

CURRICULUM VITA



Name: ***Refaat Mohamed Mahfouz***

Place of Birth: Assiut, Egypt

Nationality: Egyptian

Title: **Professor of physical and Inorganic materials
Chemistry**

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Scientific Degrees:

1. B.Sc. Special Chemistry June, 1975, Assiut University, Egypt.
2. M.Sc. *“Radiochemical Studies on the Extraction of Some Radionuclides”*, November, 1979, Assiut University, Egypt.
3. Ph.D. *“Chemical Effects of (n, γ) Reaction in Solids”*, September 1983, Assiut University, Egypt.

Professional Duties:

1. Assistant Lecturer (1975-1983), Assiut University.
2. Assistant Professor (chemistry) (1983-1988), Assiut University.
3. Associate Professor (chemistry) (1988-1994), Assiut University.
4. Professor of physical and inorganic materials chemistry (1994-1996) Assiut University.
5. Professor of physical and inorganic materials chemistry (1996-2011), Chemistry Department, Faculty of Science, King Saud University, P.O. Box 2455, Riyadh-11451, Saudi Arabia.
6. Professor of physical and inorganic materials chemistry (2011-till now) Assiut University ,Egypt

Research and Activities:

1. Bioinorganic chemistry
2. Thermal decomposition of inorganic and polymeric materials
3. Radiation Damage in Solids and polymers
4. Hot Atom Chemistry
5. Inorganic Catalysts
6. Nanotechnology
7. Radiopharmaceuticals
8. Environmental Chemistry

Professional Experience:

Teaching the following courses for undergraduate and postgraduate students at Assiut University and King Saud University.

1. Nuclear and Radiochemistry
2. Basic Inorganic Chemistry
3. Advanced Quantum Chemistry and Group Theory
4. Solid State Chemistry
5. Industrial Inorganic Chemistry
6. Advanced Inorganic Chemistry
7. Non-aqueous Reactions
8. Environmental chemistry

Scientific Degrees Supervised:

1. 3 Ph.D. degrees (in the fields of radiopharmaceuticals and bioinorganic chemistry)
2. 15 M.Sc. degrees

Titles of Some Thesis :

- 1- M.Sc. Thesis Submitted by *M.M. Al-Osaimi*, Department of Chemistry, College of Science, King Saud University, entitled "*Thermal decomposition of –irradiated acetates of some transition metals* ", (1421H).
- 2- M.Sc. Thesis Submitted by *A.A.Al-Walan*, Department of Chemistry, College of Science, King Saud University, entitled "*Preparation and characterization of new indium and rhenium complexes*", (1423H).
- 3- M.Sc. Thesis Submitted by *N.S.M. Al-Hokabany*, Department of Chemistry, College of Science, King Saud University, entitled "*Synthesis and characterization of new gallium and samarium complexes* ", (1423H).

- 4- M.Sc. Thesis Submitted by *R.Y. Alshwafy*, Department of Chemistry, College of Science, KingSaudUniversity, entitled "*Kinetics of the formation of lithium titanate in crystalline mixture of lithium carbonate and titanium dioxide and catalytic activity test*", (1427H).
- 5- M.Sc. Thesis Submitted by *E.S. Al-Enazy*, Department of Chemistry, College of Science, King Saud University, entitled "*Preparation and characterization of new rhenium complexes in different oxidation state*", (1428H).
- 6- M.Sc. Thesis Submitted by *Sh.A. Al-Ahmari*, Department of Chemistry, College of Science, King Saud University, entitled "*Kinetics of the thermal decomposition of ruthenium complexes of catalytic activity before and after γ -irradiation*", (1429H).
- 7- M.Sc. Thesis Submitted by *A. Al-Othman*, Department of Chemistry, College of Science, King Saud University, entitled "*Kinetics of magnesium chromite spinel formation*", (1429H).
- 8- M.Sc. Thesis Submitted by *Kh. A. Al-Khamis*, Department of Chemistry, College of Science, KingSaudUniversity, entitled "*Kinetics studies on thermal decomposition behavior of un-irradiated and γ -irradiated gallium acetyl acetate. New routes for synthesis of GaO₂ nanoparticles*", (2010).
- 9- M.Sc. Thesis Submitted by *T. Al-Rashidi*, Department of Chemistry, College of Science, King Saud University, entitled "*New routes for preparation of ZnO, CdO, ZnS and CdS nanoparticles*", (2010).
- 10- M.Sc. Thesis Submitted by *A. A.Al-Otabi*, Department of Chemistry, College of Science, King Saud University, entitled "*Synthesis of zirconia nanoparticles, thermal and radiation studies*", (2011).
- 11- Ph.D. Thesis Submitted by *N. S. Al-Hokbany*, Department of Chemistry, College of Science, King Saud University, entitled "*Preparation and characterization of new technetium and rhenium complexes as potential radiopharmaceuticals*", (2010).

