Curriculum Vitae

Dr. Usama Ibrahim ElAyaan

Associate Professor of Inorganic Chemistry

Present Address

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Permenent Address

Department of Chemistry, Faculty of Science, Mansoura University, Mansoura 35516, Egypt.

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ACADEMIC QUALIFICATIONS:

B.Sc. (Distinction) Major Chemistry 1987
Department of Chemistry, Faculty of Science, Mansoura University.

M.Sc. (*Inorganic Chemistry*) 1991
Mansoura University.
"Studies on some 4-(2-pyridyl) thiosemicarbazone derivatives and their legational behaviour towards some transition metal ions."

Ph.D. (*Inorganic Chemistry*) 1998
Technical University of Vienna, Austria
"Short living coordination compounds as intermediates in important redox reactions"

Post-Doctral Fellowships:

Visiting Professor, Technical university of vienna, Vienna, Austria, 1999.

Visiting Professor, Ochanomizu University, Tokyo, Tokyo, Japan 2001.

JSPS scholarship (two years scholarship October 2001-October 2003), Ochanomizu University, Tokyo, Japan.

EMPLOYMENT HISTORY:

Demonstrator (TA), 1988-1992- explaining the experimental courses including general chemistry, volumetric analysis (neutralization, redox, and precipitation titrations), physical chemistry, organic chemistry, complexiметry, gravimetry, inorganic preparation and instrumental analysis.

Lecturer (TA), 1992-1995- explaining the experimental courses mainly in the field of Inorganic and analytical chemistry including general chemistry, volumetric analysis (neutralization, redox, and precipitation titrations), complexiметry, gravimetry, inorganic preparation and instrumental analysis.

Assistant Professor, Inorganic, 1999-2001(Mansoura University).

1***. Mansoura University:*** Teaching theortical courses(***in English***) and supervisinig analytical and inorganic laboratories for three years:

- ***A. Courses:*** general chemistry, Inorganic chemistry I (main groups elements - acids and bases, redox potentials), inorganic chemistry II (coordination chemistry; transition elements, nomenclature of inorganic complounds, theories of bonding including ligand field, crystal field and molecular orbital theories).
- ***B. Laboratories***: Supervision the analytical and inorganic experimental courses including volumetric, complexiметric gravimetric and instrumental analysis and inorganic preparation.
- ***C. Student graduation essay***: Bioinorganic chemistry topics, IR spectroscopy, catalysis, kinetics of complex formation, solvatochromic and thermochromic in solution.
- ***D. Adminstration***: including tender specifications, testing chemicals, education planning and modernization.

2. ***Ochanomizu University, Tokyo, Japan:*** Teaching (***in English***), Student projects, Student advisor;

- ***A. Courses***: General Chemistry, Inorganic Chemistry and Coordination Chemistry
- ***B. Student Projects :*** including the design, demonstration, supervision the practical work and revising the reports:

Student Advisor: based on the cridet hours system; Ochanomizu University 2001/2003.

Associate Professor, Inorganic, January 2005- Now (Mansoura University).

Director; ***Environmental and Analytical Chemistry Laboratories***, Mansoura University, Department of Chemisrty, technical/admenstrative/consultation work including:

1- Organization of the lab via putting the scope and plans to prepare the lab for environmental and analytical analysis.
2- Participation and explaination in all training courses done in the center such as air quality monitoring system and application, environmental analysis, internal quality control, method validation, internal auditing as well as others.

In addition to *Teaching Inorganic Chemisrty* for undergraduate student (different courses), *Supervision* the analytical and inorganic experimental courses , In addition to *Supervision* of eight postgradute students , two doctoral and six masters as follow:

Supervision of Post-graduate Students:

Co-supervised five master students and one Ph.D student.

UNIVERSITY TEACHING:

No.	*Student -level*	*Title of the course*	*Years*
1	First year student/ 1st Level	General Chemistry	1999-2000
2	first year student / 2nd Level	s- and p-Block elements	1999-2000
3	Second Year Student/4th Level	Transition metal Chemistry	2000-2001
4	Postgraduate (master-student)	Bio-inorganic Chemistry	2000-2001
5	Ochanomizu University, Tokyo, Japan	Coordination Chemistry	2001-2002
6	Fourth year student/ 8th Level	Lanthanides and Actinides	2005-2009
7	Fourth year student/8th Level	Organometallics	2005-2009
8	Fourth year student/8th Level	Inorganic Spectroscopy	2006-2009
9	Fourth year student/8th Level	Inorganic Reaction Mechanism	2007-2009

LIST OF PUBLICATIONS

1- Synthesis, Spectral and Magnetic Investigation of 4(2-Pyridyl)-1-Isatin-3 Thiosemicarbazone Complexes.
Gaber M.Abu El-Reash, Mohamed A.Khattab, and **Usama I El-Ayaan**
Synth. React. Inorg. Met.-Org. Chem. 22(9), 1417-1428 (1992).

