

# CURRICULUM VITAE

## PERSONAL DETAILS:

**NAME** : SAAD M. AL-SHEHRI

**POSTAL ADDRESS** : Chemistry Department,  
College of Science,  
King Saud University  
P.O. Box 2455  
Riyadh 11451  
Saudi Arabia  
Tel. No. - Office (01) 4675971

**DATE OF BIRTH** : August 14, 1963

**MARTIAL STATUS** : Married

**CITIZENSHIP** : Saudi Arabian

## EDUCATION:

### **Ph.D. Inorganic Chemistry, 1992**

Leicester University

Leicester, LE1 7RH, England.

*Thesis Entitled* : "Pressure and Medium Effects on Reactivity of Iron(II) Complexes".

### **M.Sc. Inorganic Chemistry, 1989**

Northeastern University

Boston, MA, USA.

*Thesis Entitled* : "Stoichiometry, Products and Kinetics of Monotransmetalation and Complexation of ( $\mu_4$ -O)  $N_4Cu_{4-x}M_xX_6$  Complexes with  $M(NS)_n$  Reagents in Nitrobenzene : Direct Evidence for Reaction Precursors and Product Adducts".

### **B.Sc. Chemistry, 1984**

King Saud University

Riyadh, Saudi Arabia.

## **PROFESSIONAL EXPERIENCE:**

- **PROFESSOR**, Department of Chemistry, *King Saud University*, Riyadh, Saudi Arabia. (2004-Now)
- **ASSOCIATE PROFESSOR**, Department of Chemistry, *King Saud University*, Riyadh, Saudi Arabia. (1998-2004)
- **ASSOCIATE PROFESSOR**, *King Khalid Military Academy*, Riyadh, Saudi Arabia. (1997–1998)
- **ASSISTANT PROFESSOR**. *King Khalid Military Academy*, Riyadh, Saudi Arabia. (1993–1997)
- **POST-DOCTOR**, *Leicester University*, Leicester, England. (1995-1996)
- **POST-DOCTOR**, *Northeastern University*, Boston, MA, USA. (1994)
- **TEACHING ASSISTANT**. *Leicester University*, Leicester, England. (1990-1992)
- **RESEARCH ASSISTANT**, *Northeastern University*, Boston, MA, USA. (1988-1989)
- **CHEMISTRY INSTRUCTOR**, King Khalid Military Academy, Riyadh, Saudi Arabia.(1985-1986)

## **ADMINSTRATIVE AND CONSULTING EXPERIENCE:**

- **ACTING DEAN**, College of Science & General Studies, *Alfaisal University*, Riyadh, Saudi Arabia. (Sep 2016– Now)
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- **DEAN**, Community College in Riyadh, *King Saud University*, Riyadh, Saudi Arabia. (2006–2013)
- **SUPERVISOR**, Bridging Program in Health Specialties, *King Saud University*, Riyadh, Saudi Arabia. (2010)
- **VICE DEAN**, Community College in Riyadh, *King Saud University*, Riyadh, Saudi Arabia. (2003–2006)
- **DEPUTY CHAIRMAN**, Department of science, *King Khalid Military Academy*, Riyadh, Saudi Arabia. (1995 –1997)

- **CHIEF**, Education and Training. *Al-Imam General Hospital*, Riyadh Health Directorate, Riyadh, Saudi Arabia. (1997 – 1998)
- **CONSULTANT** (Part-Time), Safety and Fire Administration, *Civil Defense Management*, Riyadh, Saudi Arabia. (1995 – 2013)

## **ACHIEVEMENTS:**

My achievements as Dean of Riyadh Community College include the following:

1. RCC is the first college in King Saud University to obtain international academic accreditation;
2. RCC is the first college among all colleges in Kingdom, public and private alike, to obtain international academic accreditation and complete all the requirements for the national academic accreditation;
3. Membership of RC-2020, a world class association that comprises of distinguished deans of excellent international community colleges;
4. RCC has been ranked second in the field of student activities, third in terms of best websites; and third in preparedness and discipline.
5. Establishing the Saudi Association of Community Colleges in KSA;

## **COMMITTEE AND COUNCIL MEMBERSHIPS**

- **King Saud University**, University Council 2006-2013.
- **King Saud University**, Deans' Council 2007-2013.
- Member, RC-2020 (Renewal & Change is an international association of 27 top and leading community colleges around the world) 2011-Now.
- Member of Principal Team Strategic Planning Project King Saud University 2008-2010.
- Member of the Higher Committee of Academic Accreditation, KSU 2008-2013.
- Chair, Secretariat of Community College Deans' Committee, KSA 2008-2013.
- Member of the Consultative Council, Community College, Tabuk University, KSA 2008-2013.
- Standing Committee for KSU Senior Staff Promotion 2007-2014.
- Chairman, Committee for Developing Educational Outputs at Community Colleges 2007-2013.
- Standing Committee for Propagating Community Colleges 2007-Now.
- Standing Committee for Protection Against Chemical Pollution, 2005-2014.
- Academic Committee for King Saud University Community Colleges, in the Kingdom, 2005-2006.
- Ministry of Higher Education Academic Committee of Community Colleges, in the Kingdom, 2005-2006.
- Committee of Measurement and Assessment, Ministry of Higher Education, 2003-2014.
- Committee of the 4<sup>th</sup> University and Community week, 2003-2004.
- Committee of the 3<sup>rd</sup> University and Community week, 2002-2003.
- Coordinator of Cultural Activities and Public Relations, Chemistry Department, Science College, 2002-2003.

