

CURRICULUM VITAE



MAHA NASR SAYED ALY

1- Personal Information

Date of Birth: 29, January 1981.

Birth Place: Giza, Egypt.

Marital status: Single.

Sex: Female.

Nationality: Egyptian

Email: maha2929@gmail.com; drmahanasr@pharma.asu.edu.eg

2- Current Position

Assistant Professor of Pharmaceutics, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University.

3- Education

- | | |
|---------------------|--|
| January 2012 | Ph.D. of Pharmaceutical Sciences (Pharmaceutics), Title "Advanced delivery systems for pulmonary administration" Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University. |
| May 2011 | Certificate of Pharmaceutical Bioinformatics from the department of pharmaceutical biosciences, Uppsala University, Sweden (Grade pass with distinction) |
| January 2008 | M.Sc. , of Pharmaceutical Sciences (Pharmaceutics), Title "Lipid based and vesicular aceclofenac delivery systems for topical administration" Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University. |
| May 2003 | B.Sc. , of Pharmaceutical Sciences, Faculty of Pharmacy, Ain Shams University with general grade "Excellent with Honors". |

4- Posts Held

- 1/2017-1/2022** **Global young academy (GYA) member**
- 12/2016-12/2020** **TWAS-ARO (The world academy of sciences for the advancement of science in developing countries) Arab regional office young affiliate**
<http://www.bibalex.org/TWAS-ARO/en/YoungAffiliate/Index.aspx>
- 2/2017-6/2017** **Lecturer of Dosage form design**, Department of Pharmaceutics and Industrial Pharmacy, British University in Egypt (BUE)
- 9/2016-2/2017** **Lecturer of Biopharmaceutics and pharmacokinetics**, Department of Pharmaceutics and Industrial Pharmacy, British University in Egypt (BUE)
- 3/2016-3/2017** **Africa Science Leadership ASLP fellow**, Global Young Academy GYA
<https://globalyoungacademy.net/africa-science-leadership-programme-announces-2016-fellows/>
- 2/2015-6/2016** **Lecturer of Community Pharmacy**, Department of Clinical Pharmacy, Misr International University (MIU)
- 9/2015- 1/2016** **Lecturer of biopharmaceutics and pharmacokinetics**, Department of Pharmaceutics, British University in Egypt (BUE)
- 12/2015-1/2016** **Honorary visiting scientist**, Centre for Pharmaceutical Engineering Science, University of Bradford, UK
- 2/2015 - 7/2015** **Lecturer of Pharmaceutics**, Department of Pharmaceutics, Misr International University (MIU), Cairo, Egypt.
- 2015** **Daniel Turnberg fellow**, The Academy of medical sciences
<http://www.acmedsci.ac.uk/grants-and-schemes/grant-schemes/daniel-turnberg-travel-fellowship/>
- 2/2014- 7/2014** **Lecturer of Community Pharmacy**, Department of Clinical Pharmacy, Misr International University (MIU), Cairo, Egypt
- 2012-current** **Lecturer of Pharmaceutics and Industrial Pharmacy**, Department of Pharmaceutics and Industrial Pharmacy, Ain Shams University, Cairo, Egypt
- 4/2013-10/2013** **Postdoctoral fellow**, Division of Drug delivery technology, Leiden

Academic Center for Drug Research, Leiden University, Netherlands

- 3/2013** **Biovision.Nxt fellow**, The world academy of Sciences TWAS
- 12/2010-5/2011** **Visiting Scientist and Researcher**, School of Pharmacy and Biomedical Sciences and Institute of Nanotechnology and Bioengineering, University of Central Lancashire, United Kingdom.
- 2008- 2011** **Assistant Lecturer of Pharmaceutics**, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.
- 2008** **Project coordinator**, The Experimental and Advanced Pharmaceutical Research Unit (EAPRU), Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.
- 2003-2007** **Teaching Assistant**, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.
- 2003-2004** **Senior Pharmacist**, Al Tayseer Community Pharmacy, Al Tayseer Hospital, Cairo, Egypt.

5- Teaching Experience

Institution	Level	Courses Taught
1- Ain Shams University, Faculty of Pharmacy	Undergraduates	Physical Pharmacy, Pharmaceutics 1-3, Biopharmaceutics and Pharmacokinetics, Pharmacy Practice, Dosage form design, Pharmacy Law, Quality assurance, Sterile dosage Forms, OTC medications.
2- Ain Shams University, Faculty of Pharmacy	M.Sc. students	Differential Scanning Calorimetry and FTIR Principles. Dosage form design
3- Ain Shams University, Faculty of Pharmacy	PhD. students	Pharmacokinetics
4- Ain Shams University, Faculty of Pharmacy	Undergraduates and Postgraduates	Advanced Concepts in Clinical Pharmacy Services.
5- Ain Shams University, Faculty of Pharmacy	Postgraduates	Special courses in clinical diploma
6- Misr International University	Undergraduates	Community pharmacy, pharmaceutics 1
7- British University in Egypt	Undergraduates	Biopharmaceutics and Pharmacokinetics

6- Other Professional Experience

- 1- Supervision of students' researches and summer projects.
- 2- Participated in the preparation of practical notes and course specifications of first year till fourth year courses.

7- Publications

h index: 9

Number of citations: 316

1- Rana Abdelgawad, **Maha Nasr***, Noha H. Moftah, Manal Yassin Hamza
Phospholipid membrane tubulation using ceramide doping "Cerosomes": characterization and clinical application in psoriasis treatment.

