Curriculum Vitae

Name: Hana Bashir Ali Alhanash Date of birth: 15/1/1969 Address: Tajoura Marital status: Married e-mai: <u>hanahanash@aal.ly</u> Mobile number: +218944528441



Education

2008-2012 The University of Manchester

PhD in Chemistry

- My research is based on the synthesis and characterization of novel fluorinated hydrophobic materials, in particular room temperature ionic liquids (RTILs), developed a new route for the synthesis of completely asymmetric RTIL. Investigation of their physical properties such as viscosity, conductivity, electrochemical properties, melting point, glass transistion and thermal stability.
- Developed synthetic chemistry skills with a wide range of spectroscopic methods, especially multinuclear NMR, IR and Raman spectroscopy, thermal (TG/DTA, DSC), rheological and electrochemical measurements and single X-ray.

1995-1998The University of Tripoli/ Libya
MSc Inorganic Chemistry (76.7% top most in year group)

• On the synthesis and characterization of ion-exchange membranes and their applications.

1985-1998The University of Tripoli/ Libya
BSc. Chemistry (good) (top most in group)

1983-1984 New Tripoli College, Libya O level (GCE): Chemistry (B), Physics (D), Biology (B), Maths (B), Arabic (B), English (D)

Membership:

2022-till now	Member of Staff and Researchers committee at Advanced Libyan
	Centre for chemical Analysis.
2022-till now	Member of staff recruitment committee at
2014- 2019 Feb (IRC).	Member of scientific committee in Industrial Research Centre
2009-2012	Associate member of the Royal Society of Chemistry.

Patent:	Registered a patent on the synthesis of pellicular (thin films) gamma
	Zirconium and Hafnium phosphate-phosphite membranes.

Work and experience:

2019-till now Feb 2021-till Mar2019-till	<i>i</i> 1
15 Feb 2017- 2019 – till no	11 2
Jan 2015- Fel	2019 Industrial Research Centre (IRC) Head of chemistry dept.
2013-Feb 201	9 Industrial Research Centre (IRC)-Libya Research and quality control
2014	University of Tripoli Part time lecturer in inorganic chemistry
2008-2013	The University of Manchester Lab demonstrator for synthesis lab, 3 rd year & MSc students (group of 19).
2002-2008	High Institute of Comprehensive Occupations, Garraboulli- Libya. Part time lecturer in Industrial and analytical Chemistry.
2002-2008	University of Al-Mergab, Msalata-Libya. Part time lecturer of chemistry to 4 th year BSc. students at the college of science and literature, 25 students per group. (supervisor of bachelor degree project)
1988- 2008	 Industrial Research Centre (IRC)-Libya Supervisor of instrumentation unit in the chemistry department. Experience of a wide range of analytical techniques and instrumentation for the characterization of materials such as, clays, raw materials, building materials and drinking water using the following techniques: AAS, ICP, TG/DTA & DSC, Ion analyzer PHM25, Flame photometer. Delivered courses to internal and external trainees on the basics and technology of atomic absorption spectroscopy AAS.

Training courses:

- 2021. SPSS (Libya)
- 2011, Academic writing(UK).
- **2011**, Writing up your thesis(UK).
- **2010**, Publishing academic papers(UK).
- 2009, Teaching assistant training course (UK).
- **2008**, Speed PhD (UK).
- **1998**, TG/DTA (Hungary).
- 1997, Gold and noble metals analysis (Morrocco).

12-14/6/2021 First International Conference on Food and Nutrition, Tripoli/Libya
 9/3/2021 Workshop on Water Distillation Applied Technology/ Tripoli/Libya
 22/2/2021 Scientific symposium on bread improvers and their impact on family and community health

29-31/10/2019 2nd Conference for Engineering Science and Technology Sabratha/ Libya.

Talks & Conferences presentations during my Ph.D :-

31/07/2012	University of Newcastle, Postgraduate Chemistry Committee
	Conference. Oral presentation on development of asymmetric room temperature ionic liquids
4-7/09/2011	1 st international conference on Ionic Liquids in Separation and
	Purification Technology, Sitges, Spain
	Poster presentation on synthesis and characterization of asymmetric room temperature ionic liquids.
05/07/2010	Shape of Science Symposium, University of Manchester.
	Poster presented.
2009-2011	School of Chemistry/ Manchester University
	3 Talks presenting my research work on the development of novel materials, Room temperature Ionic Liquids in the postgraduate forums, 1 st year (2009), 2 nd (2010) and 3 rd year (2011)
Additional sk	
IT	General computing skills (Word, Powerpoint, Excel) Chemical software for analysis of NMR, X-ray data, chemdrawetc. Computer searching of chemical data and scientific literature (Scifinder, Scopus, Reaxy, iProc). Chemical software for the analyses of NMR, X-ray data, chemdraw.
Language Interest	Arabic (native), English (fluent), French (basic conversational level) Enjoys cooking and Crochet. Graduated from university at the age of 19. Mum of six children and believe to manage and take responsibilities in various disciplines and work within deadlines.