## **SCHOLARSHIP AND AWARDS:**

- King Saud University Scientific Excellence Prize (third) for **Innovations, and Technology (2016)**
- National Guards Scholarship for obtaining M.Sc. degree, 1986 – 1989.
- Research Fellowship Award, Northeastern University, 1989.
- \$5.000 Academic Achievement Award from the Saudi Arabian Embassy at USA.
- National Guards Scholarship for obtaining Ph.D. degree, 1989 – 1992.
- Research Fellowship, Leicester University, 1991.
- Certificate of Distinguished Research Work- Grade Three (bronze) awarded by King Abdulaziz City for Science and Technology. Research Title: “Chemical Preparation and Characterization of Some Radiopharmaceuticals and Pharmaceuticals and its Bio-evaluation”

## **RESEARCH PROJECTS**

### **Completed Research Projects:**

1. Principal investigator for three years project (2000-2003) entitled “*Chemical Preparation and Characterization of Some Radiopharmaceuticals and Pharmaceuticals and its Bio-evaluation*”. Supporting by King Abdulaziz City for Science and Technology with total budget of one million and thirty one riyal (**SR 1031,000**).
2. Principal investigator for one year project (2000) entitled “*Kinetics of Thermal Decomposition of Some Natural and Modified Rubber Before and After  $\gamma$ -Irradiation.*” Supported by SABIC with total budget of fifty thousand riyal (**SR 50,000**).
3. Principal investigator for one year project (2002) entitled “**Electrical Conductivity and Thermal Decomposition Behavior of Some Metallo-phosphazene Polymer**” Supported by SABIC with total budget of fifty thousand riyal (**SR 50,000**).
4. Principal investigator for project entitled “*Development of Novel Thermal resistant and Microbial resistant metal containing Epoxy Resin for Coating Technology and Paint Industries*” Supported by Center of Excellence for Research in Engineering Materials total budget (**SR 125,000**) 2009.
6. Principal investigator for project entitled “*Synthesis, Characterization and in vitro Biological Evaluation of Polyamide metalodendrimers*”

Supported by College of Science, Research Center total budget (SR 50,000).

### **Ongoing Research Projects:**

1. Principal investigator for Research Group project (RG-1435-007), Supported by Deanship of Scientific Research of King Saud University total budget (SR 150,000).
2. Principal investigator for Prolific Research Group project (PRG-1436-19), Supported by Deanship of Scientific Research of King Saud University total budget (SR 500,000).
3. Principal investigator for International Research Group project (IRG-14-40), Supported by Deanship of Scientific Research of King Saud University total budget (SR 300,000).

### **TRANSLATED BOOKS:**

1. Translation of a text book "*Ion in Solution*", 2006.
2. Translation of a text book "*The Mechanisms of Reactions at Transition Metal Sites*", 2008.

### **SUPERVISION OF SCIENTIFIC THESIS:**

1. Principal Supervisor, M. Sc. Thesis Submitted by student Hussein Al-Zahrani, entitled: "Assessment of the extent of adherence of the staff in the industrial plants in dealing with dangerous chemical material: A study of the industrial area in Riyadh", Naif Arab Academy for Security Sciences, Riyadh, 1999.
2. Principal Supervisor, M.Sc. Thesis Submitted by Fatima Al Halawani entitled: "Preparation and characterization of new complexes of Indium and Rhenium of the medical and pharmaceutical applications." King Saud University, 2001.
3. Principal Supervisor, M.Sc. Thesis Submitted by Abdullah Sulaiman Mayouf entitled: "Effects of gamma irradiation on the behavior of electrical conductivity and thermal decomposition of some metallo-phosphazene polymers " King Saud University, 2002.
4. Principal Supervisor, PhD. Synthesis, characterization and antimicrobial activities of 1,4,7-triazacyclonone-N,N,N-triacetic acid (NOTA) based polyamide ligands and their polymer metal complexes. Eida S. Al-Anazy.

### **Current Master Students:**

5. Principal Supervisor, M.Sc. Synthesis, Characterization and anti-bacterial activities of Silver and Copper nanoparticles loaded hydrogels. **Abdullah Baker Al-hajji**.
6. Principal Supervisor, M.Sc. Polymer derived heteroatoms-doped magnetic carbon nanoparticles for heavy metal ion adsorption. **Basheer Mohammed Hezam Almaswari**.
7. Principal Supervisor, M.Sc. Development of supercapacitors based on conducting polymers and their composites with magnetic metal oxide. **Amin Nasir Haseen Habra**.

## EXAMINING

1. Member of the Examination Committee M. Sc. Thesis Submitted by Nouf Hezam Al-Otaibi, Department of Chemistry, College of Science, King Saud University, *entitled "Recovery of magnesia from bittern using Saudi dolomite"*, (1998).
2. Member of the Examination Committee for M. Sc. Thesis Submitted by Khlood Saad Abu Melha Department of Chemistry, Girls College Education, Jaddah, *entitled "Synthesis and Physico-Chemical Studies on Some Transition Metal Complexes with Some Hydrazones and Hydrazides Derivatives from 4-Methyl-6-(o-Hydroxyphenyl) pyrimidine"*, (1999).
3. Member of the Examination Committee for M. Sc. Thesis Submitted by Khuloud Abd Al-Rhman Al-Ibrahim, Department of Chemistry, Girls College Education, Riyadh, *entitled "Study of Complexation Equilibria and Stability of Mixed-Ligand Complexes of Some Metal Ions"*, (2000).
4. Member of the Examination Committee for M. Sc. Thesis Submitted by Noura Saad Al-Hokbany, Department of Chemistry, College of Science, King Saud University, *entitled "Synthesis and Characterization of New Samarium and Gallium Complexes"*, (2002).
5. Member of the Examination Committee for M. Sc. Thesis Submitted by Sohair M. Jambi Department of Chemistry, Girls College Education, Jaddah, *entitled "Reaction of Tricalcium Aluminate with Water and Calcium Sulphate"*, (2003).
6. Member of the Examination Committee for Ph. D Thesis Submitted by Maha H. M. Al-Qunaibit, Department of Chemistry, College of Science, King Saud University, *entitled "Spectroscopic Investigations (FT-IR, Mössbauer, and NMR) of Metals Binding Sites in Algae"*, (2000).