European journal of Pharmaceutical Sciences, in press

2- Nasr Eldin M. Aref, **Maha Nasr**, Rihab Osman
Novel heat stable enterotoxin (STa) immunogen based on cationic nanoliposomes: preparation, characterization and immunization

Journal of vaccine and vaccination, Vol. 8, issue 1, 2017, pages 1-8

3- Mamdouh Abdel Mouez, **Maha Nasr***, Mona Abdel-Mottaleb, Ahmed S. Geneidi, Samar Mansour

Composite chitosan-transfersomal vesicles for improved transnasal permeation and bioavailability of verapamil.

International journal of biological macromolecules, Vol. 93, December 2016, pages 591-599.

<http://www.sciencedirect.com/science/article/pii/S0141813016315471>

4- Maha Nasr*, Sameh Abdel-Hamid, Noha H. Moftah, Maha Fadel, Abdullah A. Alyoussef
Jojoba oil soft colloidal nanocarrier of a synthetic retinoid: preparation, characterization and clinical efficacy in psoriatic patients.

Current Drug Delivery, 2016 May 13, Epub ahead of print

<http://benthamscience.com/journals/current-drug-delivery/article/142145/>

5- Ramy Said-Elbahr, **Maha Nasr***, Mohamed A. Alhnan, Ismail Taha, Omaima Sammour
Nebulizable colloidal nanoparticles co-encapsulating a COX-2 inhibitor and a herbal compound for treatment of lung cancer.

European journal of pharmaceutics and Biopharmaceutics, Vol. 13, June 2016, pages 1-12.

<http://www.sciencedirect.com/science/article/pii/S0939641116301011>

6- Sara S. Barakat, Maha Nasr, Sabry S. Badawy, Samar Mansour
Nanoliposomes containing penetration enhancers for the intranasal delivery of the antiemetic dimenhydrinate.

International journal of pharmaceutical research and Bioscience, Vol. 5, Issue 2, 2016, pages 111-122.

<http://www.ijprbs.com/issue.php?year=2016&month=2>

7- Maha Fadel, Nevien Samy, Maha Nasr*, Abdullah A. Alyoussef

Topical colloidal indocyanine green-mediated photodynamic therapy for treatment of basal cell carcinoma.

Pharmaceutical Development Technology, 2016 Feb 19:1-6. [Epub ahead of print]

<http://www.tandfonline.com/doi/full/10.3109/10837450.2016.1146294>

8- Orchid Ashraf, Maha Nasr, Nermeen Fawzi, Marianne Nebsen, Omaima Sammour

Development of a validated HPLC method for determination of the flavonoid baicalin

Journal of Advanced Scientific Research, Vol. 7, issue 1, 2016, pages 28-31.

http://www.sciensage.info/journal/1457100920JASR_0911151.pdf

9- Rana Abdelgawad, Maha Nasr*, Manal Yassin Hamza, Gehanne A.S. Awad

Topical and systemic dermal carriers for psoriasis

International Journal of Current Pharmaceutical Research, Vol. 8, issue 1, 2016, pages 4-9.

<http://innovareacademics.in/journals/index.php/ijcpr/article/view/10604>

10- Eman A Bseiso, Maha Nasr*, Omaima A. Sammour, Nabaweya A. Abd El Gawad

Novel nail penetration enhancer containing vesicles "nPEVs" for treatment of onychomycosis

Drug Delivery, Vol. 23, Issue 8, October 2016, pages 2813-2819.

<http://www.tandfonline.com/doi/abs/10.3109/10717544.2015.1099059?journalCode=idrd20>

11- Maha Nasr*

Development of an optimized hyaluronic acid based lipidic nanoemulsion co-encapsulating two polyphenols for nose to brain delivery

Drug Delivery, Vol. 23, Issue 4, May 2016, pages 1444-1452.

<http://www.tandfonline.com/doi/full/10.3109/10717544.2015.1092619>

12- Maha Nasr, Sameh Abdel-Hamid

Optimizing the dermal accumulation of a tazarotene microemulsion using skin deposition modeling

Drug Development and Industrial Pharmacy, Vol. 42, Issue 4, April 2016, pages 636-643.

<http://informahealthcare.com/eprint/bghQZF5prmMHBUZc5mYs/full>

13- Eman A Bsieso, **Maha Nasr***, Noha H. Mofteh, Omaira A. Sammour, Nabaweya A. Abd El Gawad

Could nanovesicles containing a penetration enhancer clinically improve the therapeutic outcome in skin fungal diseases?

Nanomedicine (Lond), Vol. 10, Issue 13, 2015, pages 2017-2031.

<http://www.futuremedicine.com/doi/abs/10.2217/nnm.15.49>

14- Eman A Bseiso, **Maha Nasr**, Omaira A. Sammour, Nabaweya A. Abd El Gawad

Recent advances in topical formulation carriers of antifungal agents

Indian journal of Dermatology, Venereology, and Leprology, Vol. 81, Issue 5, Sept-Oct 2015, pages 457-463.

<http://www.ijdv1.com/downloadpdf.asp?id=162328;type=2>

15- Maha Nasr*, Sameh Abdel-Hamid, Abdullah A. Alyoussef

A highlight on lipid based nanocarriers for transcutaneous immunization

Current Pharmaceutical Biotechnology, Vol. 16, Issue 4, 2015, pages 371-379.

