



Department of Chemistry

Willard Hall
Manhattan, Kansas 66506
913-532-6665

June 17, 1986

To Whom It May Concern:

Dr. Faleh Mousa has been working in my laboratory as a Visiting Professor from the period of February 1985 - June of 1986. He wished to gain experience in organic synthesis using "super base" reagents. He conducted condensation reactions of organic carbonyl compounds with activated magnesium oxide (MgO). The MgO was activated by heating for several hours under vacuum. After cooling the activated MgO was used to interact with carbonyl compounds. Base condensation reactions (Aldol reactions) took place under mild conditions, and thus a new heterogeneous method for carrying out these reactions was developed.

Dr. Mousa's work will result in two publications, one article in a journal and one review article which he helped write.

I have been quite pleased with his work. He worked hard and persevered. Dr. Mousa is a good writer as well and was able to help a great deal with the writing of these manuscripts.

Yours truly,

Kenneth J. Klabunde
Professor and Head

KJK/mf

Department of Chemistry

The University of Newcastle upon Tyne

Department of Chemistry
Armstrong Building
The University
Newcastle upon Tyne NE1 7RU

Dr. J.C. Lockhart
Senior Lecturer (Chemistry)

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Dr. F.H. Musa,
Education College,
Baghdad University,
Iraq-Baghdad,
301-29-9


Dear Faleh,

This is a formal note to confirm that during the period 1982-85, you were a Guest Member of staff at this University, doing research in the Department of Inorganic Chemistry.

You worked firstly with Dr. Bruce Tattershall (1982-83) and then with myself (1983 until your departure in 1985). The work resulted in several publications and has been the basis for new projects in benzimidazole chemistry.

With best wishes to you and your family and for your future career.

Yours sincerely,



Joyce C. Lockhart
Senior Lecturer in Inorganic
Chemistry.

CURRICULUM VITAE

Falah H. Musa, B. Se., Ph. D.

RESIDENCE IRAQ- BAGHDAD

332-26 - 4 *Mob.07902867026*
falih.h.m@ihcoedu.uobaghdad.edu.iq
dr.falihhassan@yahoo.com

Date of Birth/ Place of Birth
July 1, 1945 Iraq , KARBALA

MARRIED

Wife - Hoda, *Prof.Dr. inorg.chem.*

Son's-Hassan *Doctor*

Daughter-Esra *Dentist*

Rusel *Civil engineering*

EDUCATION:

Baghdad High School, Baghdad Iraq, 1963.

Baghdad University, Baghdad Iraq, 1963- 67.

Aston University, England, 1975- 78.

PhD Inorganic Chemistry

ACADEMIC APPOINTMENT:

Teacher in Kalid Ibn - AL- Walid. Taught Chemistry in High School 1967- 1974.

Teacher in High School- Algeria 1974- 1975.

Teacher in Department of Chemistry, Education College

Baghdad University 1979- 1982.

Guest member staff, Newcastle Upon Tyne University, England 1982- 1985.

Visiting Professor Kansas University, Manhattan Kansas 1985- 1986.

Assistant professor, Department of Chemistry, Education College- Baghdad
University/ 1987.

professor,1998

Member Research Council 2009\9\28

Eidtor-AL-Nahrain University Journal for sci .2009

CURRICULUM VITAE

Falah H. Musa, B. Sc., Ph. D.

PARTICIPATION IN CONTINUING EDUCATION:

phD. 1975- 1978 Aston University- U. K.

Title Synthesis and Study New Organotellurium Compounds.

NEW COMPOUNDS:

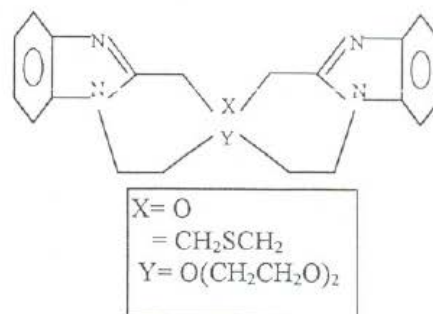
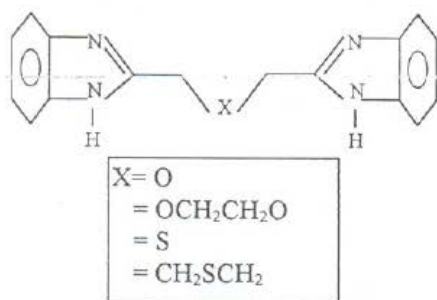
$R_2 Te (NCS)_2$	R= Ph , MeOph, EtoPh
$R_2 Te CH_3 X$	R= Ph , X= (NCS)
$R Te X$	R= Azobenzene , X= Cl, Br, I, NCS CH ₃ COO
$R_2 Te_2$	R= Aniline
$R_2 Te_2 X$	X= CuCl ₂ , Cu Cl