2- Structural, pH- Metric and Conductance Studies of 4(2-Pyridyl) -1-(2- Hydroxyacetophenone)-3 Thiosemicarbazone(H_2PHAT) Complexes.
Gaber M.Abu El-Reash, Ibrahim M. Kenawy, **Usama I. El-Ayaan** and Mohamed A. Khattab.
Synth.React.Inorg.Met.-Org. Chem. 24(5), 813-829 (1992).

3- Synthesis and Characterization of Chromium(III), Magnesium (II), iron(III), Cobalt(II), Nickel(II), Copper(II), Cadmium(II), and Dioxouranium(VI) Complexes of 4(2Pyridyl)-1- (2,4-Dihydroxybenzaldehyde)-3-Thiosemicarbazone.
Gaber M Abu El-Reash, Ibrahim M M Kenawy, **Usama El-Ayaan** and Mohamed A. Kattab
Indian Journal of Chemistry. 33A, October 1994, 914-918.

4- Complete Spin Crossover in Tris(Pyridylbenzimidazole) Iron(II)
Roman Boca, Peter Baran, L' uber Dlhan, Jozef Sima, Günther Wiesinger, Franz Renz, **Usama El-Ayaan**, and Wolfgang Linert.
Polyhedron, 16(1), 47-55 (1997).

5- Experimental Spin-Crossover Investigations on Charged and Neutral Iron (II)Complexes with 4-Substituted-2,6-bis-(Benzimidazol-2'-yl)pyridine.
F.Renz, M. Enamullah, **U. El-Ayaan**, G. Wiesinger, W. Linert.
Vibrational Spectrscopy, 14, 95-104 (1997).
6- Anaerobic Oxidation Of Dopamine by Iron (III).
Usama El-Ayaan, Erwin Herlinger, Reginald F.Jameson and Wolfgang Linert
J. Chem. Soc. Dalton Trans., 2813 -2818 (1997).

7- A kinetic study of the reaction between noradrenaline and iron(II): an example of parallel inner- and outer-sphere electron transfer.
Usama El-Ayaan, Reginald F.Jameson and Wolfgang Linert.
J. Chem. Soc. Dalton Trans., 1315 -1319 (1998).

8- Spin-Transition in [Fe(II)(2,6-bis-(benzimidazol-2-yl)pyridine)$_2$](ClO4)$_2$: Hysteresis Effect Dependent on the Matrix
Franz Renz, **Usama EL-Ayaan**, Wolfgang Linert, and Yutaka Fukuda
Mol. Cryst. Liq. Cryst. ***335****, 521-530 (1999).*

9- Kinetic studies on the formation and decomposition of bis (proxo)oxochromium (VI) in aqueous solution.
Usama El-Ayaan, Rosimarie Reisacher and Wolfgang Linert

J. Chem. Research, 2256-2278 (1999).

10- Anisotropic Effect after Stretching of the Spin-Crossover compound [Fe(II)(2,6-bis-(benzimidazol-2´-yl)pyridine)$_2$](ClO_4)$_2$ in Polyvinylalcohol Polymer Matrix
Franz Renz, Miki Hasegawa, Toshihiko Hoshi, **Usama El-Ayaan**, Wolfgang Linert, and Yutaka Fukuda
Mol. Cryst. Liq. Cryst. ***335****, 531-540 (1999).*

11- Synthesis, spectral and magnetic investigation of 4-(2-pyridyl)-1-salicyaldehyde-3-thiosemicarbazone.
Usama El-Ayaan, Peter Weinberger, Gaber Abu El-Reash and Wolfgang Linert
Synth. React. Inorg. Met.-Org. Chem. 30 (9), 1759-1772 (2000).