<http://benthamscience.com/journal/abstracts.php?journalID=cpb&articleID=128233>

16- Maha Nasr*, Sameh Abdel-Hamid

Lipid based nanocapsules: A multitude of biomedical applications

Current Pharmaceutical Biotechnology, Vol. 16, Issue 4, 2015, pages 322-332.

<http://benthamscience.com/journal/abstracts.php?journalID=cpb&articleID=128559>

17- Maha Nasr, Mohammad Najlah, Antony D'Emanuele, Abdelbary Elhissi

PAMAM dendrimers as aerosol drug nanocarriers for pulmonary delivery via nebulization

International Journal of Pharmaceutics, Vol. 461, Issues 1-2, January 2014, pages 242-250.

<http://www.sciencedirect.com/science/article/pii/S0378517313010168>

18- Maha Nasr*, Ismail Taha, Rania Hathout

Suitability of liposomal carriers for systemic delivery of risedronate using the pulmonary route

Drug delivery, Vol. 20, Issue 8, November 2013, pages 311-318.

<http://informahealthcare.com/doi/abs/10.3109/10717544.2013.835160>

19- Rania Hathout, **Maha Nasr**

Transdermal delivery of Betahistine hydrochloride using microemulsions: Physical characterization, biophysical assessment, confocal imaging and permeation studies

Colloids and Surfaces B: Biointerfaces, Vol. 110, October 2013, pages 254-260.

<http://www.sciencedirect.com/science/article/pii/S0927776513003159>

20- Maha Nasr*, Gehanne A.S. Awad, Samar Mansour, Abdelhamid Al Shamy, Nahed D.Mortada.

Hydrophilic versus hydrophobic porogens for engineering of poly(lactide-co-glycolide) microparticles containing risedronate sodium.

Pharmaceutical Development and Technology, Vol. 18, Issue 5, September-October 2013, pages 1078-1088.

<http://informahealthcare.com/doi/abs/10.3109/10837450.2012.693507>

21- Maha Nasr, Samrana Nawaz, Abdelbary Elhissi

Amphotericin B lipid nanoemulsion aerosols for targeting peripheral respiratory airways via nebulization

International Journal of Pharmaceutics, Vol. 436, Issues 1-2, October 2012, pages 611-616.

<http://www.sciencedirect.com/science/article/pii/S0378517312007314>

22- Maha Nasr*, Gehanne A.S. Awad, Samar Mansour, Ismail Taha, Abdelhamid Al Shamy, Nahed D.Mortada.

Different Modalities of NaCl Osmogen in Biodegradable Microspheres for Bone Deposition of Risedronate Sodium by Alveolar Targeting.

European Journal of Pharmaceutics and Biopharmaceutics, Vol. 79, Issue (3), November 2011, Pages 601-611. This research has been chosen by Global Medical Discovery in Canada as a topic of special interest to the drug development sector.

<http://www.sciencedirect.com/science/article/pii/S0939641111002165>

23- Maha Nasr, Gehanne A.S. Awad, Samar Mansour, Abdelhamid Al Shamy, Nahed D.Mortada.

A reliable predictive factorial model for entrapment optimization of a sodium bisphosphonate into biodegradable microspheres.

Journal of Pharmaceutical Sciences, Vol. 100, Issue (2), February 2011, Pages 612-621.

<http://onlinelibrary.wiley.com/doi/10.1002/jps.22297/abstract>

24- Maha Nasr Sayed Aly

Intra-articular drug delivery: A fast growing approach.

Recent patents on drug delivery and formulation. Vol. 2, number 3, November 2008, Pages 231-237.

<http://www.bentham.org/ddf/contabs/ddf2-3.htm>

25- Maha Nasr*, Samar Mansour, Nahed D. Mortada, A.A. ElShamy.

Vesicular Aceclofenac systems: A comparative study between liposomes and niosomes.

Journal of Microencapsulation, Vol. 25, Issue 7 October 2008, Pages 499-512.

<http://www.informaworld.com/smpp/content~db=all~content=a792967635>

26- Maha Nasr*, Samar Mansour, Nahed D. Mortada, A.A. ElShamy.

Lipospheres as carriers for topical delivery of aceclofenac. Preparation, characterization and in vivo evaluation.

AAPS PharmSciTech, Vol. 9, Number 1, March 2008, Pages 154-162.

<http://springerlink.com/content/0885r253485p5370/?p=e5945e5ec6634341b36a21851b60492d&pi=0>

8- Conferences

1- Fourth FUE international conference of Pharmaceutical Sciences, Egypt, 31 January- 2 February 2017. **Poster presentations** entitled:

a) "Cosmeceutical vesicles for topical delivery"

Maha ElKayal, **Maha Nasr**, Nahed Mortada, Seham ElKhashen

b) "Preparation and Charaterization of (-)-Epigallocatechin-3-Gallate Vesicular Systems"

Shymaa Hatem, **Maha Nasr**, Seham Elkheshen, Ahmed S. Genedi

2- Daniel Turnberg Alumni conference, Cyprus, 9-11 November 2016

Poster presentation entitled "Nebulizable nanosystems for treatment of pulmonary cancer: a promising approach"

3- Fourth Arab-American Frontiers of science, engineering and medicine symposium, hosted by the Masdar institute of Science Technology in Abu Dhabi, UAE, 5-7 November 2016.

Poster presentation and flash talk entitled "The emerging era of nanotechnology in the pharmaceutical field and its connection with other fields".