Guest member staff Newcastle Upon Tyne University 1982- 85:

A- Reaction of tetraphosphorus trisulfide with organic disulfide under ultraviolet irradiation, and with sulfur chloride gave quantitative yields of $SP(SR)_3$ and $P(SR)_3$ with no sulfurization of P_4S_3 .

B- Polydentate and macrocyclic ligands incorporating benzimidazole units were prepared and characterized [$x=O(CH_2)_2O_2X^1=O, CH_2SCH_2; X=O [(CH_2)_2O]_2, X^1=O(11), O(CH_2)_2O_2CH_2SCH_2; X=O, X^1=O C_6H_4O$].

These ligands coordinate Cu (II) and other transition metal ions through the imidazole N and other donor atoms. The crystal and molecular structure of the one of the microcycle was determined.



'CURRICULUM VITAE

Falah H. Musa, B. Se., Ph. D.

C- Kansas State University - Manhattan U. S. A. 1985- 1986: Studied condensation reactions of organic carbonyl compounds with thermally Activated magnesium oxide. the magnesium oxide was activated by heating at 700 C^o for several hours under vacuum

After cooling the activated magnesium oxide was allowed to interact with carbonyl compounds. Base condensation reactions (coupling reactions) took place under mild conditions, and thus a new heterogeneous method for carrying out these reactions was developed.

COURSE:

Under Grad

- 1) coordination chem
- 2) Nuclear chemistry .
- 3) Inorg . chem

Post Grad.

- 1) organo metallic chem.
- 2) mechanism Inorganic reaction.
- 3) Spectroscopy Inorganic compounds.
- 4) Stereochemistry Inorg. compounds
- 5) Catalysis

SUPERVISOR

M.Sc Student

- 1) Synthesis and studies Derivatives Diazole with their complexes 1990 .
- 2) Synthesis and studies Derivatives ligands containing (N, S) with their complexes 1994.
- 3) Study of chemical additives effect in reducing the sulphur and Vanadium negative effects during the heavy fuel oil and water burning process 2007 .

Ph.D

- 1) Synthesis and Activity studies selective Amino Acids Derivatives and their metal Complexes on chosen Bacterial fungal species 1996 .
- 2) Synthesis and characterization of dioxadiazol and dithiazol complexes 1999
- 3) synthesis and characterization macro Ligands containing S,N,O and their complexes 2006
- 4) Synthesis of some new metal complexes of L-ascorbic acid derivatives and evaluation their biological activity 2010
- 5) Synthesis and biological effect study of new ligand containing multi function group and associate catalytic activity of chronic renal failure with complexation 2012
- 6) Synthesis and structure studies of some metal ions complexes with new 5,6-Isopropylidene L-ascorbic acid derivatives 2012

CURRICULUM VITAE

Falah H.musa, B. Se., ph. D

Reference

- 1) Department of Chemistry .
Head of Dept .; professor w . r. Mc whinnle
Gosta Green , Binningham
Aston University Birmingham B4 7ETU- K
Telephone (021) 359 – 3611.
- 2) prof . Lochart joyce
The University of New Castle upon Tyne
6- Kensington Trefface
Chemistry Department
NE17 RU
- 3) Kenneth j . Klabunde chemistry Dept .
Kansas State University Manhattan
Willard Hall
Manhattan, Kansas 66506 – USA
Telephone (913) 532- 6665.

CRRICULUM VITAE

Falah H. Musa, B. Sc., Ph. DU.

Presentation at National meeting and panal Discussions .