12- Synthesis, characterization and X-ray crystal structures of two five-coordinate ternary copper(II) complexes containing acetylacetonate with 1,10-phenanthroline and 2,9-dimethyl phenanthroline
Adriana Paulovicova , **Usama El-Ayaan** and Yutaka Fukuda
Inorg. Chim. Acta ***321****, 56-62 (2001).*

13- Mixed Ligand Copper(II) Complexes with the Rigid Bidentate Bis(N-arylimino) acenaphthene Ligand-Synthesis, Spectroscopic and X-ray Structural Characterization
Adriana Paulovicova, **Usama El-Ayaan**, Koichi Shibayama, Takeharu Morita and Yutaka Fukuda
Eur. J. Inorg. chem. 2001, 2641-2646

14- Thermochromism and Solvatochromism in Solution. *Review Article*
Usama El-Ayaan, Fumiko Murata and Yutaka Fukuda
Monatshefte fuer Chemie ***132*** *(2001) 11, 1279-1294*

15- Synthesis and structure studies of diamagnetic first-raw transition metal complexes with the Rigid nitrogen ligand-bis[N-(2,6-diisopropyl)imino] acenaphthene.
Adriana Paulovicova, **Usama El-Ayaan**, Kayoko Umezawa, Champika Vithana, Yuji Ohashi and Yutaka Fukuda
Inorganica Chimica Acta, ***339*** *(2002) 209-214.*

16- A kinetic Study of the Reaction between Glutathione and Iron(III) in the pH range from 1-3.
Usama El-Ayaan and Wolfgang Linert
J. Coord. Chemistry, ***55*** *(2002)11, 1309-1314.*

17- Study on the Complex Formation Between N-propylsalicyledene Based on Silica as Ion Exchanger and Some Heavy Metals.
Khaled S. Abou-El-Sherbini, Mohammad Sh. Khalil, and **Usama El-Ayaan**
Journal of material Science and technology, ***10*** *(2002)23-32.*

18 - X-ray crystal structure of Bis[*N*-(2,6-diisopropylphenyl)imino] acenaphthene ligand and some studies including its Copper(I) and Copper(II) Complexes.
Usama El-Ayaan, Adriana Paulovicova, shinji Yamada and Yutaka Fukuda
J. Coord. Chem. 56 (2003), 373-381.

19- Synthesis, Spectroscopic and Magnetic Properties of some transition metal complexes with 4-(2-pyridyl)-1-(diacetylmonoxime)-3- thiosemicarbazide.
Usama El-Ayaan, Gaber Abu El-Reash, Ibrahim M. Kenawy
Synth. React. Inorg. Met.-Org. Chem, 02 (2003) 327-342.

20- Structural studies of mixed–ligands copper(II) and copper(I) complexes with the rigid nitrogen ligand: bis[N-(2,6-diisopropylphenyl)imino]acenaphthene.
Usama El-Ayaan, Adriana Paulovicova, Yutaka Fukuda
J. Mol. Struct. ***645*** *(2003) 205-212*

21- Synthesis, structural and solvent infuelence studies on solvatochromic mixed–ligands copper(II) complexes with the rigid nitrogen ligand: bis[N-(2,4,6-trimethylphenyl)imino]acenaphthene.
Usama El-Ayaan, Fumiko Murata, Soheir El-Derby, Yutaka Fukuda
J. Mol. Struct. ***692*** *(2004) 209-216.*

22- Synthesis and structural studies of Group 2B transition metal complexes with the bulky nitrogen ligand bis[N-(2,6-diisopropylphenyl)imino]acenaphene
Usama El-Ayaan
Monatsh. Chem. ***135*** *(2004) 919-925.*

23- Synthesis, antimicrobial activity and molecular modeling of cobalt and nickel complexes containing the bulky ligand: *bis*[*N*-(2,6-diisopropylphenyl)imino] acenaphthene
Usama El-Ayaan,* Alaa A.-M. Abdel-Aziz
Eur. J. Med. Chem., ***40*** *(2005) 1214-1221*.

24- Kerr effect and Thernmal analysis of some 3D and 1D polymeric Cadmium(II) and Zinc(II) azido Complexes.
M. Farhoud, Morsy A.M. Abu-Youssef and **Usama El-Ayaan**
Nonlinear Optics, Quantum Optics, ***36*** *(2007) 1-15.*

25- Thermal, Spectroscopic, and solvent influence studies on mixed-ligand copper(II) complexes containing the bulky ligand: bis[N-(*p*-tolyl)imino]acenaphthene

Usama El-Ayaan , I. M. Gabr

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, ***67****(2007) 263-272.*

26- Synthesis, thermal and spectral studies of first-row transition metal complexes with girard P reagent-based ligand
Usama El-Ayaan, I.M. Kenawy and Y.G. Abu El-Reash
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, *Volume 68, Issue 2*, *October 2007*, *Pages 211-219*.