4- Dubai International pharmaceuticals and technologies conference and exhibition – DUPHAT, 15-17 March 2016

Poster presentation entitled "Effect of co-encapsulation of resveratrol with curcumin on the latter's anticancer potential in nanoparticulate form"

5- The 15th UKICRS workshop and symposium, University of Nottingham, United Kingdom, 15-16 April 2015

Poster presentation entitled "An optimized antipsoriatic microemulsion system for dermal delivery"

Maha Nasr, Sameh Abdelhamid

6- The 3rd FUE International conference on Pharmaceutical sciences, Cairo, Egypt, 9-11 February 2015

Poster presentation entitled "Preparation and characterization of antioxidant cosmeceutical formulations"

Shymaa Hatem, **Maha Nasr**, Seham Elkheshen, Ahmed S. Genedi

7- The 17th Scientific Congress of the association of colleges of pharmacy in the Arab world, Ain Shams University, 14-16 October 2014.

a) Poster presentation entitled "Formulation Optimization of High Dose Nutraceuticals into an Oral Disintegration Tablet (ODT)"

Ahmed M. Agiba, Sameh M. Abdel-Hamid, **Maha Nasr**, Ahmed S. Genidy.

b) Poster presentation entitled "Optimization of formulation variables of bergamot oil nanostructured lipid carriers"

Mai Shaaban, **Maha Nasr**, Maha Fadel, Omaima A. Sammour.

c) Poster presentation entitled "Optimization of nanoemulsion formulations for treatment of lung cancer"

Ramy S.El-Bahr, **Maha Nasr**, Omaima A. Sammour.

d) Poster presentation entitled "Novel vesicular systems for treatment of skin fungal infections"

Eman A. Bseiso, **Maha Nasr**, Omaima. Sammour, Nabaweya A. Abd El Gawad.

8- Faculty of Pharmacy Cairo University, 5th International Scientific conference, 23-24 April 2014.

Poster presentation entitled "Penetration enhancer containing vesicles of sertaconazole for topical treatment of deep seated fungal infections"

Eman A. Biseso, **Maha Nasr**, Omaima A. Sammour, Nabaweya A. Abd El Gawad.

9- Materials Today Virtual conference: Biomaterials, 19-21 November 2013.

Attendance

10- 19th International Symposium on Microencapsulation, 9-11 September 2013, Pamplona, Spain.

Poster presentation entitled "Could liposomes be a suitable carrier for systemic delivery of an anti-osteoporotic drug via the pulmonary route?"

Maha Nasr*, Ismail Taha, Rania Hathout

11- Biovision, the world life sciences forum, 24-26 March 2013, Lyon, France.

Attendance

12- Future University International Workshop on Tablet Manufacturing, QC/QA, Bioavailability/Bio-equivalence, 20-21 February 2013, Egypt.

Attendance

13- FIP Centennial World Congress, 3-8 October 2012, Amsterdam, The Netherlands.

Poster presentation entitled “A feasibility study for nebulization of a model anti-asthma drug using dendrimers as nanocarriers”.

Maha Nasr^{*}, Abdelbary ElHissi, Antony D’Emanuele

14- FUE International conference on Pharmaceutical Technologies, 6-9 February 2012, Cairo, Egypt.

Attendance

15- United Kingdom and Ireland Controlled Release Symposium (UKICRS), 12-14 April 2011, Belfast, Ireland.

Participated with:

a) Poster presentation entitled “Pulmonary delivery of Amphotericin B using two commercially available nanoemulsions for treatment of aspergillosis”.

Maha Nasr^{*}, Samrana Nawaz, Abdelbary ElHissi, Waqar Ahmed, Antony D’Emanuele

b) Poster presentation entitled “Pulmonary delivery of beclomethasone dipropionate using PAMAM dendrimers as nanocarriers”.

Maha Nasr^{*}, Abdelbary ElHissi, Antony D’Emanuele

c) Oral and Poster presentation entitled “An Alternative Route of Administration for Bisphosphonates: From Theory to Practice”.

Maha Nasr^{*}, Gehanne A.S.Awad, Samar Mansour, Ismail Taha, Abdelhamid Alshamy, Nahed Mortada

16- First Middle East Congress of Pharmacy and Pharmaceutical Sciences, 26-28 November 2008, Sharm ElSheikh.

Oral presentation entitled: “Strategies to reduce medication errors and role of the pharmacist”.

17- The Egyptian pharmaceutical society conference of pharmaceutical sciences, 19-21 December 2006.

Poster presentation entitled: “Non inflammatory vesicular systems: a comparative study between liposomes and niosomes”.

Maha Nasr^{*}, Samar Mansour, Abdelhamid Alshamy, Nahed Mortada

9- PhD and Masters Theses supervision

1- Vesicular delivery systems for treatment of psoriasis (Master thesis, National Organization for drug control and research NODCAR) (**Completed 2016**).