12- Ph.D. Thesis Submitted by *Reowida Al-shawafy*, Department of Chemistry, College of Science, King Saud University, entitled "*Preparation and characterization of new Ru(II) complexes as potential radiopharmaceuticals*", (2011).

Refereed Projects outside King Saud University:

1. Projects in the field of "Radiopharmaceuticals environmental pollutants financed" by King Abdulaziz City for Science and Technology.
2. Projects in the field of "Thermal decomposition of polymeric material and inorganic catalysts financed by King Abdulaziz University.
3. M.Sc. thesis at both King Saud University and King Abdulaziz University.
4. Promotion for Associate Professor degree at King Abdulaziz University

Scientific Projects:

1. Prime investigator of a project entitled "**Chemical Preparation and Characterization of Some Radiopharmaceuticals and Pharmaceuticals and their Bio-evaluation**", financed by King Abdulaziz City for Science and Technology with total budget (**SR 1031,000**), ended by September 2003 (the time duration was three year).
2. Prime investigator of a project entitled "**Radiation effects on some commercially available inorganic catalysts**", financed by SABIC (Saudi Arabia) (the time duration was one year).
3. Prime investigator of a project entitled " **γ -ray induced decomposition of some PAH (Poly aromatic hydrocarbons) pollutants**", financed by ResearchCenter, College of Science, King saud University (the time duration was one year).
4. Prime investigator of a project entitled " **γ -ray induced decomposition of some halogenated aromatic compounds as petrochemical industrial waste**", financed by SABIC (Saudi Arabia) (the time duration was one year).
5. Prime investigator of a project entitled "**Thermal decomposition of γ -irradiated ruthenium acetyl acetone as economic catalyst precursor**", financed by SABIC (Saudi Arriba) (the time duration was one year).
6. Prime investigator of a project entitled "**Synthesis of In_2O_3 nanoparticles**", financed by SABIC (Saudi Arabia) (the time duration was one year).
7. Prime investigator of a project entitled "**New Routes for Synthesis of Ruthenium(0) and Ruthenium Oxide Nanoparticles for Nanotechnology Applications**".
8. Prime investigator of a project entitled "**New Routes for Synthesis of ZnS, CdS, ZnO, and CdO Semiconductors Nanoparticles and Industrial Applications**".

Translated Books:

- 1- Translation of a text book entitled “*Crystal Structure Determination*” by William Clegg, Oxford University Press, 2008.
- 2- Translation of a text book entitled “*The Solid state Chemistry and It’s Application*” by Antony West, John Wiley And Sons, LTD, 2010.
- 3- Translation of a text book entitled “*Crystal Structure Analysis, Principle and Applications*” by William Clegg, Oxford University Press, 2011.
- 4- Translation of a text book entitled “*Solid State Chemistry, an Introduction*” by Lesley E. Smart and Elaine A. Moore, Taylor & Francis, (2011).

Scientific Missions:

1. Scientific mission, KFA, Jülich, F.R.G., Germany (1986-1987).
2. Scientific mission, KFA, Jülich, F.R.G., Germany (1990-1991).
3. Scientific mission, KFA, Jülich, F.R.G., Germany 1993.
4. Scientific mission, FZR, Dresden, F.R.G., Germany 1996.
5. Scientific mission, University of Hawaii, USA, 2011.