27- Solvatochromism, DNA binding, antitumor activity and molecular modeling study of mixed-ligand copper(II) complexes containing the bulky ligand: Bis[N-(p-tolyl)imino]acenaphthene
Usama El-Ayaan, Alaa A.-M. Abdel-Aziz and Shar Al-Shihry
*Eur. J. Med. Chem., **42** (2007)1325-1333.*

28- Perchlorate mixed–ligand copper(II) complexes of β-diketone and ethylene diamine derivatives: Thermal, spectroscopic and biochemical studies
Usama El-Ayaan, Nashwa M. El-Metwally, Magdy M. Youssef and Serry A.A. El Bialy
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,*68 (2007) 1278-1286*

29- Synthesis, thermal and spectral studies of first-row transition metal complexes with Girard-T reagent-based ligand
Usama El-Ayaan, I.M. Kenawy and Y.G. Abu El-Reash
*J. Mol. Str. **871** (2007) 14-23.*

30- Mn(II), Co(II), Zn(II), Fe(III) and U (VI) complexes of 2-acetylpyridine 4N-(2-pyridyl) thiosemicarbazone (HAPT); structural, spectroscopic and biological studies
Usama El-Ayaan, Magdy M. Youssef, Shar Al-Shihry
*J. Mol. Str. **936** (2009) 213-219.*

31- Transition metal complexes of Vanillin-^{4}N-(2-pyridyl) thiosemicarbazone (H_2VPT); thermal, structural and spectroscopic studies.
Gaber Abu El-Reash, **Usama El-Ayaan**, I.M. Gabr, El-Bastawesy El-Rachawy
J. Mol. Str. Accepted.

List of CONFERENCES

1- Structural, pH-Metric and Antimicrobial Studies of 4(2-pyridyl)-1-(2,4- Dihydrxybenzaldehyde)-3-Thiosemicarbazone (H_3PBT) Complexes.
Usama El-Ayaan, Gaber M Abu El-Reash, Ibrahim M M Kenawy, and Mohamed A. Kattab.
9th Arab Chemical Conference (Thirteenth Egyptian Chemical Conference), National Research Centre, Cairo, Egypt (10-13 April)1993.

2- Ligational and antimicrobial properties of 4-(2-pyridyl)-1-(hydroxybenzaldehyde) -3-Thiosemicarbazone (H_2SBT) .
U.I. El-Ayaan, G. M. Abu El-Reash, , I. M. Kenawy.
The first International conference in chemistry and its applications, Qatar, Dec. 1993

3- Structural, pH-Metric and Antimicrobial Studies of 4-(2-pyridyl)-1-(Salicyldehyde) -3 Thiosemicarbazone (H_3SBT) Complexes.
Usama El-Ayaan, Gaber M Abu El-Reash, , and Mohamed A Khattab
Faculty of Science, Mansoura University, Egypt, Oct.1994.

4- Spin Crossover in solution and solid state:[Fe(pybzim)3]$^{2+}$
Franz Renz, Peter Weinberger, **Usama El-Ayaan**, Peter Baran, Roman Boca and Wolfgang Linert
31st ICCC Vancouver, Canada, August (1996).

5- Cation-Induced intremolecular Oxidation of Dopamine by Iron(III).
E.Herlinger, **U. El-Ayaan**, R.F.Jameson and W.Linert
3rd EUROBIC" Holand, August (1996).

6- Anaerobic Oxidation of Dopamine by Iron(III).
Usama El-Ayaan, Erwin Herlinger, Reginald F.Jameson and Wolfgang Linert
8th Int. Conf. on Bioinorganic Chem., Yokohama, Japan 1997.

7- Experimental Modelling of the synthesis of imidazole rings in biological systems: A possible mechanism for iron - induced diseases of the Nucleotide synthesis
F. Renz, M. Boca, P. Baran, R. Boca , **U.El-Ayaan**, G. Kickelbick, Y.Fukuda and W. Linert
8th International Bioinorganic Chemistry, Yokohama, Japan 1997.