- 2- A pharmaceutical study on photodynamic therapy for skin diseases (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University).
- 3- Optimizing the nutraceutical formulations of chondroitin sulphate and glucosamine sulphate using certain pharmaceutical technologies (Master thesis, Sigma Pharmaceutical company).
- 4- Lipid based formulations for the improvement of the ocular therapeutic outcome of latanoprost (Master thesis, EIPICO Pharmaceutical company).
- 5- Chitosan microspheres and ultraflexible liposomes as intranasal delivery systems of verapamil hydrochloride (Master thesis, Future University) (**Completed 2016**)
- 6- A pharmaceutical study on nebulizable delivery systems for pulmonary administration (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University) (**Completed 2016**)
- 7- In situ gels and nanocomposite systems for intranasal delivery of dimenhydrinate (Master thesis, Misr International University) (**Completed 2016**).
- 8- Nanocarriers for the topical delivery of an antifungal drug (Master thesis, 6th of October University) (**Completed 2015**).
- 9- Preparation and characterization of antioxidant cosmeceutical formulations (Master thesis, Future University).
- 10- Nanoparticles for targeting colon cancer (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University).
- 11- Formulation and evaluation of vesicular systems of a nutraceutical drug for targeting and treatment of skin cancer (PhD thesis, Future University).
- 12- Nanoparticles for topical treatment of a viral disease (PhD thesis, National Organization for drug control and research NODCAR)
- 13- Composite biodegradable systems for localized treatment of osteomyelitis (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University).
- 14- Enhancement of the ocular delivery of baicalin using vesicular systems (Master thesis, Department of Pharmaceutics, Faculty of Pharmacy, Heliopolis University).
- 15- Preparation and characterization of nanoformulations for acne treatment (Master thesis, Department of Pharmaceutics, Faculty of Pharmacy, Pharos University in collaboration with the American University in Cairo).

- 16- Enhancement of the therapeutic effectiveness of eugenol using vesicles (Master thesis, Department of Pharmaceutics, Faculty of Pharmacy, Russian University).
- 17- Quality by design approach for formulation of itopride gastroretentive tablets (Master thesis, Central Administration for Pharmaceutical affairs).
- 18- Optimization of an ocular formulation for treatment of glaucoma (Master thesis, SigmaTech company).
- 19- A pharmaceutical study on drug delivery system for brain targeting (Master thesis, National Organization for drug control and research NODCAR).
- 20- Preparation and characterization of silymarin vesicular system customized for wound healing (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University).
- 21- Optimization of rutin lipid nanoparticulate formulations (Master thesis, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Ain Shams University).
- 22- Development of solvent-free techniques for tablet manufacturing (Master thesis, Amoun Pharmaceutical company).
- 23- Vesicular systems for the topical delivery of nobiletin (Master thesis, British University in Cairo).
- 24- Preparation and characterization of vesicular nebulizable delivery systems for pulmonary administration (Master thesis, Nawah scientific company)
- 25- Preparation and characterization of pterostilbene nanoparticles (Master thesis, National Organization for drug control and research NODCAR)
- 26- Preparation and optimization of chrysin nanoparticles (Master thesis, Heliopolis University)
- 27- Preparation, characterization and evaluation of novel nanoemulsions in photodynamic therapy (PhD thesis, National Institute of Laser Enhanced Sciences NILES).
- 28- PEVs as a novel nanocarrier for topical PDT (PhD thesis, National Institute of Laser Enhanced Sciences NILES).

10- Peer Reviewing roles

- 1- International Journal of Pharmaceutics
- 2- Clinical Drug Investigation journal
- 3- Biotechnology Progress journal
- 4- Carbohydrate Polymers journal

- 5- Reviewer of E-books for Bentham Science Publishers
- 6- International journal of Nanomedicine
- 7- Drug Delivery Journal
- 8- Local and Regional Anesthesia Journal
- 9- International Journal of Cancer
- 10- Journal of Pharmaceutical Sciences
- 11- Journal of Liposome Research
- 12- Journal of Pharmacy and Bioallied Sciences
- 13- Journal of Pharmacy and Pharmacology
- 14- Journal of Advanced Pharmaceutical Technology & Research
- 15- Journal of Microencapsulation
- 16- Indian Journal of Pharmaceutical Sciences
- 17- African Journal of Pharmacy and Pharmacology
- 18- Journal of Biomaterials Applications
- 19- Journal of Hazardous Materials
- 20- World Journal of Medicine and Medical Science Research
- 21- Current Drug delivery
- 22- Archives of Pharmaceutical Sciences
- 23- The pharmacy and pharmacology research
- 24- Journal of Materials Today proceedings
- 25- Medical practice and reviews
- 26- Journal of Traditional and complementary medicine
- 27- Journal of drug development and clinical trials
- 28- Current Nanomedicine
- 29- Current Pharmaceutical Design
- 30- Epidemiology and infection
- 31- Reviewer for Science and Technology Development fund (STDF) projects and grants
- 32- Journal of medicinal plants research
- 33- Clinical reviews and opinions
- 34- Drug development and Industrial Pharmacy
- 35- Journal of "Anticancer agents in medicinal chemistry"

11- Editorial roles

- 1- Editor in chief of "SPER Journal of Advances of Pharmaceutical Delivery"
- 2- Editorial board member of the journal "ISRN Pharmaceutics"
- 3- Guest Host Editor for the journal "Frontiers in Pharmaceutical Medicine and Outcomes Research"
- 4- Editorial board member of "Elyns journal of Pharmaceutical Research"
- 5- Editorial advisory board member of "Journal of Applied Pharmacy"

12- Grants

1- A teaching grant (750 USD) provided by the US National Academy of Sciences, for teaching "Ensuring Scientific Integrity when it comes to Human Experimentation and Pharmacy Practice" for undergraduate students using active learning pedagogical approach (2015).

2- The Daniel Turnberg UK/Middle East Honorary visiting researcher travel fellowship grant for one month awarded by the Academy of Medical Sciences and funded by the Wellcome trust, for initiation of research collaboration with the Centre of Pharmaceutical Engineering Science, the University of Bradford (2015).