Symposiums:

1. Hot atom Chemistry Symposium ,Hungry, 1984
2. Radiation Effects in Solids ,Weimar, F.R.G. 1991
3. Technetium-93 symposium ,Japan, 1993 (poster)
4. Tc and Re in Chemistry and Nuclear Medicine ,Italy 1994
5. Thermal Decomposition of γ - irradiated metal acetates as Economic catalysts,
مؤتمر التنمية وتأثيرها في البيئة- الرياض- المملكة العربية السعودية- 1418 هـ
6. Chemical Effect of Ion-beam Irradiation on polyethylene, An FT-IR Study
الندوة الوطنية الأولى لعلم المواد – الرياض – المملكة العربية السعودية شعبان 1419 هـ
7. γ -irradiation Effects on Kinetics and Mechanism of the Thermal Decomposition of Zinc Acetate
ورشة عمل الحفازات وتطبيقاتها في دول مجلس التعاون كلية العلوم- جامعة الملك سعود 1423 هـ
8. Thermal Decomposition of γ - irradiated palladium acetate

9. Thermal Decomposition of γ - irradiated cadmium acetate
المؤتمر السعودي الثالث للعلوم-2007م
10. Reaction Kinetics and Formation Mechanism of Lithium Titanate
مؤتمر الكيمياء الوطني 1428هـ
11. Corals of In_2O_3 nanoparticles, synthesis by thermal decomposition of γ -irradiated indium acetate in presence of non-aqueous medium, *Based Knowledge and Nanotechnology, Qatar, Feb. 2008.*
12. Preparation and characterization of new heterocyclic Sm(III) complexes with some bi- dentate (N,N), (S,N), (O,O) and (N,O) chelate ligands, *5th Eurasian Meeting on Heterocyclic Chemistry, Kuwait, March 2008.*
13. Nano technology symposium Ras-El-Khima (2009)
14. International symposium in chemistry, Taiba University (2009).
15. Thermal decomposition of γ -irradiated gallium acetylacetonate International Symposium on Molecular Spectroscopy EUCMOS, Florence, Italy, 2011

RELEVANT SKILLS:

1. Good experience in the preparation of single crystals
2. Good experience in working with single crystals
3. X-ray 4- circles diffractometers .
4. X-ray crystal structure analysis and refinement.
5. Use of analytical instruments such as : UV-VIS, IR, ESR, HPLC, TG, DTA.

Patents:

