

# Curriculum Vitae (CV)

أ.د. الفيتوري عياد فرات العكاري

**Prof. Dr: Elfituri Ayad Farhat Elakkari**



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**Sex:** Male

**Date of birth/ place:** 1965/ Souq Elgouma (Tripoli) , Libya

**Nationality:** Libyan

**Marital Status:** Married

**Number of Children:** 4

## Educational qualifications:

**1988-** Bachelor of Science (B.Sc.) (chemistry); Tripoli University, Tripoli, Libya

**1992-** Master of Science (M.Sc.) (chemistry); Tripoli University, Tripoli, Libya

**Thesis:** "Intercalation of pellicular materials (thin film) of zirconium-, hafnium phosphate and zirconium-titanium-, hafnium-titanium phosphate with nitrogen heterocyclic compounds" Tripoli University, Tripoli, Libya, 1991/1992.

**2006-** Doctor of philosophy (Ph.D.) (chemistry); Torvergata University, Rome, Italy

**Thesis:** "Cyclooligomerization reactions catalyzed by ruthenium and rhodium porphorins," Torvergata University, Rome, Italy, 2006.

**Academic degree:** Professor 2014

**Area:** Inorganic chemistry

**Specific area:** Chemistry of Catalysis , Organometallic Chemistry , Tetravalent metals phosphate , General Chemistry and Staff member in the Department of Chemistry, Faculty of science, Tripoli University from 1992 to 2022

## Teaching experience: 28years:

**1992-1996** -Teaching Assistant (Chem. Dept.), Faculty of Science, Tripoli university.

**1996-2000-** Lecturer (Chem. Dept.), Faculty of Science, Tripoli University, Tripoli Libya.

**2000-2008-** Assistant Professor (Chem. Dept.), Faculty of Science, Tripoli University, Tripoli Libya.

**2008-2014-** Associated Professor (Chem. Dept.), Faculty of Science, Tripoli University, Tripoli Libya.

**2014-2022-** Professor (Chem. Dept.), Faculty of Science, Tripoli University, Tripoli Libya.

### **Teaching and research experience and courses:**

- 1- Teaching General chemistry to the students of the faculties of Science , Pre-Pharm, Medicine and Vet and Agriculture (Theoretical and Practical courses)
- 2- Italian language courses in Perugia, Italy, 2001-2002
- 3- Teaching Inorganic chemistry for undergraduate Students (Theoretical and Practical courses), for the chemistry departments of Tripoli University.
- 4- Teaching Inorganic chemistry for graduate Students (Theoretical and Practical courses), for the chemistry departments of Tripoli University.
- 5- Member of the Committee on the development of master degree Syllabus of the Chemistry Department, Faculty of Education, Tripoli
- 6- Member of the Committee on the development of syllabus of Chemistry Department for students of teacher training colleges in Libya and in teacher training system, four and six semesters
- 7- Coordinator of General chemistry and Organic chemistry courses in the Committee of Pre-Pharm., Medicine and Vet. ,Tripoli University, 2007-2016

### **Undergraduate level courses taught:**

- 1- General chemistry and general practical chemistry I&II.
- 2- Organometallic chemistry.
- 3- Coordination Chemistry I (Properties of transition metals, nomenclature, isomers and theories of bonding of complexes)
- 4- Practical inorganic Chemistry (Synthesis and analysis of the complexes).
- 5- Aqueous and non-aqueous Solvents.
- 6- Coordination chemistry II (Electronic spectra).

### **Graduate level courses taught:**

- 1- theoretical Inorganic CH520
- 2- practical inorganic CH520P
- 3- theoretical Inorganic CH621 , CH622
- 4- Practical inorganic Chemistry (Synthesis and analysis of the complexes).
- 5- Spectroscopy and Special topics in Inorganic Chemistry.