- 1) Internatinal Conference on tellurium July 1983
(attending) Aston university U.K
- 2) ACS meeting in southern illinos university at corbandale nov. 1985
with initial result
- 3) international conference IRAQ Chemical SOC . 1993 , 92 , 91
Baghdad .
- 4) The 15th IRAQ Chemical conference basrah Iraq – Feb . 3- 7- 1990
with inital result .
- 5) The 16 th Iraq chemical conf . Baghdad feb 4- 7- 1992 with initial
resuth .
- 6) The 18 th Iraq chem. Conf . Baghdad- Iraq . march 22- 24 / 1994
with initial resuth .
- 7) The first sci. conf. Baghdad 18-19 march 1997 with paper .
- 8) The first Arab conf . At Applied sci , Univ .31- oct. – 2 Nov . 2001
Jordan – Amman .
- 9) The second Arab conf . At Applied sci , Univ , Jordan – Amman 21-
23 April 2004 with paper .
- 10) المؤتمر الاول /كلية التربية جامعة الموصل 2008/10 مع بحث
- 11) حلقة دراسية لمد الجسور بين المجال الاكاديمي والجهات المسؤلة عن السياسات والقطاع الصناعي 29-27
2009/7/ فى دمشق
- 12) First Iraq oil and gas 26-27/10/2011 with paper
- 13) المؤتمر العلمى الاول/كلية التربية /جامعة كربلاء/2012/4/29 مع بحث
- 14) المؤتمر العلمى السابع/كلية التربية/ جامعة تكريت مع بحث 2012/7-6
- 15) المؤتمر العلمى الثانى دور البحث العلمى فى تطور المجتمع/جامعة تكريت/2012/ 9/26-25 مع بحث
- 16) الندوة العلمية الرابعة للتفكير /جامعة الكوفة /مركز تطوير التدريب والتدريب الجامعى/مشاركة2012/4/2

CURRICULUM VITAE

Falah H. Musa, B. Sc., Ph. D.

BIBLIOGRAPHY:

- 1- Dioganotellurium disothiocyanates. Musa, Faleh H. ; McWhinnie, William R.; Downs, Allan W. J. *Organomet. Chem.* 1977, 134 (3) (43- 44).
- 2- Studies of dioganotellurium disothiocyanates and of a trioganotellurium isothiocyanate in the solid state and in solution. Musa, Faleh H.; McWhinnie, William R. J. *Organomet Chem.* 1978, 159 (1) 37-45.
- 3- Some New Organotellurium compounds derived from azobenzene. The crystal and molecular structure of (2- phenyl azophenyl- CN¹) tellurium (II) chloride. Cobble Dick, Roger E; Einstein, Frederick W. B. ; McWhinnie, William R.; Musa, Faleh H. *J. Chem. Res., Synop* 1979 (S), 145.
- 4- Reaction of tetraphosphorous trisulfide with organic disulfides under ultraviolet irradiation, and with sulfur chloride, Musa , Faleh H. Tattershall, B. W., *J. Chem. Soc. Dalton Trans* 1984 (8) 1517- 20.
- 5- Preparation and complexation of polydentate and macrocyclic ligands incorporating benzimidazol. X- ray crystal structure of 6, 7, 9, 10, 12, 13, 16 octahydro 23H , 25H bis - (benzimidazol [1, 2-j: 2,1¹-0]) [1, 4, 7, 13, 10, 16] tetraoxdiazacyclo- octa- decine.
Clegg, William; Lockart, Joyce C., Musa, Faleh H.
J. Chem. Soc. Dalton Trans. 1986 (1) 47-53.
- 6- Reaction of some carbonyl compounds on thermally activated Magnesium oxide F. H. Musa and Kenneth J. Klabunde, Dept. Of Chemistry in Kansas State University, *J. IBN AL-Haitham Vol.1* (1) 1989.

CURRICULUM VITAE

Falah H. Musa, B. Sc., Ph. D.