Method for Esterification and Esterification Catalyst

Bibliographic data: WO2012171539 (A1) -2012-12-20

List of Publications

1	H.F. Aly, S.M. Khalifa, R.M. Mahfouz and M.K. Sherif., <i>Temperature Effects on the Extraction of Divalent Cobalt, Zinc, Cadmium and Mercury by Salicylaldoxime in Carbon tetrachloride</i> , J. Radioanalytical Chem., (1981), 63(2), 295-300.
2	M.K. Sherif, S.M. Khalifa, R.M. Mahfouz and H.F. Aly, Radiochem., <i>Effects of solvent on the Extraction of Co^{2+} by Salicylaldoxime (SADO)</i> , Radioanal-Letters, (1981), 47(1-2) , 11-18.
3	El-H.M. Diefallah, S.N. Basahl, M.S. El Meligy and R.M. Mahfouz , <i>Chemical Effects of ^{51}Cr-Recoils and Annealing in $K_3Cr(CN)_6$-$K_3Fe(CN)_6$ Mixed Crystal</i> , RadiochimicaActa, (1984), 37 , 17-18.
4	El-H.M. Diefallah, A.O. Baghlafl and R.M. Mahfouz , <i>Chemical Effects of Cobalt Neutron capture Recoils in $K_3Co(CN)_6$-$K_3Fe(CN)_6$ and $K_3Co(CN)_6$-$K_3Cr(CN)_6$ Mixed Crystals</i> , J. Radioanal. Nucl. Chem. Letters, (1985), 94(2) , 109-120.
5	El-H.M. Diefallah, M.A. Ashy and R.M. Mahfouz , <i>Chemical Effects of ^{51}Cr- Neutron capture Recoils in $K_3Cr(C_2O_4)_3$-$K_3Fe(C_2O_4)_3$ Mixed Crystals</i> , J. Radioanal. Nucl. Chem. Letters, (1985), 93(2) , 89-96.
6	S.N. Basahl, A.O. Baghlafl, El-H.M. Diefallah, R.M. Mahfouz and J.G. Kay, <i>Thermal Annealing of Cobalt Neutron Capture Recoils in Pure Hexacyanocobaltate(III) and in Mixed Crystals of Hexacyanocobaltate(III) Hexa-cyanoferrite(III)</i> , Indian Journal of Chemistry, (1986), 25A , 215-218.
7	R.M. Mahfouz , <i>Chemical Effects of Chromium Neutron capture Recoils in $K_3Cr(C_2O_4)_3$-$K_3Al(C_2O_4)_3$ and $K_3Cr(CN)_6$-$K_3Al(CN)_6$ Mixed Crystals</i> , J. Radioanal. Nucl. Chem. Letters, (1984), 87(3) , 143-150.
8	R.M. Mahfouz , <i>Gamma Irradiation Effects of $^{51}Cr(III)$ Isotope Exchange in doped Magnesium Chromate-Zinc Chromate Mixtures</i> , J. Radioanal. Nucl. Chem. Letters, (1984), 87(3) , 137-142.
9	R.M. Mahfouz , <i>On the Mechanism of Isotopic and Non-Isotopic Exchange of Dopant in Gamma Irradiated Cobalt-60 Doped Hexaminecobalt(III), Hexacyanochromate and Hexaminecobalt(III) hexacyanoaluminate (III)</i> , Indian Journal of Chemistry, (1985), 24A , 1048-1049.
10	R.M. Mahfouz , <i>Thermal Effects on Isotopic Exchange of $^{51}Cr(VI)$ in Gamma-irradiated, $^{51}Cr(III)$ doped Sodium Chromate-Potassium Chromate Mixture</i> , Indian Journal of Chemistry, (1986), 25A , 173-174.
11	M.A. Hefni and R.M. Mahfouz , <i>ESR Studies of S_3, S_4 and SO_3 Generated from Na_2S_4 Reacted with NaY Zeolites</i> , Bull. Fac. Sci. Assiut Univ., (1986), 15(1) , 27-33.
12	R.M. Mahfouz and S.A. Ibrahim, <i>Synergistic Extraction of Cobalt (II) Complexes with</i>

