# Curriculum Vitae

## -Personal information

**Full Name:** ▪ **Dr. Tarek Saad Makram Hanna**

**Nationality:** ▪ **Egyptian**

**Date of birth:** ▪ **7/1/1968**

**Place of birth:** ▪ **Giza**

**Marital status:** ▪ **Married**

**Address:** ▪ **1134 Yasmin Compound Elsheikh Zayed**

**E-Mail:** ▪ **tareksaadmakram@yahoo.com**

## -Education:

▪ **Ph.D. in Pharmaceutical science, Faculty of Pharmacy, Cairo University 2000**

**Ph.D.** Thesis:

**"A contribution to the Study of the Phenomenon of Mass transfer of Furosemide".**

1. Effect of cyclodextrins on physicochemical characteristics of Furosemide:
   The data revealed formation of 1:1 complexes between Furosemide and the investigated CyDs. The investigated CyDs. Where found to increase the solubility of the drug in water. The degradation rate constant as well as the half-life were improved and marked protection of the drug against chemical degradation. The solubility of Furosemide in CyD-complexes is improved.
2. Implication on Bioavailability:
   The bioavailability of the drug was studied on normal human volunteers. The excretion rate of the drug was determined by HPLC for a period of 24 hrs. Post dosing. Inclusion complexation of Furosemoide in CyDs leads to a more or less delay in its onset of action, a significant increase in its duration of action as well as significant augmentation in its overall biological

availability.

3. Experimental:
   a. Preparation of complexes according to kneading method.
   b. Assessment of bioavailability:
      The bioavailability of Furosemide and its CyD complexes was assessed in 6 healthy human volunteers, average age of 28 years and average weight 65 kg. After an overnight fast, each subject received a single dose (20 mg/70 kg b.w) of Furosemoide or the equivalent amount of its inclusion complex.
      i. Urine samples:
         Urine samples were calculated at 1, 2, 3, 4, 6, 9, 12, 15, 18 and 24 hrs. post dosing.
      ii. HPLC assay:
         1. Preparing the sample:
            Urine samples were extracted with 3 ml ethyl acetate in a vortex mixer for 1 min, and phase separation was achieved by centrifugation. 2 ml of organic layer were transferred to be evaporated using temperature-regulated sand bath. Each sample residue was injected into the HPLC equipment using mobile phase.

- **M. Sc. in Pharmaceutical Science, Faculty of Pharmacy, Cairo University 1995.**

  **M.Sc**. Thesis:

  **"A contribution to the Study of the Phenomenon of Mass transfer of Oral Anticoagulants".**

  1. Interaction of Oral anticoagulants with methyl Xanthines:
     The results revealed formation of equimolar complex with caffeine and theophylline, such complex improves solubility of dicumarol and Warfarine sodium and dissolution rate.
  2. Improvement of biological performance of oral antiagulants:
     i. Warfarine: Coevaporates of Warfarine sodium containing different weight fraction of polyvinyl-pyrrolidone (kollidon 25 & 30) polymers. The coevaporate of Warfarine with an equal weight fraction of kollidon 30 was found to exhibit

optimum biological properties beside highest dissolution rate.

ii. Dicumarol: Polyethylene glycols enhance the dissolution properties of the drug and the dissolution rate, increase with increasing polymer weight fraction. PEG improve the biological effect of Dicumarol.

3. Assessment of Bioavailability of Anticoagulant Drugs: By using single oral dose of Anticoagulant drugs or the equivalent amount of its physical mixture or co evaporates packet in transparent gelatin capsules were administrated to 6 main healthy Albino rabbits weighing 2.5 ± 0.2 kg in a cross-over design system. The animals were kept on dry meal, excluding any green fodder for 1 week before as well as during the experiment. The bioavailability of the drug was assessed by determining the prothrombin time of blood samples taken from an animal ear vein after different time intervals following administration of the drug.

- **B.Sc. of Pharmaceutical sciences, Faculty of Pharmacy, Cairo University 1990.**

## -Professional occupations:

- **T.A. in Pharmaceutical science department, National Research Center, Giza, Egypt, Sep 1991 to Nov 1995**
- **Assistant Lecturer in Pharmaceutical science department, National Research Center, Giza, Egypt, Dec 1995 to Mar 2000**
- **Lecturer in Pharmaceutical science department National Research Center, Giza, Egypt, Apr 2000 to 2006**
- **Lecturer in Pharmaceutical science department 6 of October university, 6 of October city, Egypt, Aug 2006 to February 2018**
- **Professor assistant in Pharmaceutical science department 6 of October university, 6 of October city, Egypt, February 2018 to date**

## -Experience

**Teaching experience :**

- **Lecturer in Pharmaceutical science department 6 of**

October university, 6 of October city, Egypt, Aug 2006 to February 2018

- Professor assistant in Pharmaceutical science department 6 of October university, 6 of October city, Egypt, February 2018 to date

**Research experience and list of publications:**

- "Effect of the Hydrophobic Nature of Triacetyl-B-Cyclodextrin on the Dissolution Properties of Fenoprofen Calcium Dihydrate Prepared by Kneding and Co-evaporating Methods."
  Hussein O. Ammar, M. A. Nahdy, Tarek S. Makram, Shaimaa Mosallam
  Ejbps, 2016, Volume 3, Issue 6,127-130