- 7- The reaction of carbonyl compounds on activated metal oxide (review) with some of recent results. Kenneth I. Klabunde, Musa, Faleh H. Fazlul Hog. Kansas State University, Chemistry Dept. 1987 by Academic Press, Inc. 35- 59.
- 8- Synthesis and spectral characteristic of (2-phenylazophenyl C, N) tellurium (IV, II) halides, F. H. Musa, H. ALBYTL, Iraq J. Of chem. 203 , 1990.
- 9- New Synthesis Route for the synthesis of 2- mercapto- 5- phenyl-1, 3,4 Oxadiazol derivatives F. H. Musa H. AF. ALBA YTI I. IBN AL- HAITHAM Vol. 3(3) 1992.
- 10- Synthesis of 5-phenyl -1,3,4- oxadiazol - 2- thio derivatives and their reactions with some transition metal salts. F. H. Musa. EA W J. IBN-AL-HATHAM VOL.9(1), 1998. Othman.
- 11- Synthesis and characterization of new orthoaminophenylthio derivatives and their complexes, F. H. Musa, W. K. Mahdi, for pure & APPL.SCI. J. IBN-AL- HAITHAM VOL ., 16 (1) 2003 .
- 12- Synthesis and character of some metal complexes with bis- (5- mercapto-1, 3, 4- oxadiazol)_1,3propane and bis [2,2 -(5 - mercapts 1,3,4 oxadiazol] 1,4- butane . F. H. Musa, M. J. Mahmoud and I. F. Mustafa J- IBN- AL- Haitham for pure & APPL.SCI. VOL ., 15 (3) 2002 .
- 13- Synthesis Biological Activities studies of leucine -0- Acetic acid and its complexes F. H. Musa A. AL- Rawi , B. M. Serhane . proceeding of the first scientific conf vol 1 december 1997 , pp 197- 207 college of science .

- 14) Preparation and characterization of dioxadiazol and ditrazol complexes with divalent Co , Ni Zn and Hg . F. H Musa , Iraq J.of chem, vol . 24 NO (239)1998
- 15) Synthesis , Biological –Activities studies of prolinyl phenyl isothiocyanate , cysteniny phenyl thiocyanate and their complexes .
F.H Musa , A. AL – RAW L , B. M. Serhan Iraq J . of chem. , vol 26 , NO(725)2000 .
- 16) preparation and character of some metal complexes with (5,5 – (Ethane diylidine dintrilo) ditetrazole I.F. Mustafa, A.T. Atto .F . H . Musa , Iraq , J . chem. Vol 16 , NO .(2) 1991 .
- 17) Preparative chemistry Using supported Reagents K.J klabunde , F.H. Musa Accademic press Lnc 1987 .
- 18) Mass spectra Studies of some Organo Tellurium compounds
Musa F.H Iraq J. of chem. Vol . 28 , NO (4) 2002 .
- 19) Triazoles – thio as complexing Agent , Synthesis ,characterization of Cr(IV) , Co (II) , Ni (II) , Cu (II) and pd (II) complexes with 4,5 . Diphenyl 1,2,4 – Triazol –yl thio Acetic acid (TRBAC) and 4,5-dipheny 3- Benzyl thio 1,2,4 Triazol (TRBZ) F. H.Musa, H.AF . AL – Bayti , I- A.W. OTMAN Iraq J.of chem. , vol . 28 , NO .(3) 2002 .
- 20) Synthesis and studies of Bis – [3,4- Dipheny 1,2,4 Triazol – 5yl – thio] methane and its complexes with Cr (IV) , Co (II) Cu (II) , Pd (II) and Pt () H.A.F. Albayti , I. A.W . Otman and F.H. Musa , Iraq . J. OF chem vol . 28, NO 3 2002 .
- 21) Synthesis Organo Se, Te and Hg compounds containing , Oxadiazol , Triazol and 2- benzothiozol Rings with some of Their complexing . W.k mehdi , F. H.Musa. All mustansiriya J . SCi , vol . 12, NO(8) 2001 .

22) Synthesis and studying of disulphide ligands containing Oxadiazol, Triazole and Thiozole Ring with some of Their complexing W.K. Muhdi, F.H.musa, J. of Nahrain Univ, vol. 7 (2), 2004

23) Complexes of Bis [4-phenyl 1,2,4- triazol -5yl methane (BTRLTM) .F.H.Musa I.A.W. Othman, proceeding of the second Arab chem. Conf. at Applied Sci private Univ. Amman – Jandan 21-23 April 2004.

24) Synthesis of Ligands of Bis – oxadiazol and Triazol with open or close sides and their Complexes with Cu() pd () F.H.Musa, H.AF. AL – Bayt i W.K.Mahdi, accepted for publication J. IBN - AL – HATHAM 21/2/2005

25) Synthesis of 2-(2-thioethyl) thio – 5- phenyle -1, 3,4-oxadiazol(TESPO)with M (II): Cu,Ni,Co and Hg H.A.Mohammad, F.H.Musa, A.I.Abdullah J.Educ. and Sci, the first Conference on chem.october-2008 p.198 -219.

