

## PERSONAL INFORMATION

## Mona Abdel-Rahman Ali



📍 Assiut University, 71516 Assiut (Egypt)

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🔗 <https://scholar.google.com/citations?user=FLgn200AAAAAJ&hl=en>

Sex Female | Date of birth 13 Feb 1973 | Nationality Egyptian

## JOB APPLIED FOR

## Professor of Organic Chemistry (Polymer Chemistry)

## EDUCATION AND TRAINING

Mar 2000

**M. Sc.**

Faculty of Science, Assiut University, Assiut (Egypt)

**M.Sc. Thesis** in Organic Chemistry “ Organic Synthesis ” under the title : “ **Synthetic Studies on Quinones and Their Derivatives** ”

1 Jul 2006

**Ph. D.**

Faculty of Science, Assiut University, Assiut (Egypt)

**Ph.D. Thesis** in Organic Chemistry “ Polymer Synthesis and Polymer Characterization ” under the title : “ **Synthetic Studies on Some New Polymers Based on Diarylidene-cyclopentanone** ”

Dec 2007

**Postdoctoral student in ETH Zürich (Swiss Federal Institute of Technology in Zürich)**

ETH Zürich (Swiss Federal Institute of Technology in Zürich), Zürich (Switzerland)

<http://www.polychem.mat.ethz.ch/people/Alumni/ETHZurich/A-F/MonaA.html>

Organic Chemistry, Polymer Synthesis and Characterization

Aug 2009

**Postdoctoral student in ETH Zürich (Swiss Federal Institute of Technology in Zürich)**

ETH Zürich (Swiss Federal Institute of Technology in Zürich), Zürich (Switzerland)

<http://www.polychem.mat.ethz.ch/people/Alumni/ETHZurich/A-F/MonaA.html>

Organic Chemistry, Polymer Synthesis and Characterization

Jun 2010

**Visiting Scientist in ETH Zürich (Swiss Federal Institute of Technology in Zürich)**

ETH Zürich (Swiss Federal Institute of Technology in Zürich), Zürich (Egypt)

<http://www.polychem.mat.ethz.ch/people/Alumni/ETHZurich/A-F/MonaA.html>

Organic Chemistry, Polymer Synthesis and Characterization

Jul 2015

**Visiting Scientist in ETH Zürich (Swiss Federal Institute of Technology in Zürich)**

ETH Zürich (Swiss Federal Institute of Technology in Zürich), Zürich (Switzerland)

<http://www.polychem.mat.ethz.ch/people/Alumni/ETHZurich/A-F/MonaA.html>

Organic Chemistry, Polymer Synthesis and Characterization

Jun 2016 **Visiting Scientist in Shanghai University.**  
Shanghai University, Shanghai (China)

Organic Chemistry, Polymer Synthesis and Characterization

Mar 2013–Apr 2019 **Assistant Professor**  
Faculty of Science, Assiut University, Assiut (Egypt)  
Assistant professor of Organic Chemistry (Polymer Chemistry)

Apr 2019–Present **Professor**  
Faculty of Science, Assiut University, Assiut (Egypt)  
Professor of Organic Chemistry (Polymer Chemistry)

#### PERSONAL SKILLS

Mother tongue(s) Arabic

#### Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B2	B2
Deutsch	A2	B1	A2	A2	A2

Deutsch Language, (G1, G2 and G3).

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

Communication skills A member in different committees (related to post graduate students) in Faculty of Science, Assiut University.

#### Organisational / managerial skills

##### Membership of Professional Organization and Societies

- The Egyptian Society for Polymer Science & Technology (ESPST).
- The Egyptian Society of Chemistry.

#### Job-related skills

##### Research Experiences

- Good theoretical background in general Chemistry “ Organic and Polymers”.
- IR Spectra.
- U.V. Spectrophotometry. .
- Mass Spectra.
- NMR Spectra.
- X-ray diffraction using the powder technique.
- X-ray single crystal ( theoretical analysis)
- Thermal Analysis TGA, DTA and DSC.

- Scanning Electron Microscopy SEM.