#### **رسائل الشكر:**

- .1 من اللجنة المشرفة على المؤتمر العلمي الثاني للعلوم الأساسية / طرابلس ليبيا 2007/11
- .2 من اللجنة المشرفة على وضع مناهج مراكز تأهيل واعداد المعلمين 2007/2008
- .3 من اللجنة المشرفة على اليوم العلمي الثاني للكيمياء 2017
- .4 من اللجنة المشرفة على اعداديات الطب 2007
- .5 من اللجنة المشرفة على اليوم المفتوح (البحث العلمي واقع وافق بشرف كل من وزارة التعليم والبحث العلمي والهيئة الليبية للبحث والعلوم والتكنولوجيا) 2014/12/15

#### **الجان التي شارك بها:**

1. لجنة الكيماويات بالقسم 2007 - 2016
2. لجنة قبول أعضاء هيئة التدريس بقسم الكيمياء كلية التربية 2015
3. لجنة الكتب والمجلات 2007 - 2012
4. لجنة الاجهزة الخاصة بالتحاليل الكيميائية بالقسم 2009 - 2018
5. لجنة المشرفة على وضع مفردات ومناهج مراكز تأهيل واعداد المعلمين 2008/2007
6. لجنة المشرفة على اليوم العلمي الثاني للكيمياء 2017
7. لجنة المشرفة على اعداديات الطب 2007 - 2016
8. لجنة المشرفة على وضع مفردات منهج قسم الكيمياء لطلبة الماجستير كلية التربية 2010
9. لجنة المشرفة على المؤتمر العلمي الثاني للعلوم الأساسية / طرابلس ليبيا 11/11/2007

### **Publications and Conferences :**

- 1- Effect of  $H_3PO_4$  Concentration on The Degree of Crystallinity of Pellicles of Mixed Hafnium-Titanium Phosphates., S.K.Shakshooki and F.A.El-Akari , *4<sup>th</sup> Chemistry in industry Conference & Exhibition, Gen-5 , pp 1-4, Bahrain* (2000).
- 2- Thermal Behavior of 2,2'-Bipyridyl, 4,4'-Bipyridyl and 1,10-Phenanthroline Products of Pellicular of Hafnium Phosphate., S.K.Shakshooki and F.A.El-Akari, O. El-Azzabi, Y. Shaaban and A. El-Rais, *4<sup>th</sup> International Conference & Exhibition on Chemistry in industry, Gen-8 , pp 1-8, Bahrain* (2000).
- 3- Effect of  $H_3PO_4$  Concentration on The Degree of Crystallinity of Pellicular Zirconium Phosphate and Hafnium Phosphate Prepared Via Reflux Method S.K.Shakshooki, F.A.Tarish, and F.A. El-Akari, *6<sup>th</sup> International Conference on Inorganic Membranes, Montpellier, France* (2000).
- 4- Thermal Behavior of 2,2'-Bipyridyl, 4,4'-Bipyridyl and 1,10-Phenanthroline Products of Pellicles Mixed Zirconium- Titanium Phosphates., S.K.Shakshooki and F.A.El-Akari, *2<sup>nd</sup> International Conference of Pure Applied and Environmental Chemistry, SL-11, Irbid, Jordan*(2002).
- 5- The formation of substituted benzene arylethyynes catalyzed by ruthenium and rhodium porphyrins. E. Elakkari, B. Floris, P. Galloni, P. Tagliatesta, *VII FIGIPS Meeting in Inorganic Chemistry, Lisbona, giugno 2003.*
- 6- Catalysis by metalloporphyrins. The formation of substituted benzene from arylethyynes catalyzed by Ru and Rh porphyrins. E. Elakkari, B. Floris, P. Galloni, P. Tagliatesta, *VII Italian Seminar on Catalysis, New Frontiers in Molecular Catalysis, Venezia, luglio 2003.*
- 7- The Formation of 1-Aryl-Substituted Naphthalenes by an Unusual Cyclization of Arylethyynes Catalyzed by Ruthenium and Rhodium Porphyrins. Elfituri Elakkari,