7. Member of the Examination Committee for Ph.D Thesis Submitted by Maha Abdullah Fahad Al-Mohanna, Department of Chemistry, Girls College Education, Riyadh, entitled "*Studies on Binary and Ternary Complexes of Some Schiff Bases and Imidazol Derivatives*", (2001).
8. Member of the Examination Committee for M. Sc. Thesis Submitted by Asma Mukideer Al-Mughamsi, Department of Chemistry, Girls College Education, Jaddah, entitled "*Perparation and characterization of some transition metal complexes derived from  $\beta$ -diketone hydrazones*", (2004).
9. Member of the Examination Committee for Ph.D. Thesis Submitted by Foziah Ali Al-Saif, Department of Chemistry, Girls College Education, Riyadh,, entitled "*Synthesis and characterization of group 6 and group 8 metal carbonyl complexes of isatin and some of its derivatives* ", (2005).
10. Member of the Examination Committee for Ph.D. Thesis Submitted by Fatemah Aldulazize I. AlKhodair, Department of Chemistry, Girls College Education, Riyadh,, entitled "*The binding effect of some metal ions by beta-lactam antibiotics* ", (2006).
11. Member of the Examination Committee for Ph.D. Thesis Submitted by Khayriah Mohammed Al-Qhtany, Department of Chemistry, Girls College Education, Riyadh,, entitled "*Study of the electrochemical behaviour of some antimalarial drugs and their metal complexes*", (2006).
12. Member of the Examination Committee for Ph.D. Thesis Submitted by Khulood Abdullah Al-Sadhan, Department of Chemistry, Girls College Education, Dammam, entitled "*Synthesis and spectroscopic studies of Imidazolidine-2-thion and its derivatives with sliver metal ion*", (2006).
13. Member of the Examination Committee for M. Sc.. Thesis Submitted by Khulood Abdullah Al-Sadhan, Department of Chemistry, Girls College Education, Riyadh,, entitled, entitled "*Stability Constants and Thermodynamics Parameters of Complexes of Some Divalent Transition Metal Cations with Schiff Base Hydrazones Containing the Quinoline Moiety*", (2006).

## **PUBLICATIONS AND CONFERENCE**

More than 30 conferences were attended to present poster and oral work. The lists of publication are listed below:

- [1] **S. M. Alshehri**, G. Davies, M. A. El-Sayed and A. El-Toukhy, Products and Kinetics of Direct, Specific Transmetalation of ( $\mu$ -

- $O)N_4Cu(Ni(H_2O))_3Cl_6$  (N= N,N-Diethylnicotinamide) by the  $M(NS)_n$  Reagents (NS=Monoanionic S-Methyl Isopropylidenehydrazinecarbodithioate) in Nitrobenzene: A Relationship Between Precursor Stabilities and Product Formation Rates. *Inorg. Chem.*, **29**, 1198 (1990).
- [2] **S. M. Alshehri**, G. Davies, M. A. El-Sayed and A. El-Toukhy, Rate law Variation in the Specific Monotransmetalation of  $(\mu_4-O)(N,py)_4 Cu_{4-x} M_xX_6$  Complexes with  $Zn(NS)_2$  in Nitrobenzene. *Inorg. Chem.*, **29** 1206 (1990).
- [3] **S. M. Alshehri** and J. Burgess, Activation Volumes for Dissociation of Pentacyanoferrate(II) : The Role of Ligand Size. *Inorganica. Chemica Acta.*, **181**, 53 (1991).
- [4] A. Barriors, M. Graciani, R. Jimenez, E. Mioz, F. Sanchez, M. Moya, **S. M. Alshehri** and J. Burgess, Salt Effects on the Kinetics of Dissociation of the Pentacyano-4-pyridineferrate(II) Anion. *Transition Met. Chem.*, **17** 231 (1992).
- [5] **S. M. Alshehri**, J. Burgess, Kinetics of Base Hydrolysis of *Tris*(1,10-phenanthroline)iron(II) and of Solvolysis of *Cis*-Dichlorobis(1,2-ethanediamine)cobalt(III) in Water and Doil Mixture. *Int. J. Chem. Kinet.*, **25**, 113 (1993).
- A. Al-Alousy, **S. M. Alshehri**, J. Burgess, M. Graciani, M. Moya, E. Munoz, A. Rodrigues and F. Sanchez, Volumes of Activation for Dissociation of Pentacyanoferrate(II) Through pressure and Salt Effects on Reactivity. *Transition met. Chem.* **18**, 179 (1993).
- [6] **S. M. Alshehri**, J. Burgess and C. Hubbard, dissociation Kinetics of  $[Fe(phen)_3]^{2+}$ ,  $[Fe(bipy)_3]^{2+}$ , and  $[Fe(4,4'-Me_2bipy)]_3^{2+}$  in presence of Cyanide Ion in Aqueous Solution at Pressures up to 1 Kilobar. *Transition Met. Chem.* **18**, 228 (1993).
- [7] **S. M. Alshehri**, M. J. Blandamer, J. Burgess, P.Guardado and C. D. Hubbard, Solvation and Reactivity of the Low-Spin *Tris*-Diimine Iron(II) Complexes of the Schiff Base Ligand Derived from 2-Benzoylpyridine and 3,4- Dimethylaniline,  $[Fe(Me_2bsb)_3]^{2+}$ . *Polyhedron*, **12**, 445 (1993).
- [8] A. Al-Alousy, **S. M. Alshehri**, M. J. Blandmer, N. J. Blundel, J. Burgess, H. J. Cowles, S. Radulovic, P. Guarado and C. D. Hubbard, Solvation and Reactivity of Iron (II)- Diimine Complexes in Sulfoxide-Water Mixtures, *J. Chem. Soc. Faraday Trans.*, **89** (7), 1041 (1993).
- [9] J. Benko, O. Vollarva, **S. M. Alshehri**, J. Burgess and R. I. Haines. Activation Volumes for Peroxodisulphite Oxidation of Cobalt(III), Iron(III), and Nickel(III) Complexes. *Transition Met. Chem.* **18**, 551 (1993).
- [10] **S. M. Alshehri**, J. Burgess, G. H. Morgan, B. Patel and M. S. Patel. Solvatochromism and Piezochromism of Pentacyanoferrate(II) Complexes in Binary Aqueous Solvent Media. *Transition Met. chem*, **18**, 619 (1993).

