Noura Mossaed Salah

CV

1. Personal Background

- **Name:** Noura Mossaed Salah Elwany.
- **Birthdate:** Jan, 9th, 1991.
- **Sex:** Female.
- **Nationality:** Egyptian.
- **Place of birth:** Assiut, Egypt.
- **Marital state:** Married.
- **For Correspondence:**

Home address: Sayed Pharmaceutical Factory, Divide the Sons of Sheikh Street, Assiut, Egypt.

Work address: Assistant Lecturer of Inorganic Chemistry, Chemistry Department, Faculty of Science, Assiut University, Assiut, Egypt, Postal Code 71516 – Egypt.

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2. Professional Title / Current Occupation:

Assistant Lecturer of Inorganic Chemistry, Chemistry Department, Faculty of Science, Assiut University, Assiut, Egypt.

3. Educational Background:

2016-2019	**Master's degree in science chemistry "Inorganic Chemistry" from Chemistry Department, Assiut University, Egypt.** **Title of the thesis: "γ- irradiation Effects on the Crystal Structure and Kinetics of the Thermal Dehydration of Neodymium Acetate Hydrate".**
2015-2016	**Preparatory Year (Diploma) in Inorganic Chemistry from Chemistry Department, Assiut University, Egypt with General grade (very good with Honor, 85.71%)**
2009-2013	**Bachelor of Science in Chemistry from Chemistry Department, Assiut University, Egypt (very good with honour, GPA=3.68/4).**
2006-2009	**High School, Manfalut Secondary School for Girls.**

4. Employment Record and Research Experience:

2014 – 2019	**Demonstrator of Inorganic Chemistry, Faculty of science, Assiut University.**
7/2019-present	**Assistant Lecturer of Inorganic Chemistry, Faculty of science, Assiut University**

►Since I was appointed as demonstrator and teaching assistant at the chemistry department, Assiut University, Egypt. I have been participating in teaching programs organized by chemistry department for undergraduate students of Sciences, Pharmacy, Veterinary Medicine, Education and Agriculture faculties.

►The work presented in the M.Sc. thesis focused on "γ- irradiation Effects on the Crystal Structure and Kinetics of the Thermal Dehydration of Neodymium Acetate Hydrate" that involved:

Kinetics of dehydration of unirradiated and γ-ray irradiated neodymium (III) acetate hydrate with 10^3 kGy total γ-ray dose absorbed in air atmosphere were studied by isoconversional non isothermal method. The dehydration reactions are best described by nucleation (A2 model) and gas diffusion (D4 model) for unirradiated and γ-ray irradiated samples, respectively. Analysis of the kinetic data using linear and nonlinear isoconversional methods showed that the apparent activation energy, Ea (kJ/mol) is dependent on the conversion degree, α, of the dehydration process. The Ea−α plots for both unirradiated and γ-ray irradiated neodymium (III) acetate hydrate showed that the dehydration is a complex process. The results showed that γ-ray irradiation has a significant effect on the kinetics and thermodynamic parameters of the dehydration reaction. Gamma-irradiation effects on the thermal decomposition of Nd(CH3COO)3.xH2O were evaluated and discussed based on the formation of trapped electrons, point defects, cation and anion vacancies and cluster imperfections in the host lattice of Nd(CH3COO)3.xH2O. The results derived from nonisothermal data presents reliable predictions of isothermal kinetics. Straight line and reduced time plots method were applied for determination of the kinetic triplet (Ea, ℓn A and reaction model f(α)) from predicted isothermal data and the results showed good coincidence with that obtained from the experimental nonisothermal data. Powder X-ray diffraction showed that neodymium (III) acetate hydrate has a monoclinic system (SG P^2/m) and no phase transformation was detected by γ-ray irradiation up to 10^3 kGy absorbed dose. The system maintains the same crystal structure before and after dehydration, but the unit cell parameters were reduced by absorption of γ-ray. IR spectra of un-irradiated and γ-irradiated neodymium acetate hydrate before and after dehydration showed neither appearance of a new band nor disappearance of an old band by absorption of successively increasing doses of γ-ray. Calcination of

$NdAc.xH_2O$ at 800 ºC for 6 hours led to the formation of Nd_2O_3 nanoparticles as were demonstrated by XRD, FT-IR , and TEM measurements.