## Digital skills

Independent user, with a high quality in some chemistry programs

## Other skills

Love to travel and getting experience from different cultures.

## ADDITIONAL INFORMATION

## Publications

## List of Publications

1. Ahmed S. Hammam, Mohamed S. K. Youssef,\* Shaban M. Radwan, **Mona A. Abdel-Rahman**. Synthesis of a New Diels-Alder Quinone Adduct and Its Use in Preparing Thiazolo- and Oxazoloquinolines. *Bull. Korean Chem. Soc*, 25, 779 - 785 (2004).
2. Ahmed. S. H ammam, Kamal. I. Aly\*, Shaban. M. Radwan, **Mona A. Abdel-Rahman**. Liquid crystalline polymers VIII: thermotropic liquid crystalline poly(hydrazone-ether)s containing bis-thiophene linked to the main chain through spacers of various lengths. *Journal of Sulfur Chemistry*, 28, 547–561 (2007).
3. Kamal I. Aly\*, **Mona A. Abdel Rahman**, Mahmoud A. Hussein. New Polymer Syntheses Part 53. Novel Polyamides of Diarylidencycloalkanone Containing Azo Groups in the Polymer Backbone: Synthesis and Characterization. *International J. of Polymeric Materials*, 59, 553 – 569 (2010).
4. **Mona A. Abdel-Rahman**, Bernd W. Schweizer, Oleg Lukin, Afang Zhang, A. Dieter Schlüter\*. Dendronized Polymers with Aromatic Sulfonylimide Dendrons. *Macromol. Chem. Phys.*, 211, 1538 – 1549 (2010).
5. Kamal I. Aly, Ahmed S. Hammam, Shaban M. Radwan, **Mona A. Abdel-Rahman\***. New Unsaturated Copolyesters based on Diarylidencyclopentanone. Optimum conditions of Synthesis, Characterization and Morphology. *International Journal of Basic & Applied Sciences JBAS-IJENS*. 11, 15-35 (2011).
6. Mahmoud A. Hussein\*, **Mona A. Abdel-Rahman**, Ahmed A. Geies. New Heteroaromatic Polyazomethines containing Naphthyridine Moieties: Synthesis, Characterization and Biological Screening. *J. Applied Polymer Science*, 126, 2 – 12 (2012).
7. Mahmoud A. Hussein\*, **Mona A. Abdel Rahman**, Kamal I. Aly. New Polymer Syntheses Part 56: Novel Friedel-Crafts Polyketones Containing Naphthalene Moiety: Synthesis, Characterization and Antimicrobial Activity. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry*, A50, 99 – 109 (2013).
8. **Mona A. Abdel Rahman\***, Mahmoud A. Hussein. Polyarylidene Containing Saturated Silicon Spacers in the Polymers Main Chain. *Designed Monomers and Polymers*, 16, 377 – 388 (2013).
9. **Mona A. Abdel Rahman\***, Mahmoud A. Hussein, Abd El-wareth A.O. Sarhan, Kamal I. Aly. New Polymer Syntheses Part 57: Thermally Stable New Ferrocene-Polyazomethines, Synthetic Methodology and Characterization. *J. of Chemistry*, V 2013, 1 – 9 (2013).
10. Ahmed S. Hammam, **Mona A. Abdel-Rahman\***, Abdel-Rahman A. Hassan, Osama M. Younis. Synthesis and characterization of pyrrolo[2,3-*f*]indole-3,7-dicarbonitriles. *International Journal of Advance in Medical Science, In Press, Corrected Proof*, 1, 11-17 (2013).
11. Ahmed S. Hammam, **Mona A. Abdel-Rahman\***, Abdel-Rahman A. Hassan, Osama M. Younis. Synthesis of New Indolizo-pyrido-indole-diones by a one pot three- component reaction. **The Third Scientific Conference for Young Researchers Basics Science & Technology (SCYR), 2011.**
12. Mahmoud A. Hussein, **Mona A. Abdel-Rahman**, Abdullah M. Asiri, Khalid A. Alamry, Kamal I. Aly Review on: liquid crystalline polyazomethines polymers. Basics, syntheses and characterization. *Designed Monomers and Polymers*, 15, 431 – 463 (2012).
13. **Mona A. Abdel-Rahman\***, Ahmed M. Al-Abd. Thermoresponsive dendrimers based on oligoethylene glycols: Design, synthesis and cytotoxic activity against MCF-7 breast cancer cells. *European Journal of Medicinal Chemistry*, 69, 848 – 854 (2013).
14. Chiara Gstrein, Baozhong Zhang, **Mona A. Abdel-Rahman**, Oscar Bertran, Carlos Aleman, Gerhard Wegner, A. Dieter Schlüter\*. Solvatochromism of dye-labeled dendronized polymers of generation numbers 1– 4: comparison to dendrimers. *Chemical Science*, 7, 4644 – 4652 (2016).