- [11] G. Davies, A. Ali, **S. M. Alshehri**, N. El.Kady, M. A. El-Sayed and A. El-Tourkhy,, Transmetalation Mechanisms. *Qatar Univ. Sci. J.*, **13(2)**,194 (1994).
- [12] **S. M. Alshehri**, J. Burgess, K. A. Darcey and M. S. Patel, Solvation of Ethylmaltol and of Its Iron (III) Complex. *Transition Met, Chem.*, **19**, 119, (1994)
- [13] **S. M. Alshehri**, J. Burgess, R. V. Eldik and C. D. Hubbard, leaving Group Effects on Ligand Substitution Reaction of Pentacyanoferrate(II) Complexes: Rate Constant and Activation volume correlations. *Inorica. Chimica. Acta*, **240**, 305 (1995).
- [14] A. O. Abdelhamid and **S. M. Alshehri**, Aconvenient Synthesis of Thipnene, 1,3-Thiazole, 2,3-Dihydro-1,3,4-Thiadiazole and Pyrazole Derivatives. *J. Chem. Res. (S)* **240** (1997).
- [15] **S. M. Alshehri**, Reactivity and Solvatochromism of Pentacyanoferrate (II) Complexes in Diol-Water Mixtures. *Transtion Met. Chem.* **22**, 553 (1997).
- [16] **S. M. Alshehri**, J. Burgess, S. Parson and A. Cacey, Kinetics of Substitution at Bis-cyclopentadienylvanadium Dichloride. *Int. J.Chem. Kinet.* **29**, 835 (1997).
- [17] Ali Shaker, **S. M. Alshehri** and J. Burgess, Salt Effect on Reactivities of Low-Spin Iron(II) Complexes of Diazabutadiene and Schiff Base Ligands. *Transition Met. Chem.* **23**, 683 (1998).
- [18] **S. M. Alshehri**, J. Burgess and A. Shaker, Attenuation of Substituent Effects on Reactivities of Low-Spin Iron(II) Complexes of Schiff Base Ligands. *Transition Met. Chem*, **23**, 689 (1998).
- [19] **S. M. Alshehri**, M. Monshi, A Basfer, N. Abd El-Salam and R Mahfouz, Kinetics of Thermal Decomposition of Natural Rubber. *J. Saudi Chem. Soc.*, **4(1)**, 27 (2000).
- [20] **S Alshehri**, J. Burgess, J. Fawcett, S. Parson and David Russell, Structures of Bis-ethylmaltolatodichlloro-tin(IV) and -titanium(IV) and of Trichloro(1-methyl-2-ethyl-3-hydroxy-4*H*-pyridin-4-onato) Aquatin(IV). *Polyhedron*, **19**, 399 (2000).
- [21] R Mahfouz, **S. M. Alshehri**, M. Monshi, and N. Abd El-Salam, Isothermal Decomposition of  $\gamma$ -Irradiated Samarium Acetate. *Radiation Physics and Chemistry*, **59**, 381 (2000).
- [22] M. Monshi, **S. M. Alshehri** N. Abd El-Salam and R Mahfouz, Isothermal Decomposition of  $\gamma$ -Irradiated Thallous Acetate. *Thermochimica Acta*, **360**, 11 (2000).
- [23] **S. M. Alshehri**, M. Monshi, N. Abd El-Salam and R Mahfouz, Kinetics of the Thermal Decomposition of  $\gamma$ -Irradiated Cobaltous Acetate. *Thermochimica Acta*. **363**, 61 (2000).