- "A Comparative Study for Pre-formulation and Stability of Combination of Atorvastatine and Ezetimibe."
  Tarek S. Makram
  Ejbps, 2017, volume 4, Issue 2, 60-80

- "Effect of Polymers on the Physiochemical Properties and Biological Performance of Fenoprofen Calcium Dihydrate –Triacetyl-B-Cyclodextrin Complex."
  Hussein O. Ammar, Tarek S. Makram, Shaimaa Mosallam. Pharmaceutics 2017, 9, 23; doi: 10.3390

- Preparation and evaluation of hydrogels as a vehicle for topical delivery of lornoxicam.
  Ammar, H.O., Ghorab, M. and Mahmoud, A.A., Makram, T.S. and Noshi, S.H.
  Int. J. Drug Formulation & Research, 2.
  "تحضير وتقييم الهيدروجيل كأداه للتوصيل الموضعى للورنوكسيكام"

- Topical liquid crystalline gel containing lornoxicam/cyclodextrin complex.
  Ammar, H.O., Ghorab, M. and Mahmoud, A.A., Makram, T.S. and Noshi, S.H.
  J. Incl. Phenom. Macrocycl. Chem., 73, 161.
  "جيل بلورى موضعى يحتوى على مركب لورنوكسيكام/سيكلودكسترين"

- Host-guest system of etodolac in native and modified β-cyclodextrins: preparation and physicochemical characterization.

**Ammar, H.O., Ghorab, M., Mostafa, D.M., Makram, T.S. and Ali, R.M.**
**J. Incl Phenom Macrocycl Chem., 77, 121-134.**
**" نظام الخاص لإتودولاك فى بينا – سيكلودكسترين الأصلى والمعدل: الاعداد والتحضير والتوصيف الفزيائى الكميائى"**

- **Rapid pain relief using transdermal film forming polymeric solution of ketorolac.**
  **Ammar, H.O., Ghorab, M. and Mahmoud, A.A., Makram, T.S. and Ghoneim, A.M.**
  **Pharm. Dev. Technol., 18, 1005-16.**
  **" استخدام الكيترولاك فى صورة محلول للحقن عبر الجلد للتسكين السريع للألام"**

- **Industrialization Of Medroxy Progesterone Acetate In Prolonged Parental Suspension (Part I)**
  **Ghorab, M. K. and Makram, T.S.**
  **International Journal of Pharmacy and Pharmaceutical Sciences, Vol 7, Issue 1, 2015**
  **"تصنيع ميدروكسى بروجيسترون اسيتات فى معلق للحقن طويل المدى"**

- **A Comparative Study for the Sterilization of Medroxy Progesterone Acetate for Parentral Product.**
  **Ghorab, M. M. and Makram, T.S.**
  **European Journal of Biomedical and Pharmaceutical Sciences, ejbps, 2015, Volume 2, Issue 3, 1164-1178.**
  **"دراسة مقارنة لتقييم ميدروكسى بروجسترون اسيتات كمنتج للحقن"**

- **“Interaction of Oral Anticoagulants with Methyl Xanthines”. (Pharmazie 52 “1997” 12).**

- **“Improvement of The Biological Performance of Oral Anticoagulants drugs” (Pharmazie 52 “1997” 9).**

- **“Inclusion complexation of Furosemide in Cyclodextrins”**
- **Part 1: “Effect of Cyclodextrins on Physicochemical characters of Furosemide” (Pharmazie 54 “1999” 2).**
- **Part 2: “Implications on Bioavailability” (Pharmazie 54 “1999” 3).**

**Training and Attendance of conferences :**

- **Training course of the seminar on evaluation of drug efficacy. Organized by Agency for cooperation in international health (ACIH) & Japan international cooperation agency (JICA).**
  **Mar 2000: June 2000 Course Locations:**
  **Faculty of Pharmacy & Faculty of Medicine, Kumamoto University.**
  - **Kaketsuken kikuchi laboratories.**
  - **Panapharm laboratories.**
  - **Pharmaceutical business development Takeda Chemical Industries, Ltd.**
  - **Kyushu University.**
  - **Faculty of pharmaceutical science, Kyoto University.**
  - **Faculty of pharmaceutical science, Tokyo University.**
  - **National Institute of Hygienic Science (Tokyo).**
  - **Techno Research Park, faculty of engineering, K.U. University.**
- **June1995 Training course about Oral contraceptives and other ways of pregnancy control.**
  **Course included: field trips to low educated people and areas.**
- **Training at "Al- Raei Al-Saleh" Hospital**
  **Jan91: Apr92 Responsible for conducting the studies on the possibility of reducing the occurrence of tropical diseases and prevention of enzymatic diseases through teamwork and with support of member states. Planning implementation and monitoring of most of the regional tropical diseases and zones programs.**
- **Training at ABI Pharmaceutical company, Egypt (Glaxo Smith Klein)**
  **Summer of 1988 Training in the Production department and the Quality control department.**
- **Certificate from "The Egyptian Pharmacists Association" for being outstanding in the practice of pharmaceutical work.**
- **Certificate from "Kyushu International Center & Japan International Cooperation Agency" for the attendance of "The General Japanese Language Course from 21 Apr 2000: 9 June 2000.**
- **Special certificate from "Cairo University" for the**

**outstanding performance in preparing for the M. Sc.**

- **Certificate for successfully completing the group-training course of the seminar on evaluation of drug efficacy. Organized by Agency for cooperation in international health (ACIH) & Japan international cooperation agency (JICA).**