8- Spin Crossover in solution : Weak Ferromagnetic Coupling of Bis (2,6 bis(bezimidazole- 2' -yl)4-X-Pyridine) iron(II)
F. Renz, M. Boca, P. Baran, R. Boca , **U.El-Ayaan**, G. Kickelbick, Y.Fukuda and W. Linert
32nd - ICCC, Santiago de Chiele, 1997.

9- Thermal spin Crossover in both Bis (2,6-bis(benzimidazol-2´-yl) pyridine) iron (II)$^{2+}$ and its deprotonated form.
Franz Renz, Guido Kichelbick, **Usama El-Ayaan**, Roman Boca, Peter Baran, Wolfgang Linert, Wasuke Mori and Yutaka Fukuda.
Spin-Crossover Meeting, Seeheim, Germany, April 1998.

10- Oxidation of catecholamines by iron(III); A kinetic study

Usama El-Ayaan, Reginald F.Jameson and Wolfgang Linert
7th ICCA, International Chemistry Conference in Africa, Durban, South Africa, July 1998

11- The reaction between noradrenaline and iron(II): an example of parallel inner- and outer-sphere electron transfer.
Usama El-Ayaan, Reginald F.Jameson and Wolfgang Linert
Biological and Medicinal Aspects of Metal Ion Speciation, COST D8 & ESF Workshop, Szeged, Hungary, August, 1998

12- Anaerobic oxidation of Noradrenaline by Iron (III)
Usama El-Ayaan, Reginald F.Jameson and Wolfgang Linert
33rd ICCC, International Conference on Coordination Chemistry, Florence, Italy, August30-September4, 1998.

13- Effect of magnetic field on the spin crossover system $[Fe(BZIMPY)_2](ClO_4)_2$
Franz Renz, **Usama El-Ayaan**, Roman Boca, Wolfgang Linert, Wasuke Mori Yutaka Fukuda and Philip Gütlich. 33rd ICCC, International Conference on Coordination Chemistry, Florence, Italy, August30-September4, 1998.

14- The kinetic reaction between noradrenaline and iron(III)
Usama El-Ayaan, Reginald F.Jameson and Wolfgang Linert
5th International Symposium on New Trends in Chemistry, Cairo, Egypt, January 2000.

15- The 3rd Joint Forum of EWU, JWU and Ochanomizu U. for the Promotion of Education and Research in Science for Women in the 21th Century, Ochanomizu University, Tokyo, Japan. November 8-10, 2001

16- Structural studies of mixed-ligand copper(II) and Copper(I) complexes with the rigid nitrogen ligand: bis[n-(2,6-diisopropylphenyl)imino]acenaphthene
Usama El-Ayaan, Adriana Paulovicova, Fumiko Murata, Yutaka Fukuda
35th ICCC, International Conference on Coordination Chemistry, Heidelberg, Germany, July 21- 26, 2002.

17- Studies on the reaction of Ferric Iron and Glutathione.
Usama El-Ayaan, Wolfgang Linert,Yutaka Fukuda.
The 52nd Symposium on Coordination Chemistry of Japan, Tokyo, Tokyo University, (September 30th - October 2nd, 2002).

18- Copper complexes with sterically demanding diimine-based ligands
Adriana Paulovicova, **Usama El-Ayaan**, Yutaka Fukuda
The 52nd Symposium on Coordination Chemistry of Japan, Tokyo, Tokyo University, (September 30th - October 2nd, 2002).

19- Solvatochromic behavior of mixed copper(II) chelates containing bis[N-(2,4,6-trimethylphenyl) imino] acenaphthene with different ß-diketonate ligands.
Usama El-Ayaan, Yutaka Fukuda
19th International Conference on Coordination and Bioinorganic Chemistry, Smolenice, Slovakia (June 2–6th , 2003).

20- Structural studies on rigid nitrogen ligand: bis[N-(2,6-diisopropylphenyl)imino]acenaphthene and its complexes with d^{10} metal ions.
Usama El-Ayaan, Marilena Ferbinteanu, Shinji Yamada, Yutaka Fukuda
The 53rd Symposium on Coordination Chemistry of Japan, , Yamagata (September 24-26th , 2003).

21- Solvatochromic Behavior of Mixed Copper(II) Complexes Containing Bis [N-(Aryl)Imino] Acenaphthene
8th International Conference on Chemistry and its Role in Development; Sharm El-Sheikh, Egypt, April 11-14, 2005.