	<i>Toluene-3,4-Dithiol in Presence of Some Benzylamines</i> , Monatshefte fur chemie, (1987), 118 , 589-594.
13	R.M. Mahfouz and A.H. Amrallah, <i>Thermodynamic of Formation of Bibenzylamine Adduct of Cobalt(II)-Toluene-3,4-Dithiol Chelate in Chloroform and in Nitrobenzene Solvent</i> , Isotopes in Environmental and Health Studies, (1987), 23 , 296-297.
14	R.M. Mahfouz and M.A. Hefni, <i>Note on the Mechanism of Non-isotopic Exchange of the Dopant in Gamma Irradiated Mixed Crystals</i> , Isotopes in Environmental and Health Studies, (1987), 23 , 298-299.
15	A.M. El-Awad and R.M. Mahfouz , <i>Kinetic Analysis of Isothermal-Non-Isothermal and Catalyzed Thermal Decomposition of Malonic Acid</i> , Journal of Thermal Analysis, (1989), 35 , 1411-1419.
16	S.A.Ibrahim, M.A.El-Gahami, R.M.Mahfouz and K.A.Farghly, <i>Preparation, Spectral Properties and Biological Activity of Cu(II), Zn(II) and Cd(II) Chelates of 8-Hydroxy Quinoline-5-Salfonamid</i> , Z.Naturforsch, (1989), 44b , 1488-1492.
17	R.M. Mahfouz , <i>Radiolysis of Methyl iodide-Methylene Chloride Liquid Solutions</i> , Isotopes in Environmental and Health Studies, (1990), 26 , 222-224.
18	R.M. Mahfouz and A.H. Amrallah, <i>Thermal Decomposition of Gamma-irradiated Hexamine Cobalt (III) Chloride</i> . Radiation Physics and Chemistry, (1990), 36(3) , 453-455.
19	R.M. Mahfouz , <i>New Oxotechnetium(V) Complexes of Salicylidene-O-amino Phenol and Salicylidene-2-aminopyridine</i> , Isotopes in Environmental and Health Studies, (1990), 26 , 68-69.
20	R.M. Mahfouz and M.A. Hefni, <i>Chemical Effects Induced By Gamma-Irradiated Alkali Selenite in Aqueous Medium</i> , J. Radio analytical and Nuclear Chemistry Articles, (1990), 139(1) , 109-111.
21	M. A. AbdAlla , A.S. El-Shahawy and R.M. Mahfouz , <i>Preparation and characterization of New Oxotechnetium(V) Complex of Ethandiamide N,N⁻bis(2-hydroxyethyl)</i> , RadiochemicaActa, (1990), 51 , 163-165.
22	M. A. Abd-Alla and R.M. Mahfouz , <i>Gamma Irradiation Effects on the electrical Conductivity Behaviour, IR Absorption Spectra and DSC Measurements of Some New Synthesized poly(Arylidene-Cycloalkanones)</i> , J. Applied Polymer Science, (1991), 42 , 2255-2259.
23	R.M. Mahfouz , <i>Gamma Irradiation Effects on the Thermal Decomposition Induction Period in Hexamine cobalt(III) Chloride</i> , Isotopes in Environmental and Health Studies, (1991), 27(8) , 402-403.
24	R.M. Mahfouz , Aref A.M. Aly, M.S. El-Meligy and A.S. Zidan, <i>Gamma Irradiation</i>

	<i>Effects on the electrical Conductivity Behaviour, IR Absorption Spectra of Some Haloacetato-Transition Metal Complexes</i> , <i>Isotopes in Environmental and Health Studies</i> , (1991), 27(5) , 245-247.
	Aref A.M. Aly, R.M. Mahfouz , M.S. El-Meligy and A.S. Zidan, <i>Complexes of Bis(DiphenylDithiophosphine) Nickel(II) with Nitrogen and Sulphur Containing Ligand</i> , <i>Synth. React. Inorg. Met.-Org. Chem.</i> , (1991), 21(8) , 1249.
25	M.K. Hassan, A. El-Shahawy, R.M. Mahfouz and A.H. Osman, <i>Synthesis and Characterization of a New Technetium(V) Complex with Butane-2,3-dionemonoxime and Some PPP Calculations</i> , <i>Z. Naturforsch</i> , (1991), 46b , 662-664.
26	M. A. Hefni and R.M Mahfouz , <i>EPR Studies of $[Cu (H_2O)_6]^{2+}$ in Zinc sulphate Heptahydrate</i> , <i>Bull. Fac. Sci. Assiut Univ.</i> , (1992), 21(1) , 1-10.
27	M. A. Hefni and R.M. Mahfouz , <i>γ-Irradiation Effects on the EPR Spectra of $SrMoO_4: Mo^{5+}$</i> , <i>Bull. Fac. Sci. Assiut Univ.</i> , (1992), 21(2) , 37-44.
28	R. M. Mahfouz , M. Sauer, S. T. Atwa, R. I. Kaiser and K. Roessler, <i>Interaction of MeV and VUV Photons with Polymers and High Molecular Hydrocarbons</i> , <i>Nuclear Instruments and Methods in Physics Research B</i> , (1992), 65 , 447-451.
29	R.I. Kaiser, R. M. Mahfouz and K. Roessler, <i>Emission of Organic Products from the Surface or Frozen Methane Under MeV Ions Irradiation</i> , <i>Nuclear Instruments and Methods in Physics Research B</i> , (1992), 65 , 468.
30	R. M. Mahfouz , M. Sauer and K. Roessler, <i>Paraformaldehyde and Organic Solids in MeV Ion and VUV Photon Radiation Field</i> , 29-The World Space Congress, Washington D. C. USA, 28 Agust-5 September , (1992), (F3. 6. M. 1.06).
31	R. M. Mahfouz and M. M. M. Abd- El-Wahab, <i>Kinetic Analysis of the Thermal Decomposition of Gamma-Irradiated Nickel Oxalate</i> , <i>Radiation Physics and Chemistry</i> , (1993), 43(3) , 299-302.
32	S. El-Shahawy, R. M. Mahfouz , Aref A. M. Aly and Maher El-Zohry, <i>Technetium-Aspirin Molecule Complex</i> , <i>J. Chem. Tech. Biotechnology.</i> , (1993), 56 , 227-231.
33	R. M. Mahfouz and A. S. El-Shahawy, <i>Complexes of Low Oxidized ^{99}Tc and Re with Thiosalicylic Acid and Their Characterization in Solution with Some CNDO-MO Calculation</i> , <i>Spectroscopy Letters</i> , (1993), 26(10) , 1867-1874.
34	R. M. Mahfouz , A. S. El-Shahawy and Ali A. Hassan, <i>A New Technetium(V) 2-Thiohydantion Complex</i> , <i>Transition Metal Chemistry</i> , (1994), 19 , 385-386.
35	R. M. Mahfouz , A. S. El-Shahawy, A. S. El-Shatoury and R.M. Hassan, <i>New Technetium (V) and Rhenium (V)-N-Acetyl Anthranilic Acid (NAA) Complexes</i> , <i>Spectroscopy Letters</i> , (1995), 28(1) , 127-135.
36	S. El-Shahawy, R.M. Hassan and R.M. Mahfouz , <i>Preparation and Characterization of</i>