- [24] **S. M. Alshehri**, J. Burgess, J. Fawcett, D. Russell and A. Shaker, Structure of a Precursor in the Synthesis of Low-Spin Iron(II) Complexes of Schiff Base Ligands . *Transition Metal Chemistry*, **25**, 691 (2000).
- [25] A. I. Al-Wassil, Kh. A. Al-Farhan, **S. M. Alshehri**, M. Mukalalati and R. M. Mahfouz, Synthesis and Characterization of New In (III),Re(III), Re(V), Pd(II) and Rh(III) Complexes of Toluene-3, 4-Dithiol,. *Spectroscopy Letters*, **34(6)**, 737 (2001).
- [26] **S. M. Alshehri**, Salt Effect on Reactivity for Substitution Reaction of 1,10-Phenanthrolineiron(II) Complex. *J. Molecular Liquids*, **94**, 283 (2001).
- [27] R. M. Mahfouz, M. A. S. Monshi, **S. M. Alshehri**, N. M. Abd El-Salam, A. M. A. Zaid, Complexation Reactions Of Dy(III), Er(III), Gd(III), Ho(III) And Sm(III) Ions with Thenoyltrifluoroacetone. *Synth. React. Inorg. Met.-Org. Chem.*, **31(10)** 1873 (2002).
- [28] **S. M. Alshehri**, Complexation Reactions of Rh<sup>III</sup>, Ru<sup>III</sup>, Pd<sup>II</sup> And Pt<sup>II</sup> With 1H-1,2,4-Triazole-3-Thiol, *Spectroscopy Letters*, **35(3)**, 349 (2002).
- [29] R. Mahfouz, Kh. A. Al-Farhan, G. Y. Hassen, A. I. Al-Wassil, **S. M. Alshehri** and A. Al-Wallan, Preparation and Characterization of New In(III), Re(III), and Re(V) Complexes With Thenoyltrifluoroacetone and Some Bidentate Heterocyclic Ligands. *Synth. React. Inorg. Met.-Org. Chem.*, **32(3)**, 489 (2002).
- [30] R. Mahfouz, **S. M. Alshehri**, M. Monshi, and N. Abd El-Salam, Isothermal Decomposition of  $\gamma$ -Irradiated Dysprosium Acetate. *Radiation Effects and Defects in Solids*, **157**, 515 (2002).
- [31] **S. M. Alshehri**, R. Mahfouz, M. Monshi, A. Basfar and N. Abd El-Salam, Gamma Irradiation Effects on the Kinetics of Thermal Decomposition of Natural Rubber and Modified Rubber by Carbon-black and Cross-linking Agents Additives. *J. Saudi Chem. Soc.*, **7(1)**, 41 (2003).
- [32] **S. M. Alshehri**, Metal Complexes of A Schiff-Base Formed by The Condensation of S-Benzylthiocarbamate with N-Acetylmorpholine. *J. Saudi Chem. Soc*, **7(2)**, 235 (2003).
- [33] **S. M. Alshehri**, The Kinetics of Adduct Formation Between Heteropolymetallic targets ( $\mu_4-O$ )N<sub>4</sub>Cu<sub>4-x</sub>M<sub>x</sub>X<sub>6</sub> and Cu(NS)<sub>2</sub> Reagent in Nitrobenzene *Polyhedron*, **22**, 2917 (2003).
- [34] **S. M. Alshehri**, and J. Burgess, Salt Effects on Reactivity for Substitution Reactions of Pentacyanoferrate(II) Complexes. *Inorganic Reaction Mechanism*, **5**, 59 (2003).
- [35] **S. M. Alshehri**, Isothermal Decomposition of Un-Irradiated and Pre- $\gamma$ -Irradiated Neodymium Acetate. *J. King Saud Univ.*, **16(2)**, 149 (2004).
- [36] R. Mahfouz, M. Monshi, A. El-Owais, **S. Alshehri**, M. Al-Osaimi, N. Abd El-Salam,  $\gamma$ -Irradiation Effects on Kinetics and Mechanism of The Thermal Decomposition of Zinc Acetate. *Radiation Effects and Defects in Solids*, **159**, 7 (2004).

- [37] R. Mahfouz, **S. M. Alshehri**, M. Monshi, N. Abd El-Salam, Isothermal Decomposition of  $\gamma$  -Irradiated palladium Acetate, *Radiation Effects and Defects in Solids*, **159**, 345 (2004).
- [38] R. Alshwafy, W. Z. Alkayali, **S. M. Alshehri**, S.I. Al-Resayes, N.M. Abd El-Salam, and R.M. Mahfouz, Reaction Kinetics and Formation Mechanism of Lithium Titanate, *J. Saudi Chem. Soc*, **10(3)**, 475 (2006).
- [39] R. Mahfouz, **S. M. Alshehri**, M. Monshi, A.I. Alhazan, and N. Abd El-Salam, Isothermal decomposition of  $\gamma$  -Irradiated Erbium Acetate, *Radiation Effects and Defects in Solids*, **162(2)**, 95 (2007 ).
- [40] **S. M. Alshehri**, R.M. Mahfouz, M.A.S. Monshi, N.M. Abd El-Salam and M.M. Al-Osaimi, Kinetic Analysis of The Thermal Decomposition of Pristine and  $\gamma$ -irradiated Cadmium Acetate, *J. King Saud Univ.*, Vol. **21**, 119 (2009).
- [41] M.R.H. Siddiqui, **S. M. Alshehri**, I.Kh. Warad, N.M. Abd El-Salam and R.M. Mahfouz, Model Free Approach for Non-Isothermal Decomposition of Un-Irradiated and -Irradiated Silver Acetate: New Route for Synthesis of Ag<sub>2</sub>O Nanoparticles, *Int. J. Mol. Sci*, **11**, 3600-3609 (2010).
- [42] N. Nishat, S. Parveen, T. Ahamad, P K. Singh, **S. M. Alshehri**, and A. Malik, Synthesis, Characterization of Starch urea based biodegradable ligand and its metal modified coordination polymer, *Bioinorganic Chemistry and Application*. DOI. aip.848130 (2010).
- [43] **S. M. Alshehri** and T. Ahamad, New Thermal and microbial resistant metal containing epoxy polymers, *Bioinorganic Chemistry and Applications*, DOI: 10.1155/2010/976901, (2010).
- [44] A. Malik, S. Parveen. T. Ahamad, **S. M. Alshehri**, and P.K. Singh, Coordination Polymer: Synthesis, Spectral Characterization and Thermal Behaviour of Starch-Urea Based Biodegradable Polymer and Its PolymerMetal Complexes, *Bioinorganic Chemistry and Applications*, DOI: 10.1155/2010/848130, (2010).
- [45] T. Ahamad, and **S. M. Alshehri**, Synthesis Characterization of Polyamide Metallo dendrimers and their Catalytic Activities in Ethylene Oligomerization, *Catal. Lett.*, **138**, 171–179 (2010).
- [46] Tansir Ahamad, **S. M. Alshehri**, Synthesis and Characterization of polyamide Metallo dendrimers with their antibacterial and antitumor activities, *Medicinal Chemistry Research*, DOI 10.1007/s00044-011-9715-0 (2011)
- [47] Tansir Ahamad, **S. M Alshehri**, TG-FTIR-MS (Evolved Gas Analysis) of bidi tobacco powder during combustion and pyrolysis. *Journal of hazardous materials*; **199-200:200-8** (2011).
- [48] T. Ahamad, **S. M. Alshehri**, Thermal, microbial, and corrosion resistant metal-containing poly(Schiff) epoxy coatings. *Journal of Coatings Technology and Research*, **9(5):515-523** (2012).