15. **Mona A. Abdel-Rahman\***, Essam M. Hussein, Mahmoud A. Hussein. Synthesis and characterization of novel anti-inflammatory poly(spiro thiazolidinone)s. *Designed Monomers and Polymers*, 19, 650 – 670 (2016).
16. Chunhua Zhou, **Mona A. Abdel-Rahman**, Wen Li, Kun Liu, Afang Zhang\*. Thermoresponsive dendronized copolymers for protein recognitions based on biotin– avidin interaction. *Chinese Chemical Letters*, 28, 832 -838 (2017).
17. Leon F. Scherz, Engy A. Abdel-Rahman, Sameh S. Ali, A. Dieter Schlüter, **Mona A. Abdel-Rahman\***. Design, synthesis and cytotoxic activity of water-soluble quinones with dibromo-*p*-benzoquinone cores and amino oligo(ethylene glycol) side chains against MCF-7 breast cancer cells. *MedChemComm*, 8, 662 – 672 (2017).
18. Kamal I. Aly\*, **Mona A. Abdel-Rahman**, Amal H. Tolba. Liquid crystalline polymers XV. Synthesis, properties and cytotoxicity of photoresponsive thermotropic liquid crystalline copoly(arylidene-ether)s based on 4-*tert*-butylcyclohexanone and cyclohexanone moieties in the main chain. *Liquid crystals*, 45, 187 – 203 (2018).
19. Kamal I. Aly, **Mona A. Abdel-Rahman\***, Mona M. Qutai. Photoactive linear and hyperbranched polyesters based on 4-methylcyclohexanone and 4-*tert*-butylcyclohexanone moieties in the main chain: synthetic methodology, characterization and cytotoxicity. *Journal of Polymer Research*, 2018, **25**, Article 185.
20. Mahmoud A. Hussein, Khalid A. Alamry, Samar J. Almeahmadi, **Mona A. Abdel-Rahman**, Kamal I. Aly, Abdullah M. Asiri. History of arylidene polymers from chemistry point of view. MedCrave Group LLC April 25, 2018.
21. Kamal I. Aly\*, **Nayef S. Al-Muaikel**, **Mona A. Abdel-Rahman**, Amal H. Tolba. Liquid crystalline polymers XVI\*. Thermotropic liquid crystalline copoly(arylidene-ether)/TiO<sub>2</sub> Nanocomposites: synthesis, characterisation and applications. *Liquid crystals*, Published online: 09 Apr 2019.

#### Conferences

1. **Micro and Nano Science Platform Industry Day 2008, May 8th 2008, ETH, Zurich.**
2. **The second periodic scientific conference for young researchers - Faculty of Science - Assiut University, 18-19 October 2008.**
3. **The seventh conference for women, scientific research and development in south Egypt - Assiut University, 16-17 April 2009.**
4. **Assiut Univ. 8th International Pharmaceutical Sciences Conference; Assiut, March 14th&15th, 2012.**
5. **2nd International Advances in Applied Physics and Materials Science Congress. Antalya, Turkey.**
6. **The first International Conference on Multidisciplinary Research. Ain Sokhna, Egypt, 28-31 October 2015.**
7. **IBN SINA Conference on Heterocyclic Chemistry and it's Applications ISACHC 2018, Hurghada, Egypt. 30 March- 2 April 2018.**