3- Six months funded research grant from the Missions Department, Egypt, for research conduction at the University of Leiden, the Netherlands (2013).

4- Six months funded research grant from the Missions Department, Arabic Republic of Egypt, for research conduction at the University of Central Lancashire, United Kingdom (2010/2011).

13- Projects

1- Collaborator (Project ID 5251, code TC/11/Research Centers/2012/5251) with a budget 10 million EGP funded by STDF for establishment of Center of Excellence in the Faculty of Pharmacy, Ain Shams University (2013)

2- Research team member in a project of the "Short term fellowship category" (Project ID 6087, code TC/14/STF/2013/6087) entitled "A pharmaceutical study on nebulizable delivery systems for pulmonary administration for treatment of lung cancer" in collaboration with the School of Pharmacy and Biomedical Sciences, University of Central Lancashire, United Kingdom, with a budget of 133,000 EGP funded by Science and Technology Development Fund (STDF) for a period of one year (2014)

3- Co-principal investigator in a project of "Basic and Applied Research category" Project ID 5313 entitled "Design and molecular characterization of Nano/Micro-particulated immunogenic heat-stable enterotoxin of enterotoxigenic Escherichia coli for prevention of colibacillosis in newly born calves" with a budget of 921 thousand EGP funded by Science and Technology Development Fund (STDF) for a period of two years (2014-2016), in collaboration with the Faculty of Veterinary Medicine, Assiut University.

4- Formulator in COMPACT (collaboration on the optimization of macromolecular pharmaceutical access to cellular targets) IMI (innovative medicines initiative) project, Leiden Academic Center for Drug Research, Netherlands for a period of 6 months (2013).

5- Formulator in a project entitled "Effect of curcumin nanoparticles on brain injury in diabetic rats" funded by the National Research Center (NRC) (2016).

6- Team member and implementer of a capacity building project entitled "Science capacity building in Africa: Institutional and Academy of Science model" under the patronage of Africa Science Leadership programme ASLP and the University of Pretoria, South Africa.

7- Team member of a project entitled "Combating obesity complications using advanced drug delivery systems and nanotechnology for the purpose of enhancing therapeutic materials" funded by the National Research Center (NRC) with a budget of 150,000 EGP for 3 years (2016-2019).

14- Prizes and Awards

1- The international publishing award from Ain Shams University (2009, 2011, 2012, 2013, 2014, 2015, 2016)

2- Full travel award granted by Sandia National Laboratories in cooperation with the US department of States, for attendance of the chemical inventory management systems (CIMS) workshop, 16-19 December 2013 in Kuala Lumpur, Malaysia.

3- Biovision.Next fellowship full travel award for attendance of "Biovision: The world life sciences forum" in Lyon, France from 24-26 March 2013, jointly funded by Fondation pour l'Universite' de Lyon and TWAS/Biovision unit in Bibliotheca Alexandria. The selection was made based on scientific excellence, mobility and involvement in civil society.

4- Full travel award as invited trainer and consultant, granted by Getrac Emirates, Gebril for training and consultancy, 25-27 November 2012, Dubai, UAE. Participated as the principal and sole trainer in a 3 days workshop for Security, safety and environment sector, Dubai Municipality with the theme of nutraceuticals, safety of cosmetics and cosmeceuticals and nanotechnology applications in cosmetics.

5- FIP Congress full travel award granted by the FIP foundation for education and research, the Netherlands for attendance of the World congress of Pharmacy and Pharmaceutical Sciences (FIP centennial congress) in Amsterdam, the Netherlands (2012).

6- Full travel award as invited guest speaker First Middle East Congress of Pharmacy and Pharmaceutical Sciences, 26-28 November 2008, Sharm ElSheikh, invited guest speaker.

7- Certificates of merit from the Quality Assurance Unit, Faculty of Pharmacy, Ain Shams University for excellence in teaching:

a) Pharmacy law and dosage form design courses for the credit hour system (academic year 2012/2013)

b) Pharmacy practice for the regular program (academic year 2014/2015)

c) Pharmacy law, pharmacy practice, pharmaceuticals 3 and dosage form design courses for the regular program (academic year 2015/2016)

8- Partial travel award from Ain Shams University for attending the 15th UKICRS conference held in Nottingham, United Kingdom (2015).

9- Full travel award as invited trainer, granted by Dubai Municipality, for oral presentation, 21-24 March 2015, Dubai, UAE.

10- Full travel award sponsored by the U.S. National Academy of Sciences to attend the 2nd Egyptian *Teaching Responsible Science Institute* in Egypt, 21-26 July 2015, Ain El Sokhna, Egypt.

11- Professional Development travel award sponsored by the National Institutes of Health (NIH) National Cancer Institute (NCI) in partnership with AORTIC and CRDF Global, for attendance of 2015 Africa Scientific Peer-Review Publication and Grant Writing Workshop developed in conjunction with the 2015 African Organization for research and training in cancer (AORTIC) international cancer conference in Marrakech, Morocco, 18-19 November 2015.

12- Professional Development travel fellowship entitled "Africa Science Leadership programme ASLP" sponsored by the University of Pretoria and the Global Young Academy with the support of Robert Bosch Stiftung, Pretoria, South Africa, 11-16 April 2016.

13- Professional Development workshop for participation in the "1st Egyptian Leadership Institute" sponsored by the U.S. National Academy of Sciences and co-organized by Ain Shams University, 14-17 May 2016.

14- Full travel award funded by Daniel Turnberg Foundation, UK, for attendance of the 1st Daniel Turnberg alumni conference in Nicosia, Cyprus, 9-11 November 2016.