	<i>New ⁹⁹Tc and Re-Complexes in Colloidal State</i> , Spectroscopy Letters, (1995), 28(5) , 665-672.
37	M. M. Abd El-Wahab and R.M. Mahfouz , <i>Gamma Irradiation Effects on the Electrical Conductivity Behavior and Thermal Decomposition Induction Period in Nickel Oxalate</i> , Thermochemica Acta, (1996), 274 , 281-287.
38	S. El-Shahawy, R.M. Mahfouz and Z.H.Khalil, <i>Rhenium-Picric acid Complex and Some CNDO Calculation on TNB, TNT and Picric acid</i> , Chim. Chron, (1994), 23(1), 3-12.
39	R.M. Mahfouz , <i>Medical Application of Cyclotrons:- the Status and Prospect in Egypt</i> , Journal of King Saud Univ., (1998), 10 , 79-83.
40	R.M. Mahfouz and H. Spies, <i>Structure and Reactivity of a 3+1 Mixed Ligand Rhenium Complex Containing Thiobenzoate as a Monodentate Ligand [Re O(SSS)(SCCO)Ph]</i> Report KFZ, Dresden. B. Noll, P. Leibnitz, St. Noll, Institute of Bioinorganic and Radiopharmaceutical Chemistry, Annual Report, (1996), 93-96
41	R.M. Mahfouz , <i>The Impact of Radioactivity on Environment</i> , Paper presented at the International Symposium "Development and Environmental Impact", held at Riyadh, Saudi Arabia, 21-23 Sep., (1997).
42	I. Al-Wassil, Kh. A. Al-Farhan, M. Mukalalati and R.M. Mahfouz , <i>Coordination Chemistry of Thenoyltrifluoroacetone. I-Synthesis and Characterization of In³⁺thenoyltrifluoroacetone Complex</i> , Spectroscopy Letters, (1998), 31(2) , 299-305.
43	M.A.S. Monshi, N.M. Abd El-Salam and R.M. Mahfouz , <i>Synthesis and Characterization of Mixed Ligands Complexes of Zr⁴⁺ and La³⁺ with Thenoyltrifluoroacetone and Some Aliphatic Amines</i> , Synth. React. Inorg. Met.-Org. Chem., (1998), 28(9) , 1483-1492
44	R.M. Mahfouz , A.I. Al-Wassil, Kh.A. Al-Farhan and M. Mukalalati, <i>Some Consideration on Technetium Chemistry, Application in Human Myocardial and Cerebral Studies</i> , Acta Chim. Hung., Models in Chemistry, (1999), 136 (1-2) , 31-40.
45	M.A.S. Monshi, N.M. Abd El-Salam and R.M. Mahfouz , <i>Isothermal Decomposition of γ-Irradiated Uranyl acetate</i> , Thermochemica Acta, , (1998), 322 , 33-37
46	M.A.S. Monshi, N.M. Abdel-Salam, and R.M. Mahfouz , <i>γ-Irradiation Effects on The Thermal Decomposition Induction Period in Uranyl Acetate</i> , Thermochemica Acta, (1999), 327(1-2) , 139-143.
47	S.M. Alshehri, M.A.S. Monshi, A.A. Basfar, N.M. Abd El-Salam; R.M. Mahfouz , <i>Kinetics of Thermal Decomposition of Natural Rubber</i> , J. Saudi Chem. Soc., (2000), Vol.4, No.1 , 27-32
48	M.A.S. Monshi, S.M. Alshehri, N.M. Abd El-Salam, R.M. Mahfouz , <i>Isothermal Decomposition of γ-Irradiated Thallous Acetate</i> , Thermochemica Acta, (2000), 360(1) ,

