophilic macromolecules: III-Wettability of modified temazepam crystals, Bull. Pharm. Sci., Assiut University, 9 (2), 157 (1986).
- 19- Effect of pH and organic hydroxylated additives on N-desmethyl diazepam solubilization by non-ionic surfactants, Bull. Pharm. Sci., Assiut University, 9 (2), 11 (1986).
- 20- Preformulation studies of directly compressed temazepam tablets, Bull. Pharm. Sci., Assiut University, 9 (2), 172 (1986)
- 21- Studies of cyclodextrin inclusion complexes:II Inclusion complexes between -cyclodextrin and N-desmethyldiazepam, J. Pharm. Belg., 4 (6), 437 (1988).
- 22- Interaction of temazepam with certain macromolecules: IV-Phase diagram of temazepam-polyethylene glycol binary systems, Bull. Pharm. Sci., Assiut University, 11 (1), 50 (1988).
- 23- Interaction of temazepam with certain Macromolecules: V- Thermodynamics of temazepam solubilization, Bull. Pharm. Sci., Assiut University, 11 (1), 70 (1988).
- 24- Interaction of temazepam with hydrophilic macromolecules: VI- Preparation, dissolution characteristics and aging of temazepam solid dispersions, Bull. Pharm. Sci., Assiut University, 12 (2), 175 (1989).

- 25- Interaction of temazepam with certain macromolecules: VII- Formulation of tablets containing temazepam solid dispersions, Bull. Pharm. Sci., Assiut University, 12 (2), 308 (1989).
- 26- Interaction of temazepam with hydrophilic macromolecules: VIII- Effect of polyethylene glycols molecular weight and polysorbate 80 on temazepam dissolution from solid dispersions, J.Pharm. Belg., 47 (2), 141 (1992).
- 27- Evaluation of chloramphenicol—B-cyclodextrin inclusion complex, Eur. J. Pharm. Biopharm., 37 (1), 34 (1991).
- 28- Factors affecting chlordiazepoxide solubilization by non-ionic surfactants, Bull. Pharm. Sci., Assiut University, 14 (1&2), 35 (1991).
- 29- Complex formation of nitrazepam in coprecipitating and in cogrinding with methylated B -cyclodextrins, Chem. Pharm. Bull. Japan, 38 (12), 3423 (1990).
- 30- Effect of certain macromolecules on the extraction of Sophora alkaloids, Bull. Pharm. Sci., Assiut University, 15, 37 (1992).
- 31- Effect of certain surfactants on the accelerated stability of the anticancer agent pyridine-3-carboxaldhyde thiosemicarbazone at 57 C, Bull. Pharm. Sci., Cairo University, 30 (2), 127 (1992).
- 32- Evaluation of ibuprofen controlled release tablets: I-Eudragit matrix controlled release tablets, Eur. J. Pharm. Biopharm., 38 (2), 71 (1992).
- 33- Optimization of Eudragit or cellulosic polymers-ibuprofen sustained release systems using Principal component analysis, Bull. Pharm. Sci., Assiut University, 15, 63 (1992).
- 34- Effect of cellulosic polymers on the physical properties and dissolutio of ibuprofen granules. Bull, Pharm. Sci, Assiut University, 15, 89 (1992)
- 35- Preparation and evaluation of clonazepam solid dispersions, Bull. Pharm. Sci., Assiut University, 15, 49 (1992).

- 36- Preparation and evaluation of metformin hydrochloride suppositories, S.T.P. pharma Sciences, 4 (2), (1994).
- 37-Solid stability testing of ibuprofen-Eudragit RSPM sustained release tablets, Bull. Pharm. Sci., 16 (1), 12 (1993).
- 38-Evaluation of ibuprofen-cellulosic polymers sustained release tablets, Bull. Pharm. Sci., Assiut University, 16 (1), 25 (1993).
- 39-Accelerated stability testing of ibuprofen-Eudragit RSPM sustained release tablets using 1H-NMR, HPLC and TLC, Bull. Pharm. Sci., Assiut University, 16 (1), 1 (1993).
- 40-The mode of inclusion complexation of bromazepam with dimethyl-B-cyclodextrin, Bull. Pharm. Sci., Assiut University, 16 (1) 47 (1993).
- 41-Comparative dissolution characteristics of bropirmine-cyclodextrin inclusion complex and its solid dispersion with polyethylene glycol 6000, Int. J. pharmaceutics, 96, 5 (1993).
- 42-Inclusion complexation between trimethyl-B-cyclodextrin and clobazam or flunitrazepam during sealed heating, Eur. J. Pharm. Biopharm., 3 (2), 82 (1993).
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- 1- Stability of directly compressed medazepam hydrochloride tablets. Presented during the 19<sup>th</sup> Egyptian Pharmaceutical Conference, Cairo (1986).
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- 4- Formulation of certain clonazepem PVP K 30 solid dispersions and HP-B-CD Inclusion complex into tablets and capsules .TLC and HPLC investigation of the stored preparations, presented before the Fifth scientific congress of the association of the colleges of pharmacy in the Arab World held in Faculty of pharmacy, Jordan University, Amman, Jordan, October 16-18 (2001).
- 5- Thermodynamics of Glipizide solubilization by certain surfactants. Presented before Al-Azhar International pharmaceutical Conference, Cairo, February 19-22 (2002).
- 6- Enhacement of dissolution of meclozine HCl by co-grinding and adsorption technique. Presented before Al-Azhar Second International Conference for Pharmaceutical and Biological Sciences, Cairo, 19-21 December (2001).
- 7- Preparation and evaluation of sustained release glibizide from floating capsules. Presented before the 28 th Pharmaceutical conference held in Cairo, Egypt, 19-22 December (2002).
- 8- Adsorption and co-adsorption of Glipizide on some inert matrices, presented before the 28<sup>th</sup> pharmaceutical conference held in Cairo, Egypt, 19-22 December (2002).
- 9- Study on the release of glibizide co-adsorbates with and without ionic and non-ionic surfactants. Presented before the 28<sup>th</sup> Pharmaceutical conference held in Cairo, Egypt, 19-22 December (2002).

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- 17-Comparative study of Nano-cavity size of cyclodextrin and micelles of surfactants on the solubility of isoxsuprine Hcl. Presented before The Future University Pharmaceutical Technologies, City Star Intercontennental Hotel, Cairo, Feb.6-9,2012.

- 18-Comparative study of Verapamil Hcl release from floating capsules with cardiomil,presented before the 32 <sup>nd</sup> conference of pharmaceutical sciences, Egyptian pharmaceutical society, December 20-22, 2011.
- 19-Comparative gastric ulcerogenic study of formulated floating indomethacin capsules with Bonidon 75 mg ,Presented before The Future University Pharmaceutical Technologies,Future University and City Star Intercontennental Hotel, Cairo, Feb.6-9,2012.
- 20-Enhancement of the dissolution of Glipizide from capsules and tablets, presented before Assiut University 8<sup>th</sup> International Pharmaceutical conference, March, 14, 2012.