15- Full travel award funded by the Arab-American Frontiers program to attend the fourth Arab-American Frontiers of science, engineering and medicine symposium, hosted by the Masdar institute of Science Technology in Abu Dhabi, UAE, 5-7 November 2016.

15- Collaboration

A) International

- 1- Institute of Nanotechnology and Bioengineering, United Kingdom
- 2- School of Pharmacy and Biomedical Sciences, University of Central Lancashire, United Kingdom
- 3- Centre of Pharmaceutical Engineering, University of Bradford, United Kingdom
- 4- Faculty of Pharmacy, Tabuk University, KSA

B) National

- 1- National Organization for drug control and research

- 2- Sigma Pharmaceutical company
- 3- EIPICO Pharmaceutical company
- 4- Faculty of Pharmacy, Sixth of October University
- 5- Faculty of Pharmacy, Future University
- 6- Faculty of Pharmacy, Misr International University (MIU)
- 7- Faculty of veterinary medicine, Assiut University
- 8- American University in Cairo
- 9- Faculty of medicine, Ain Shams University
- 10- Faculty of Pharmacy, Heliopolis University
- 11- Faculty of medicine, Minya University
- 12- Department of medical applications of lasers, Cairo University
- 13- Faculty of Pharmacy, Russian University
- 14- Regional center of mycology and its applications, Alazhar University
- 15- Sigma Tech pharmaceutical company.
- 16- Atomic Energy Authority
- 17- National Research Centre (NRC)
- 18- Military health services
- 19- Faculty of Pharmacy, British University in Egypt (BUE)

16- Training Courses

A) International:

- i) **Fifth Virtual Training Workshop on Bioinformatics** by the Asian Bioinformatics Research and Education Network (ABREN) (Kyushu institute of technology and Advanced technology institute, Japan) (2011).
- ii) **Laser Diffraction technique for Particle sizing & method development** webinar by Malvern Company (2012).

B) National:

I- Certified from FLDC (Faculty and Leadership Development Center), Ain Shams University:

- 1- Effective communication skills.
- 2- Application of credit hours systems in universities.
- 3- The use of technology in teaching.
- 4- Competitive research projects skills.
- 5- Ethics of scientific research.
- 6- Scientific papers publications.
- 7- Effective presentation skills.
- 8- Proper student assessment and exam preparation.
- 9- Conferences organization

- 10- Digital libraries
- 11- Quality standards in the teaching process
- 12- Ethics of academic profession
- 13- Legal and Financial aspects of the academic profession
- 14- Managing a research team
- 15- Problem solving and decision making
- 16- Data management and statistics

II- Certified from DAAD Cairo (German Academic exchange service):

Business plan development for academics

III- Certified from Information and communication technology project ICTP:

Statistical analysis using SPSS

IV- Familiarization and operation of Agilent HPLC model 1200 and chemstation software, Agilent Company, Egypt (2010).

IV- Higher education funding opportunities in the Arab region, organized by Library of Alexandria (2012).

V- Novartis Pharmaceutical Company, Quality Assurance Department (2002).

17- Oral Presentations

A) International:

1- United Kingdom and Ireland Controlled Release Symposium (UKICRS), 12-14 April 2011, Belfast, Ireland.

Lecture entitled: "An Alternative Route of Administration for Bisphosphonates: From Theory to Practice".

2- Getrac Emirates, Gebril for training and consultancy, 25-27 November 2012, Dubai, UAE.

Principal and sole trainer in a 3 day workshop for Security, safety and environment sector, Dubai Municipality with the theme of nutraceuticals, safety of cosmetics and cosmeceuticals and nanotechnology applications in cosmetics.

3- Dubai Municipality, 22-23 March 2015, Dubai, UAE.

Invited guest speaker in the Regulatory and Safety Cosmetic Perspective workshop with two oral presentations entitled "Non-traditional actives in cosmeceuticals" and "Nanocosmeceuticals".

B) National:

I) First Middle East Congress of Pharmacy and Pharmaceutical Sciences, 26-28 November 2008, Sharm ElSheikh.

Lecture entitled: "Strategies to reduce medication errors and role of the pharmacist".

II) Faculty of Pharmacy, Ain Shams University

- 1- Lipospheres for perineural site application
- 2- Vesicular and lipid based systems for anti-inflammatory drugs
- 3- Novel topical drug delivery techniques
- 4- Seven habits for highly effective people
- 5- Survival skills for scientists
- 6- Advanced techniques for pulmonary administration
- 7- Intra-articular drug delivery
- 8- Pulmonary vaccination: concepts and perspectives
- 9- Dendrimers and their application
- 10- Polymeric microspheres for delivery of a third generation bisphosphonate for treatment of osteolysis
- 11- Advanced Delivery systems for pulmonary administration
- 12- Graph-pad Instat program: Back to statistical basics
- 13- Active Teaching methods/Responsible conduct of research RCS

18- Membership

- 1- Egyptian Syndicate of Pharmacists
- 2- United Kingdom and Ireland Controlled release society (UKICRS)
- 3- The Italo-Latin American Asian African Society of Ethnomedicine (SILAE)
- 4- International Liposome Society
- 5- European Science Foundation
- 6- Egyptian responsible conduct of research RCR society
- 7- Egyptian Pharmaceutical Society
- 8- International Association of Advanced Materials
- 9- Global young academy (GYA)
- 10- TWAS Arab regional office

19- Skills

1- Languages:

- Arabic: Mother tongue.
- English: Excellent Written and spoken (International Toefl score 118/120).
- French: Very Good Written and spoken

2- Computer Skills: WinWord, Excel, PowerPoint, Internet and mailing (ICDL certified).