- Barbara Floris, Pierluca Galloni and Pietro Tagliatesta, *Eur. J. Org. Chem.* 2005, 889–894.
- 8- The cyclooligomerization of arylethyynes in ionic liquids catalyzed by ruthenium porphyrins: a case of real catalyst recycling. Valeria Conte, Elfituri Elakkari, Barbara Floris, Valentina Mirruzzo and Pietro Tagliatesta, *Chem. Commun.*, 2005, 1587–1588.
- 9- Highly Selective Biaryls Formation by the Cyclooligomerization of Arylethyynes Catalysed by Ruthenium Porphyrins ; Pietro Tagliatesta, Elfituri Elakkari, Agostina Capodilupo,a Giuditta Viticchie', Angelo Lembo and Daniel Cicero; International conference on porphyrins and phtalocyanines (ICPP-4) Roma , 2-7 July 2006
- 10- Highly selective biaryl formation by the cyclooligomerization of arylethyynes catalyzed by rhodium and ruthenium porphyrins, Pietro Tagliatesta, Elfituri Elakkari, Alessandro Leoni, Angelo Lembo and Daniel Cicero, *New J. Chem.*, 2008, 32, 1847–1849.
- 11- Conductometric Studies On CC-Substituted Ferrites; M. R. El-Talbi, E. E. Elshereafy, Elfituri Elakkari and Elhamassi Ali; *Journal of Faculty of Teachers Training*; 16-26(2009).
- 12- The Cyclooligomerization of Ethynylnaphthalenes Catalyzed by Ru(OEP)CO; Elfituri Elakkari, Marco Mereu, Agostina-Lina Capodilupo, Pietro Tagliatesta. *XXXIII Congresso Nazionale di Chimica Inorganica, Siena, luglio, 2005.*
- 13- The Cyclooligomerization of Ethynylnaphthalenes Catalyzed by Ru(OEP)CO. Elfituri Elakkari, Marco Mereu, Agostina-Lina Capodilupo, Pietro Tagliatesta, 5<sup>th</sup> Scuola Internazionale di Chimica Organometallica, Camerino, Settembre, 2005.
- 14- Conductivity Studies on Synthetic Rubber, effect of Accelerator Percent; Elhamassi Ali, Elfituri Elakkari, A. Etorki and A. Mashaly, *Second basic science conference, Tripoli- Libya*, 04-08/11/ 2007.
- 15- Further Conductivity Studies on mixed natural-synthetic Rubber; Elfituri Elakkari, Elhamassi Ali A. Etorki and A. Mashaly, *The 14<sup>th</sup> Arab Chemistry Conference & Exhibition (ACC-14), Tripoli-Libya* , 18-21 Feb. 2008.
- 16- Under potential Deposition and Stripping of Lead Ions at Disorganized Monolayer Modified Gold Piezoelectrode; A. M. Etorki, E. Elakkari, A. Elhamassi and M. M. Abuein, *The International Conference of Inorganic Chemical Industries& Mineral Recourses Research Division, February 1-2, 2009*, Cairo, Egypt.

- 17- Synthesis and Thermal Behaviour of Pillares  $\gamma$ -Zirconium Phosphate,  $\gamma$ -Zirconium Phosphate Phosphite-, 1,10-Phenanthroline Cu(II) Materials; S. K. Shakshooki, R. S. Abudlal, and F.A. El-Akari; *10<sup>th</sup> International Conference on Chemistry and its Role in Development ICCRD' 10; Mansoura-Sharm El-Sheikh*, March 16-21, 2009
- 18- Thermal behaviour of pillars zirconium phosphate, zirconium phosphate-phosphite-, 1,10-phenanthroline-Cu(II) materials. S.K.Shakshooki, R.S.Abdulal , F.M.Turki, F.A. El-Akari and R.Abukhatwa *University Bulletin – Issue No.12-2010.*
- 19- Poly-Vinylalcohol/Exfoliated Pellicular  $\gamma$ -Zirconium Phosphate Nanocomposites; S.K.Shakshooki, F.A.El-Akari, A.M.Hamassi, N.M.Etorki and A.M. El-Hamady, *11<sup>th</sup> Eurasia Conference on Chemical Sciences, 6-10 October 2010, Dead Sea Jordan.*
- 20- Poly(vinylalcohol/ $\alpha$ -vanadylphosphate-,  $\alpha$ -typepellicular zirconiumphosphate composite membranes, S.K.Shakshooki, O.H. Azzabi, F.A. El-Akkari, F. Tarish, A.M. EL-Dernawi, R.S. Tunisi and O.H. Burshan *International Conference On Materials Imperatives In The Millennium [MINM 2010] 29 Nov. -2 Dec. 2010, Cairo, Egypt*
- 21- Application of 1, 4-benzenedimethanethiol self-assembled monolayer on gold piezoelectrode as a sensor for determination of Hg(II) Abdunnaser M. Etorki , Elfituri Elakkari, Elhamassi Ali :, *Chemical Sensors 2011, 1: 10*
- 22- S.K.Shakshooki1, Omar H. El-Azzabi1, F.A.El-Akkari1 , F. A. Tarish1, A. M. ELDerawwi1 R. S. Tunisi , A. S. Benhamed and O. H. BurshanPoly(vinyl alcohol) /  $\alpha$  -Vanadyl phosphate-,  $\alpha$ -Type Pellicular Zirconium Phosphat Composite Membranes., Journal Faculty of Education Number Seven , Atumn (2011)pages12-20.
- 23- S. K.Shakshooki, A. M. Rhuma and F.A.El-Akari, .Inclusion Of Amino Acids L-alanine, L-arginine, L-serine, L- lysine, L-asparagine And proline Into Fibrous Cerium Phosphate Membrane. Journal Faculty of Education Number Seven Atumn (2011)pages21=38.
- 24- FT-IR and thermal Behaviour of  $\theta$ -Type Zirconium-, and Hafnium phosphates And their pellicular membranes. S. K. Shakshooki , O. H. EL-Azzabi , F. M. Turki , F. A. EL-Akari, R. S. Abodlal and S. R. EL-Tarhuni,. *Egypt J. Anal. Chem. Vol. 21 , pp. 45-56 (2012).*
- 25- Thermal and Sorption Properties of Nano Fibrous Cerium Phosphate/Exfoliated  $\alpha,\gamma$ -Zirconium Phosphates Composites S. K. Shakshooki, S. R. EL-Tarhuni' F. A.