- [49] T. Ahamad, **S. M. Alshehri**, Thermal degradation and evolved gas analysis of thioureaformaldehyde resin (TFR) during pyrolysis and combustion. *Journal of Thermal Analysis and Calorimetry*. **109(2):1039-1047 (2012)**.
- [50] Tansir Ahamad, **S. M. Alshehri**, Synthesis, characterization and antimicrobial activity of phenylurea-formaldehyde resin (PUF) and its polymer metal complexes (PUF-Mn(II)). *Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy*, **96:179-87 (2012)**.
- [51] Tansir Ahamad, **S. M. Alshehri**, Thermal, microbial, and corrosion resistant metal-containing poly(Schiff) epoxy coatings. *Journal of Coatings Technology and Research* **9(5):515 (2012)**.
- [52] Tansir Ahamad, **S. M. Alshehri**, Synthesis and characterization of monomeric and polymeric pyridinylimine-based Ni(II) complexes and their catalytic activities in ethylene oligomerization. *Polymer International*, **61(11):1640 (2012)**.
- [53] Tansir Ahamad, **S. M. Alshehri**, Thermal degradation and evolved gas analysis of epoxy (DGEBA)/novolac resin blends (ENB) during pyrolysis and combustion. *Journal of Thermal Analysis and Calorimetry*, **111(1):445 (2013)**.
- [54] **S. M. Alshehri**, Amal Al-Fawaz, Tansir Ahamad: Thermal kinetic parameters and evolved gas analysis (TG-FTIR-MS) for thiourea-formaldehyde based polymer metal complexes. *Journal of Analytical and Applied Pyrolysis* **101:215-21 (2013)**.
- [55] Tansir Ahamad, **S. M. Alshehri**, Physicochemical characterization and antimicrobial evaluation of phenylthiourea-formaldehyde polymer (PTF) based polymeric ligand and its polymer metal complexes.. *Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy* **108C:26-31 (2013)**.
- [56] **S. M. Alshehri**, Tansir Ahamad, Thermal degradation and evolved gas analysis of N,N '-bis(2 hydroxyethyl) linseed amide (BHLA) during pyrolysis and combustion, *Journal of Thermal Analysis and Calorimetry* **114, 3,1029-1037 (2013)**.
- [57] **S. M. Alshehri**, Tansir ahamad Thermal degradation and evolved gas analysis: A polymeric blend of urea formaldehyde (UF) and epoxy (DGEBA) resin. *Arabian Journal of Chemistry* **04:07, 6 (2013)**.
- [58] **S. M. Alshehri**, Tansir Ahamad: Synthesis and characterization of polymer metal complexes and their catalytic activity in ethylene oligomerization. *Advances in Polymer Technology* **32(3) (2013)**.
- [59] Tansir Ahamad, **S. M Alshehri**: Synthesis and characterization of first- and second-generation polyamide pyridylimine nickel dihalide metallodendrimers and their uses as catalysts for ethylene polymerization. *Polymer International* **63(11) (2014)**..
- [60] **S. M. Alshehri**, Mu. Naushad, Tansir Ahamad, Zeid A. Alothman, Ali Aldalbahi: Synthesis, characterization of curcumin based ecofriendly