3- Personal Skills: Excellent presentation skills, effective working individually or as a part of a team, gain Experience and skills quickly, utilization of interactive teaching; datashow; powerpoint presentation; seminars and workshops.

20- Faculty-related extra-curricular student activities

- 1- Advisor for the clinical and green's students' committees in SCOPS " Student Conferences on Pharmaceutical Sciences" with three projects for extemporaneous preparation of anti-hypertensive drugs for pediatric use (2009).
- 2- Supervisor of the drug manufacture workshop for formulation of new drug delivery systems (2010).
- 3- Participated as a lecturer in "the way out" workshop for assistance of students in applying for scholarships and exchange travel grants (2012).
- 4- Participated in the cultural season of the faculty of Pharmacy Ain Shams University with a lecture entitled "Non traditional actives in cosmeceuticals" (2015).
- 5- Supervisor of the students' research activity submitted for the "Arab Council for Training Students of Arab Universities ACTSAU" in its 17th cycle with a research entitled "Preparation and characterization of nanoparticles and their efficacy assessment in different cancer cell lines" (2015).
- 6- Supervisor of the students' project entitled "Effect of co-encapsulation of resveratrol with curcumin on the latter's anticancer potential in nanoparticulate form" presented as a poster and oral presentation in the DUPHAT (Dubai International pharmaceuticals and technologies conference and exhibition), 15-17 March 2016.
- 7- Supervisor of the credit hour students' graduation project entitled "Pulmonary delivery route for vaccines (influenza virus)" (2016).
- 8- Advisor for students activities in SCOPS " Student Conferences on Pharmaceutical Sciences" for projects dealing with extemporaneous preparations of active ingredients (2016).

21- Administrative work

- 1- Member of the scientific judging committee of the 1st Arab African Expo/Conference for Active Pharmaceutical and Cosmeceutical Ingredients (AAAPCI), Cairo, Egypt, 17-18 May 2016.
- 2- Organization of the pricing workshop which was held in the 17th Scientific Congress of the association of Pharmacy colleges in the Arab World, 15 October, 2014.
- 3- Member of the department accreditation quality assurance committees (2012-2014).
- 4- Member of the undergraduate students' affairs committee (2012/2013).
- 5- Member of the postgraduate students' affairs committee (2013/2014).
- 6- Member of ordering and evaluation committee for purchasing and examination of chemicals and equipment (2014 till current).

- 7- Representative of the Pharmaceutics Department in the quality assurance and accreditation unit activity (2008).
- 8- Representative of the Pharmaceutics department in the IT unit (2009, 2010).
- 9- Member of the environmental affairs committee (2014/2015).
- 10- Member of the team responsible for automation of the system required for production of students cumulative grades certificate (2014).
- 11- Member of the advisory board of the Faculty of Pharmacy Ain Shams University journal entitled "Archives of Pharmaceutical Sciences" (2014-current)
- 12- Head of the "students and alumini" standard in the faculty's quality assurance unit (2015 till current)
- 13- Member of the applied scientific research bureau, Faculty of Pharmacy, Ain Shams University (2014 till current)
- 14- Member of the examination control offices (First year, third year and postgraduate controls 2012-current)
- 15- Member of the animal house supervision committee (2016)
- 16- Member of the libraries committee (2016/2017)
- 17- Supervisor of undergraduate exams' invigilation (2016/2017)

22- Counseling and civil society activities

- 1- Member of student counseling team affiliated with Career Resources Center – Egypt Scholars, to provide consultations to current and prospective students regarding studying abroad, hunting scholarships, admission requirements, academic/professional/industry-related issues, planning of future studies and other relevant issues via email and/or online webinars <http://egyptscholars.org>
- 2- Consultant at Getrac Emirates, Gebril for training and consultancy, Dubai, UAE. Participated as the principal and sole trainer in a 3 days workshop entitled "Ingredients for cosmetics and toiletries" for Security, safety and environment sector, Dubai Municipality to provide consultancy on nutraceuticals, safety of cosmetics and cosmeceuticals and nanotechnology applications in cosmetics.
- 3- Member in a non-remunerated capacity building project for empowering young scientists; in which I participated as a speaker and consultant in "Scientific research and proposal writing workshop" held at the Faculty of Engineering, Cairo University, Egypt at 2 November 2016, and participated in the "TAs orientation day" by giving a session for career orientation of young teaching assistants at 2 August 2016 <https://globalyoungacademy.net/activities/african-science-leadership-program/>
- 4- Key opinion leader/consultant for Truvan Health Analytics, Brussels, Belgium <http://truvenhealth.com/>
- 5- Scientific consultant in The Science Advisory board, USA <https://www.scienceboard.net/>

23- Research Interests

Advanced drug delivery technology, formulation, biodegradable particulate systems, biomaterials, nanotechnology, pharmaceutical bioinformatics, tissue engineering, pulmonary delivery, topical drug delivery, vesicular delivery systems, cosmetic product development, intra-articular delivery systems, ocular delivery systems, transdermal drug delivery, dendrimers, lipid-based delivery systems, vaccines, colon targeting, cancer targeted delivery systems, photodynamic therapy, cosmeceuticals, protein delivery, nanocomposites.