	11-16.
49	A. Hassan, N. Abo-El-Maali, R.M.Hassan, R.M. Mahfouz and A. Abd El-Kader, <i>Application of Chromatographic Techniques in The preparation of phosphoric Acid from Super-phosphate Fertilizer as Phosphate Ions Source</i> , J. Saudi Chem. Soc., (1999), Vol.3, No.1 ,1-5 .
50	A.I. Al-Wassil, Kh.A. Al-Farhan, M. Mukalalati and R.M. Mahfouz , <i>Synthesis and Characterization of New In (III), Re(III), Re(V), Pd(II) and Rh(III) Toluene-3, 4-Dithiol Complex</i> , Spectroscopy Letters, (2001), 34(6) , 737-743.
51	M.A. Hefni, M.A. Osman, R.M. Mahfouz and M.M.Ahmad, <i>Electron Paramagnetic Resonance, Infrared and Electrical Conductivity Studies Of γ-ray irradiated Li_2SO_4-K_2SO_4 Mixed System</i> , Radiation Effects & Defects in Solids (2000), 152 ,255-267.
52	M.A. Osman, M.A. Hefni, R.M. Mahfouz and M.M. Ahmad, <i>Spectroscopic and Electrical Conductivity Behavior of γ-irradiated Li_2SO_4-K_2SO_4 Mixed System</i> , Radiation Effects & Defects in Solids (2001), 153 ,115-138
53	M.A. Osman, M.A. Hefni, R.M. Mahfouz and M.M. Ahmad, <i>γ-irradiation Effects on the Spectroscopic and Electrical properties of K_2SO_4-Na_2SO_4 Mixed systems</i> , Radiation Effects & Defects in Solids (2001), 153(2) , 151-171.
54	R.M. Mahfouz , M.A.S. Monshi, S.M. Alshehri, N.M. Abd El-Salam, <i>Isothermal Decomposition of γ-Irradiated Samarium Acetate</i> , Radiation Physics and Chemistry (2000), 59 , 381-385.
55	S.M. Alshehri, M.A.S. Monshi, N.M. Abd El-Salam and R.M. Mahfouz , <i>Kinetics of The Thermal Decomposition of γ-Irradiated Cobaltous Acetate</i> , Thermochimica Acta, (2000), 36(1-2) , 61-70.
56	R.M. Mahfouz , M.A.S. Monshi and N.M. Abd-EL-Salam, <i>Kinetics of the thermal Decomposition of γ-Irradiated Gadolinium acetate</i> , Thermochimica Acta (2002), 383 , 95-101.
57	R.M. Mahfouz , S.M. Al-Shehri M.A.S. Monhsi and N.M. Abd El-Salam, <i>Isothermal Decomposition of γ-irradiated Dysprosium Acetate</i> , Radiation Effects & Defects in Solids, (2002), 157(5) , 515-519.
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