EL-Akari, R. H. Ghariani , S. M. EL-Fetury, A. M. EL-Hamady , A. Benhamed and O.H. Burshan , “*Nanotechnology, Biotechnology and Spectroscopy, Tools of success in the coming era*” 1-3 March 2012, Cairo - Egypt

- 26- Poly(vinylaleohol) Fibrous Cerium Phosphate Nano Composite Membranes A.A. Elejmi, S.K.Shakshooki, A.M.Hamassi, F.A.El-Akari and N.A.Masoud,. “*Nanotechnology, Biotechnology and Spectroscopy, Tools of success in the coming era*” 1-3 March 2012, Cairo - Egypt
- 27- Complexation of Trace Metal Ions by Ligands Anchored to Gold Surfaces Different than by Ligands Dissolved in Homogeneous solutions Abdunnaser M. Etorki, Elfituri Elakkari and Ali Elhamassi :, *Orient. J. Chem.*, Vol. 27(3), 919-927 (2011).
- 28- Fibrous Cerium(IV) Hydrogen Phosphate Membrane Self Supported Benzimidazole Polymerization Agent, S. K. Shakshooki a, F. A. El-Akari b, S. M. El-Fituri and S. S. El-Fituri *Advanced Materials Research* Vol. 856 (2014) pp 3-8.
- 29- Polystyrene/Lamellar Germanium Phosphate Nanocomposite Membranes, S. K. Shakshooki, F. A. El-Akari, S. M. El-Fituri and S. S. El-Fituri , *Advanced Materials Research* Vol. 856 (2014) pp 9-15.
- 30- Facile Synthesis of Poly (vinylalcohol)/Fibrous Cerium Phosphate Nanocomposite Membranes, S.K.Shakshooki, A.A. Elejmi, A.M.Hamassi, F.A.El-Akari, N.A.Masoud, *Physics and Materials Chemistry*, 2014, Vol. 2, No. 1, 1-6
- 31- Poly(vinyl alcohol) /  $\alpha$ -Vanadylphosphate-,  $\alpha$ -Type Pellicular zirconium Phosphate Composite Membranes , Sadek K.Shakshooki , Omar H. El-Azzabi , Fituri A.El-Akari , Fatheia A. Tarish, Amira M. ELDernawi , Randa S. Tunisi , Ahlam S. Benhamed and Osama H. Burshan, *Journal Of Faculty Of Education , Number Seven Autumn 2011*,pp21-38.
- 32- Inclusion of Amino Acids L-alanine, L-arginine, L-serine, L- lysine, L-Aspargine and Proline into Fibrous Cerium Phosphate Membrane; S. K.Shakshooki, A. M. Rhuma and F. A.El-Akari , *Journal Of Faculty Of Education , Number Seven Autumn 2011*,pp1-11.
- 33- Facile Synthesis of  $\gamma$ -Zirconium Phosphate-Fibrous Cerium Phosphate / Emeraldine Salt Nanocomposite Membrane: S. K. Shakshooki, F. A. El-Akari, A. A. Jangher, A. M. Hamasi, *American Journal of Chemistry* 2015, 5(3): 75-85
- 34- Exfoliated Zirconium Phosphate-Fibrous Cerium Phosphate Nanocomposite Membrane Self Supported Indole, Its Co-Aniline and Co-Pyrrole Polymerization