- antimicrobial bio-adsorbent for the removal of phenol from aqueous medium. *The Chemical Engineering Journal* **254**:181–189 (2014).
- [61] Tansir Ahamad, **S. M. Alshehri**: Green Synthesis and Characterization of Gallium(III) Sulphide ( $\alpha$ -Ga<sub>2</sub>S<sub>3</sub>) Nanoparticles at Room Temperature. *Nanohybrid*, **6**:37-46 (2014).
- [62] Y. Agawa, H. Tanaka, S. Torisu, S. Endo, A. Tsujimoto, N. Gonohe, V. Malgras, A. Aldalbahi, **S. M. Alshehri**, Y. Kamachi, C. Li, Y. Yamauchi, Preparation of a platinum electrocatalyst by coaxial pulse arc plasma deposition, *Science and Technology of Advanced Materials*, **16** (2015).
- [63] N. Bakhtiari, S. Azizian, **S. M. Alshehri**, N.L. Torad, V. Malgras, Y. Yamauchi, Study on adsorption of copper ion from aqueous solution by MOF-derived nanoporous carbon, *Microporous and Mesoporous Materials*, **217**, 173-177 (2015).
- [64] J.E. Chen, H.Y. Lian, S. Dutta, **S. M. Alshehri**, Y. Yamauchi, M.T. Nguyen, T. Yonezawa, K.C.W. Wu, Synthesis of magnetic mesoporous titania colloidal crystals through evaporation induced self-assembly in emulsion as effective and recyclable photocatalysts, *Physical Chemistry Chemical Physics*, **17**, 27653-27657(2015).
- [65] G. Darabdhara, M.A. Amin, G.A.M. Mersal, E.M. Ahmed, M.R. Das, M.B. Zakaria, V. Malgras, **S. M. Alshehri**, Y. Yamauchi, S. Szunerits, R. Boukherroub, Reduced graphene oxide nanosheets decorated with Au, Pd and Au-Pd bimetallic nanoparticles as highly efficient catalysts for electrochemical hydrogen generation, *Journal of Materials Chemistry A*, **3**, 20254-20266 (2015).
- [66] K. Eid, V. Malgras, P. He, K. Wang, A. Aldalbahi, **S. M. Alshehri**, Y. Yamauchi, L. Wang, One-step synthesis of trimetallic Pt-Pd-Ru nanodendrites as highly active electrocatalysts, *RSC Advances*, **5**, 31147-31152 (2015).
- [67] K. Eid, H. Wang, P. He, K. Wang, T. Ahamad, **S. M. Alshehri**, Y. Yamauchi, L. Wang, One-step synthesis of porous bimetallic PtCu nanocrystals with high electrocatalytic activity for methanol oxidation reaction, *Nanoscale*, **7** 16860-16866 (2015).
- [68] P.R. Jothi, K. Shanthi, R.R. Salunkhe, M. Pramanik, V. Malgras, **S. M. Alshehri**, Y. Yamauchi, Synthesis and Characterization of  $\alpha$ -NiMoO<sub>4</sub> Nanorods for Supercapacitor Application, *European Journal of Inorganic Chemistry*, **2015**, 3694-3699 (2015).
- [69] C. Li, V. Malgras, **S. M. Alshehri**, J.H. Kim, Y. Yamauchi, Electrochemical Synthesis of Mesoporous Pt Nanowires with Highly Electrocatalytic Activity toward Methanol Oxidation Reaction, *Electrochimica Acta*, **183**:107-11 (2015).
- [70] S.A.A. Manaf, P. Roy, K.V. Sharma, Z. Ngaini, V. Malgras, A. Aldalbahi, **S. M. Alshehri**, Y. Yamauchi, G. Hegde, Catalyst-free synthesis of carbon nanospheres for potential biomedical applications: Waste to wealth

approach, *RSC Advances*, **5**, 24528-24533(2015).

- [71] M. Naushad, T. Ahamad, Z.A. Allothman, M.A. Shar, N.S. AlHokbany, **S. M. Alshehri**, Synthesis, characterization and application of curcumin formaldehyde resin for the removal of Cd<sup>2+</sup> from wastewater: Kinetics, isotherms and thermodynamic studies, *Journal of Industrial and Engineering Chemistry*, **29**, 78-86 (2015).
- [72] M. Pramanik, F.K. Shieh, **S. M. Alshehri**, Z.A. Allothman, K.C.W. Wu, Y. Yamauchi, Template-free synthesis of nanoporous gadolinium phosphonate as a magnetic resonance imaging (MRI) agent, *RSC Advances*, **5**, 42762-42767 (2015).
- [73] L. Sun, H. Wang, K. Eid, **S. M. Alshehri**, V. Malgras, Y. Yamauchi, L. Wang, One-Step Synthesis of Dendritic Bimetallic PtPd Nanoparticles on Reduced Graphene Oxide and Its Electrocatalytic Properties, *Electrochimica Acta*, **188** 845-851 (2015).
- [74] J. Tang, T. Wang, R.R. Salunkhe, **S. M. Alshehri**, V. Malgras, Y. Yamauchi, Three-Dimensional Nitrogen-Doped Hierarchical Porous Carbon as an Electrode for High-Performance Supercapacitors, *Chemistry - A European Journal*, **21** 17293-17298 (2015).
- [75] M.B. Zakaria, M. Hu, M. Pramanik, C. Li, J. Tang, A. Aldalbahi, **S.M. Alshehri**, V. Malgras, Y. Yamauchi, Synthesis of Nanoporous Ni-Co Mixed Oxides by Thermal Decomposition of Metal-Cyanide Coordination Polymers, *Chemistry - An Asian Journal*, **10**, 1541-1545 (2015).
- [76] M.B. Zakaria, M. Hu, M. Pramanik, C. Li, J. Tang, A. Aldalbahi, **S.M. Alshehri**, V. Malgras, Y. Yamauchi, Synthesis of Nanoporous Ni-Co Mixed Oxides by Thermal Decomposition of Metal-Cyanide Coordination Polymers, *Chemistry - An Asian Journal*, (2015).
- [77] H. Zhang, P. Lin, E. Chen, Y. Tan, T. Wen, A. Aldalbahi, **S.M. Alshehri**, Y. Yamauchi, S. Du, J. Zhang, Encapsulation of an Interpenetrated Diamondoid Inorganic Building Block in a Metal-Organic Framework, *Chemistry - A European Journal*, **21**, 4931-4934 (2015).
- [78] H. Zhang, M. Zhang, P. Lin, V. Malgras, J. Tang, **S. M. Alshehri**, Y. Yamauchi, S. Du, J. Zhang, A Highly Energetic N-Rich Metal-Organic Framework as a New High-Energy-Density Material, *Chemistry - A European Journal*, **22** 1141-1145 (2016).
- [79] Y. Kamachi, B.P. Bastakoti, **S. M. Alshehri**, N. Miyamoto, T. Nakato, Y. Yamauchi, Thermo-responsive hydrogels containing mesoporous silica toward controlled and sustainable releases, *Materials Letters*, **168**, 176-179 (2016).
- [80] H. Shirai, Y.Y. Huang, T. Yonezawa, T. Tokunaga, W.C. Chang, S.M. Alshehri, B. Jiang, Y. Yamauchi, K.C.W. Wu, Hard-templating synthesis

of macroporous platinum microballs (MPtM), *Materials Letters*, **164**, 488-492 (2016).