Books

Highlights in Solute-Solvent Interactions ***(chapter three in this book)***

This book emphasizes a broad spectrum of features in solution chemistry, reaching from recent developments in the empirical characterization of solvent-solute interactions up to modern theoretical descriptions of liquid-state systems, from solid-liquid interfaces to preferential solvation in mixed solvents. Accordingly, this collection presents the most important, though strongly different approaches to the understanding of the mutual influences between solute and solvent. Descriptions of actual and practically useful applications of these concepts are included

Referee in many International Journals

- ***Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy***
- ***Journal of Molecular Structure***
- ***European Journal of Medicinal Chemistry***
- ***Canadian Journal of Chemistry***
- ***Internaltional Journal of Chemical Kinetics***

Awards

- منحة مقدمة من هيئة (ÖAD) *Österreichischer Austauschdienst* للحصول علي الدكتوراه من جامعة The Vienna University of Technology *(TU Vienna)* بفيينا- النمسا.
- الحصول على ميدالية التفوق وجائزة أحسن بحث مقدم من باحث شاب (Young Scientist) فى مؤتمر Szeged بالمجر أغسطس ١٩٩٨.
- ترشيح رسالة الدكتوراه من قبل (Austrian Chemical Society) في ديسمبر ١٩٩٨ لتكون واحدة من أفضل الرسائل على مستوى جامعات النمسا لهذا العام.
- منحة مقدمة من هيئة Japanese Society for the Promotion of Science (JSPS) باليابان لمدة عامين لإجراء أبحاث مابعد الدكتوراه بجامعة *Ochanomizu* بطوكيو.
- ضمن الموسوعة ذائعة الإنتشار *Who's who* عام ٢٠٠٧ والتى تتضمن المتميزين على مستوى العالم فى جميع المجالات
  - **International Encyclopedia:**
    Inclusion in "Who's Who in the world", 2007.
- جائزة أكديما (ACDIMA)لأحسن بحث علمى لعام ٢٠٠٧ عن البحث رقم ٢٧ فى قائمة الأبحاث.

Scientific Societies

- ***Egyptian Chemical Society***
- ***Arab Society of Material Science***
- ***Austrian Chemical Society***
- ***American Chemical Society***

Projects

Project No. 7035 Deanship of Scientific Research, King Faisal University, Ministry of Higher Education, Kingdom of Saudi Arabia,
(2006-2007) budget 81,000 SR
Title : Solvatochromic studies on copper mixed-ligand complexes containing *bis(aryliminoacenaphthene).*
- دراسات التغير اللونى(بسبب المذيب) لمرتبطات النحاس المختلطة والتى تحتوى على ثنائى (آريل إيمينو) أسنافثين.

Project No. 90072 Deanship of Scientific Research, King Faisal University, Ministry of Higher Education, Kingdom of Saudi Arabia,
(2007-2008) budget 93,000 SR
Title: Thermal, spectroscopic and biochemical studies on 2-acetylpyridine derivative complexes.
- دراسات حرارية وطيفية وبيوكيميائية على متراكبات تحتوى على ٢-اسيتيل بيريدين

Project No. 10080 Deanship of Scientific Research, King Faisal University, Ministry of Higher Education, Kingdom of Saudi Arabia,
(2008-2009) budget 87,000 SR
Title: Structural, Spectroscopic and antimicrobial activity studuies on Aza-Systems Containing Chalcophenes complexes
- دراسات بنائية وطيفية والفعالية كمضادات للميكروبات لمتراكبات الكالكوفين ذات النظام النيتروجينى

Project No. 110010 Deanship of Scientific Research, King Faisal University, Ministry of Higher Education, Kingdom of Saudi Arabia,
(2009-2010) budget 94,400 SR
Title: Synthesis and molecular modeling of dicationic quinolinouracils and their antimicrobial activity
- تحضير ودراسة تقنية النماذج الجزيئية على مركبات اليوراسيل الكينولينية ثنائية الكاتيون والفعالية كمضادات للميكروبات

Project No. 110013 Deanship of Scientific Research, King Faisal University, Ministry of Higher Education, Kingdom of Saudi Arabia,
(2009-2010) budget 90,000 SR
Title: Uranyl complexes of thiosemicarbazone derivatives; structural, spectroscopic, and biochemical studies
- دراسات بنائية وطيفية وكيميائية حيوية على متراكبات اليورانيوم لمشتقات الثيوسيمىكربازون