26) Synthesis and studies of 1,2-bis(5",2")thio ethylsulphide-1,3,4-oxadiazole- 2yl methane and its complexes with ((M (II);Cu,Ni,Co,Hg) H.A.Mohammad F.H.Musa, A.I.Abdullah College of science 4th scientific Conf.2009 p.127 – 142.

27) Synthesis and studies of 1,2 –bis (5"-2"thio ethyl sulphide-1,3,4 oxadiazol-2yl) eyhane and its complexes with Cu,Co,Hg. H.A.Mohammad,F.H.Musa A.I.Abdullah.J.Raf.Sci, vol.20, No.1, p.75-89 / 2009.

28) Synthesis, characterization of some metal salts with bis- (orthoamino phenyltio) -Methane S.H.Naji, H.A.F.AL-Bayti and F.H.Musa AL-Mustansiriya J.Sci Vol.19, No2, 2008

29)Synthesis ,spectroscopic and biological studies of some metal complexes with 2,3,5,6-o,o,o,o-tetraacetic L- ascoricacid ,J.S.Sultan ,A.A.Mukhuls, F.H.Musa.IBN AL-Haithem J.for pure &appl. Sci.vol.24(2)2011

30) Synthesis of some new metal complexes of 5,6-o-isopropylidene-2,3-acetic acetic-L-ascorbicacid and evaluation their biological activity. J.S.Sulta ,A.A.Mukhlus,F.H.Musa. IBN-AL –Haithem . J.for pure and appl.Sci.vol.25,302-327,2011

31) Synthesis and characterization of [2(carboxymethyleneamino) phenylimino]acetic(L)and some complexes. J.S. Sultan,F.H.Musa,sent to 28/6/2012 Baghdad J.scince of college for women

32) Synthesis of some new metal complexes of methlidene carboxyl 5,6-o-isopropylidene- L-ascobic acid and evaluation their biological activity. J.S.Sultan,A.A.Muklus F.H.Musa,accted to be puplish ; college of education J. Tikret 7/5/2012

33) Synthesis ,characterization and study biological activities of a new Vanadyl(11),Antimonyl (111) complexes of derivatives vitamine –C. J.S.Sultan,F.H.Musa,Accepted for publishing J.of college Sci.-tikrit 26/8/2012

34) Synthesis and spectral studies of new Schiff base pyrimidine -2-ylimino acid (L)and some of its complexes.J.S. Sultan ,F.H.Musa,sented to J.of Baghdad for Sci. 8/2012

35) Metal complexes with 5,6-o-methylidene L-ascorbic acid .A.A.AL-Mula,W.AL-Taie,F.H.Musa. accepted for publishing AL-Nahrin university J.for Sci.14/5/2012

36) Metal complexes with 5,6,-o,o,-ethylene L-ascorbic acid .A.A.AL-Mula, W.AL-Taie.F.H.Musa. accepted for publishing MEJB 11/4/2012

37) حامض اسكوربيك وبعض معقداته عاى انزيم الكتاليز لمرض الفشل الكلوى L- 5,6, o, o, تأثير ازهار عباس اسماعيل وفاء الطائي فالح حسن موسى قبلت للنشر فى مجلة كلية التربية الأساسية العدد 2012/4/19/276

38)Synthesis ,spectroscopic and biological studies of some metal complexes with 2,2-diamino-N-phenyl hydrzo benzene. S.H.Naji, F.H.Musa J.of AL-Nahrain university . vol.14(4)25-37 2011

39) Synthesis ,spectroscopy and biological studies of a new some complexes with-N-2-yl of methyl –benzene -1,2-diamine.S.H.Naji,L.K.Abdul karim, F.H.Musa,accepted for publishing J. Ibn-AL-Haitham for pur &appl,sci. 2/16612/2/2012

40) Synthesis, spectroscopy and biological studies of some divalent metal complexes with 1-phenyl-2-(1-phenylethylidene)hydrazone.S.H. Naji, F. H. Musa.accepted for publishing College of education J.tikret university 6/7/2012