Additionally, I gained a good experience in operating instruments and techniques like:

UV-Vis spectroscopy	**400 MHz NMR**	**X-Ray**
FT- IR spectroscopy	**Mass spectrometry**	**HPLC-UV**
Fluorescence spectroscopy	**Elemental analyzer**	**Magnetic susceptibility**
Molar conductometer	**DTG 60-H thermal analyzer**	**Autoclaving**
Reactions under N_2 and inert gases		**Bio spectroscopy**

5. Teaching Experience:

Course	Date	Candidates	Place
Qualitative Analysis (Identification of simple inorganic salts).	**since 15/2/2014 until Now**	**Science and Education Faculties Students (Students of 1st year)**	**Assiut University**
Volumetric Analysis.	**since 15/2/2014 until Now**	**Science Faculty Students (Students of 1st and 2nd year)**	**Assiut University**
Gravimetric Analysis.	**since 15/2/2014 until Now**	**Science Faculty Students (Students of 3rd year)**	**Assiut University**
Practical Physical Chemistry.	**since 15/2/2014 until Now**	**Science Faculty Students (Students of 3rd year)**	**Assiut University**
Inorganic Synthesis.	**since 15/2/2014 until Now**	**Science Faculty Students (Students of 3rd year)**	**Assiut University**
Instrumental Analysis.	**Since15/2/2014**	**Science Faculty Students (Students of 4th year)**	**Assiut University**

6. Publications:

1. **A published paper of Master thesis: - (Saleh, N.M., et al., Kinetics of nonisothermal dehydration of unirradiated and γ-ray irradiated neodymium (III) acetate hydrate. Radiochimica Acta, 2019. 107(2): p. 165-178).**

7. Additional Experiences and activities:

4-5 January 2015: Passed the training program of " Code of Ethics " held by The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

10-11 January 2015: Passed the training program of "Effective presentation" held by "The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

27-28 January 2015: Passed the training program of "Student Evaluation" held by "The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

7-8 February 2016: Passed the training program " International Publishing of Research " held by "The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

14 December, 2016: The training program "Using Technology in Teaching" held by "The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

5-6 February 2017: Passed the training program " How to Design the E-Course " held by "The Faculty and Leadership Development Centre (FLDC)", Assiut University, Egypt.

8. Language Proficiency:

Arabic: Native language.

English: All chemistry studies and exams are done in English.

9. Computer Skills:

ICDL International Computer Driving license.

Excellent knowledge of Windows (XP, 7, 8, 10), Word, Excel, Power Point and Internet.

10. Personal Skills:

Excellent communication Skill, Self-Confidence, Able to work under pressure, Self-motivated, Hard worker, quick learner and enjoy challenges.

11. Interties:

Traveling, Sporting: Running

13. References:

1. **Prof. Dr. Refaat Mohammed Mahfouz Professor of Inorganic Chemistry, Department of Chemistry, Faculty of Science, Assiut University, Asyut 71516, Egypt, E-mail: rmhfouz@aun.edu.eg, rmhfouz@hotmail.com & rmhfouz@science.au.edu.eg.**
2. **Prof. Dr. Abou-Elhagag Abdel-Aziz Hermas Professor of Electrochemistry Chemistry, Department of Chemistry, Faculty of Science, Assiut University, Asyut 71516, Egypt, E-mail: ahermas@aun.edu.eg.**
3. **Prof. Dr. Otify AbdEl-Ghafar Bakhite Professor of Organic Chemistry, Department of Chemistry, Faculty of Science, Assiut University, Asyut 71516, Egypt, E-mail: ebakhite@yahoo.com**