Publications:

- Water Chemistry in Tripoli, 1993-3 مجلة البحوث الصناعية العدد الرابع –الربيع
- 2- Inorganic ion-exchange membranes of insoluble acid salts of tetravalent metal. Manama Bahrain, October 1994).
- 3- S. K. Shakshooki, R. A. Mokhtar, R. H. Idris, L. O. Morgom and <u>H. B.</u> <u>El-Hanash</u>, *Patent No*. 352, 22.10.1994, Industrial Research Center.
- 4- Preparation of γ-Zirconium phosphate-phosphite, presented in 35th IUPAC congress, 14-19 August 1995, Istanbul, Turkey.
- 5- Inorganic Ion Exchange membranes of Insoluble acid Salts of tetravalent metals, pellicular of γ-hafnium phosphate and γ-hafnium phosphite. Wrexham, UK, 10-14 September 1995.
- 6- Preparation of pellicles of zirconium phosphate, hafnium phosphate, zirconium phosphate-phosphite and hafnium phosphate-phosphite via Intercalation-deintercalation of Arginine in to their crystalline materials, 5th International Conference in Inorganic membranes, Nagoya, Japan 22-26, June 1998.
- 7- Direct formation of pellicles of zirconium phosphate-phosphite and hafnium phosphate-phosphite via the HF method, 5th International conference in Inorganic membranes, Nagoya, Japa 22-26, June 1998.
- 8- Studies on the Adsorption of some lanthanides and UO_2^{2+} on fibrous cerium phosphate and its 1,10-phenanthrolin product, Tunisia, 16-20, November 1998.
- 9- Uptake of some lanthanides on γ-zirconium phosphate-phosphite and its 1,10-phenanthrolin and 2,2'-bipyridyl intercalated products. *Journal of Radioanalytical & Nuclear chemistry, Budapest 1999.*
- 10- Thermal Behavior of carbazole intercalates of glassy tin phosphate, 2nd international conference of pure, applied and environmental chemistry, Irbid-Jordan 2000.
- 11- Thermal Behavior of carbazole, intercalates of glassy zirconium phosphate, 2nd international conference of pure, applied and environmental chemistry, Irbid-Jordan 2000.

- 12- Intercalation behavior of amines and amino acids into pellicular γzirconium phosphate and γ-zirconium phosphate-phosphite. Montpellier-France 2000.
- 13- Thermal Behavior of pellicular γ-hafnium phosphate and its alkali Metal form products, Manama Bahrain, October 14-16, 2002.
- 14- Intercalation of 1,10-phenanthroline, 2,2`-bipyridyl, 4,4`-bipyridyl, imidazole and piperazine into pellicles of zirconium phosphate and zirconium phosphate-phosphite. Luxor-Egypt 16-19/2/2002.
- 15- A study on natural libyan clay minerals using thermal analysis technique. October 14-16, 2002.
- 16- Thermal Behavior of pellicular γ -hafnium phosphate and its alkali Metal form products, Manama Bahrain, October 14-16, 2002.
- 17- Effects of fluoride on health and environment and its determination using ISE. Sharm El-Sheikh, April 14-17 2003.
- 18- Intercalation of aromatic amines into γ-zirconium phosphate & γzirconium phosphate-phosphite, 27/11-01/12/2004, Riyadh, Kingdom of Saudi Arabia.
- 19- 1,10-phenanthroline, 2,2`-bipyridyl, benzoimidazole and 2,4,6(2-pyridyl)s-triazine inclusion products of fibrous cerium phosphate, 10th Ibn Sina International conference on pure and applied heterocyclic chemistry, 17-20/2/2007, Luxor, Egypt.
- 20- Quaternary Ammonium Ionic Liquids containing Fluorous Ponytails: Competitive Alkylation and Elimination reactions of I(CH₂)nR_f (n=2, 3) with Tertiary Amines. A.K. Brisdon, H. Alhanash, *J. Fluorine Chem.*, 2013, 156, 152-157.
- 21- Competitive sorption of some di- and tri-valent metal ions by Libyan Kaolinite and its modified phases. Ragiab A.M. Issa, Nick D. Bryan and Hana B. Alhanash. *Journal of Education Faculty*, 1st Edition December 2014.
- 22- Development of asymmetric ammonium-based room temperature ionic liquids, 2nd international conference on ionic liquids in separation, 2014, Toronto, Canada.
- 23- An investigation on Libyan olive oil in the western region, Ragiab A. M. Issa, Hana B. AlHanash, Thuraya E. Kaakul, Rowida Alkout and Hanadi Alkmishi, Mor. J. Chem. 5 No4 (2017) 652-658.

- 24- The Use of Fourier-Transform Infrared Spectroscopy to Assess Libyan Virgin Olive Oil Adulteration with Corn and Sun Flower Oils, Hana B. Alhanash, Rabea G. Elhabishi, Wael Elhrari, Ragiab A. M. Issa, Academic Journal of Chemistry, vol.3, Issue 5, pp: 40-45, 2018.
- 25- Simultaneous sorption of Am3+, Eu3+ and Cs3+ onto montmorillonite: The effect of pH, ionic strength and humic acid. 2nd Cnference for engineering Sciences and technology- CEST2, October 2019, Sabratha- Libya.
- 26- Spectrophotometric determination of iron in dietary supplements in Libyan market., Academic Journal of Research and Scientific Publishing, 1, 12, ISSN: 2706-6495, 2020.
- 27- Residual bromate assessment in bread samples from Tajoura city bakeries, Libya, Academic Journal of research and Scientific publishing, 2,13, ISSN: 2706-6495, 2020.
- 28- Assessment of heavy metals in Roadside soil samples in Zawia city, Libya., Malaysian Journal of chemistry, vol. 22(4), 110-116, 2020.
- 29- Adsorption of UO_2^{2+} on Fibrous Cerium Phosphate and its Alanine and Arginine Intercalated Materials, Hana B AlHanash1, Ragiab A M Issa and Heba A AlJabo, Academic Journal of Chemistry, vol7, Issue 4, pp. 47-54 2022, DOI: <u>https://doi.org/</u> 10.32861/ ajc. 74.47.54 2022.
- 30- Removal of uranium(VI) ion from aqueous solution using kaoloinite. Ragiab Issa, Ayoub O. El Amari, Hana Alhanash, Husein M. Etmimi, Kuwait Journal of Science, DOI: 10.1016/j.kj.s. 2023.03.010, August 2023.