Agent : S. K. Shakshooki, F. A. Elakari, Aisha M. Shaabani; *American Journal of Chemistry* 2015; 5(4): 115-123

- 35- Novel Nanosized Mixed  $\gamma$ -Zirconium - Titanium Phosphates: S. K. Shakshooki, F. A. El-Akari, R. H. Idris, A. M. Hamassi, M. R. Eltalbi, Rabiea A. Elmabrouk, Amira A. Elfaki , *American Journal of Chemistry*, 2016; 6(4), pp. 104-110
- 36- Synthesis and Characterization of Novel Highly Crystalline Layered Nanosized Zirconium-, Hafnium-, Titanium Tellurates from Their Parent Glassy Sodium Forms via HF Solution: *S. K. Shakshooki, F. A. El-Akari , Salima M. El-Hamroni , R. H. Idris and Amani M.El-Aouzi; J. Pharm. Appl. Chem., No. 3, 205-210 (2016)*
- 37- Synthesis and Characterization of Novel Pellicular  $\gamma$ -Zirconium Phosphate Phosphite/Fibrous Cerium Phosphate Nanocomposite Membranes: *S. K. Shakshooki, F. A. Elakari, A. M. EL-Hamady, S. M. Elfituri and R. Elghariani: J. Pharm. Appl. Chem., No. 1, 27-31 (2016)*
- 38- Poly (vinylalcohol)-, Polystyrene/Theta Type Zirconium Phosphate Nanocomposite Membranes:, S. K. Shakshooki ; F. Masaudi ; F. El-Akari ; A. Jangher: *Academic Journal of Chemistry., No. 2017; 2(12), pp 143-154*
- 39- Zirconium Phosphate/Fibrous Cerium Phosphate Nanocomposite Membrane Self Supported Benzimidazole, Its Co-Aniline, Co-Pyrrole and Co-Indole Polymerization Agent: S. K. Shakshooki, F. A. Elakari, Aisha M. Shaabani; *Academic Journal of Chemistry ,Vol. 3, Issue. 10, pp: 88-100, 2018*
- 40- Shakshooki, S.K, Elakari, F.A. , Alahemmer, A.A, Glassy-,  $\alpha$ -Zirconium-Tin Phosphates / Fibrous Cerium(iv)Phosphate-Nanocomposite Membranes Self Supported Aniline, its Co-Pyrrole and co-Indole Polymerization Agent, The 4th International conference Theories and Application Basic and Biosciences, J. Faculty of Science University of Misurata,(2020) pp335-354.
- 41- Shakshooki, S.K, Elakari F.A., Aisha, A., Fawzeia Khamis, Glassy-,  $\alpha$ -Zirconium-Tin Phosphates /Fibrous Cerium Phosphate-Nanocomposite Membranes Self Supported Aniline , Pyrrole , Indole, Carbazole Polymerization, *International Conference on Applied Chemistry July 01-03, 2021 Munich, Germany.*
- 42- S. K. Shakshooki, F. A. El-Akari and Najat A. Abozaid; Synthesis and Characterization of Novel  $\Theta$ -Type Zirconium Phosphate-Crystalline Cerium Phosphate/ Polyaniline, Polyindole, Polycarbazole, Polyaniline-co-Polyindole, and Polyaniline-co-Polycarbazole Composites; *Academic Journal of Chemistry; Vol. 6, Issue. 2, pp: 45-59, 2021*

43- Sadek K. Shakshook, Fituri. A. El-Akari, Najat A. Abozaid,  $\alpha$ -Vanadyl Phosphate- Crystalline Cerium Phosphate Nanocomposite Self-Support Polymerization of Aniline, Indole, Carbazole and their Co-monomers. New York Congress, January15-16, 2022. pp345-350.

**Supervision:**

**3 M.Sc. theses (Awarded)**