- [81] S.C. Wang, Y.S. Hsu, C.T. Hsiao, C.C. Wu, Y.C. Sue, **S. M. Alshehri**, T. Ahamad, Y. Yamauchi, J.E. Chen, K.C.W. Wu, F.K. Shieh, Annulated Mesoporous Silica as Potent Lanthanide Ion Adsorbents and Magnetic Resonance Contrast Enhancing Agents, *Journal of Inorganic and Organometallic Polymers and Materials*, **26**, 165-171 (2016).
- [82] Kuan-Chou Chen, Saikat Dutta, Yusuke Yamauchi, **S. M. Alshehri**, Mai Thanh Nguyen, Tetsu Yonezawa, Kun-Hung Shen, Kevin C.-W. Wu: Mesoporous Europium-Doped Titania Nanoparticles (Eu-MTNs) for Luminescence-Based Intracellular Bio-Imaging. *Journal of Nanoscience and Nanotechnology* **15(12):9802-9806 (2016)**.
- [83] Zhongbin Wu, Ning Sun, Liping Zhu, Hengda Sun, Jiaxiu Wang, Dezhi Yang, Xianfeng Qiao, Jiangshan Chen, **S. M. Alshehri**, Tansir Ahamad, Dongge Ma: Achieving Extreme Utilization of Excitons by an Efficient Sandwich-Type Emissive Layer Architecture for Reduced Efficiency Roll-Off and Improved Operational Stability in Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces* **8(5):3150-9 (2016)**.
- [84] Jing Tang, Shichao Wu, Tao Wang, Hao Gong, Huabin Zhang, **S. M. Alshehri**, Tansir Ahamad, Haoshen Zhou, Yusuke Yamauchi: Cage-Type Highly Graphitic Porous Carbon–Co<sub>3</sub>O<sub>4</sub> Polyhedron as the Cathode of Lithium–Oxygen Batteries. *ACS Applied Materials & Interfaces* **8:2796-804 (2016)**.
- [85] Yu-Te Liao, Jeffrey E. Chen, Yohei Isida, Tetsu Yonezawa, Wei-Chen Chang, **S. M. Alshehri**, Yusuke Yamauchi, Kevin C.-W. Wu: De Novo Synthesis of Gold-Nanoparticle-Embedded, Nitrogen-Doped Nanoporous Carbon Nanoparticles (Au@NC) with Enhanced Reduction Ability. *ChemCatChem* **8(3):502-9 (2016)**
- [86] Yuichiro Kamachi MBZ, Nagy L. Torad, Teruyuki Nakato, Tansir Ahamad, **S. M. Alshehri**, Victor Malgras,, Yamauchi Y. Hydrogels Containing Prussian Blue Nanoparticles Toward Removal of Radioactive Cesium Ions. *Journal for Nanoscience and Nanotechnology* **16:4200-4 (2016)**.
- [87] Yang D, Zhou X, Wang Y, Vadim A, **S. M. Alshehri**, Ahamad T, Dongee Ma. Deep ultraviolet-to-NIR broad spectral response organic photodetectors with large gain. *Journal of Materials Chemistry C* **4:2160-4 (2016)**.
- [88] Wang J, Chen J, Qiao X, **S. M. Alshehri**, Ahamad T, Dongee Ma. Simple-Structured Phosphorescent Warm White Organic Light-Emitting Diodes with High Power Efficiency and Low Efficiency Roll-off. *ACS applied materials & interfaces* **8:10093-7(2016)**.
- [89] Thorat ND, Bohara RA, Malgras V, Tofail SA, Ahamad T, **S. M. Alshehri**, Wu, K. C. W.; Yamauchi, Y. Multimodal Superparamagnetic Nanoparticles with Unusually Enhanced Specific Absorption Rate for

- Synergetic Cancer Therapeutics and Magnetic Resonance Imaging. *ACS applied materials & interfaces* **8** (23), 14656-14664 (2016).
- [90] Naushad M, Ahamad T, Sharma G, Ala'a H, Albadarin AB, Alam MM, **S. M. Alshehri**,. Synthesis and characterization of a new starch/SnO<sub>2</sub> nanocomposite for efficient adsorption of toxic Hg<sup>2+</sup> metal ion. *Chemical Engineering Journal* **300**:306-16 (2016).
- [91] Kevin C.-W. Wu C-HK, Yi-Feng Lin, Kuo-Lun Tung, Yu-Heng Deng, Tansir Ahamad, **S. M. Alshehri**, Norihiro Suzuki,, Yamauchi Y. Towards Acid-Tolerated Ethanol Dehydration: Chitosan-Based Mixed Matrix Membranes Containing Cyano-Bridged Coordination Polymer Nanoparticles. *Journal for Nanoscience and Nanotechnology* **16**:4141(2016).
- [92] Jiang B, Ataee-Esfahani H, Li C, Ahamad T, **S. M. Alshehri**, Henzie, J.; Yamauchi, Y. Mesoporous Trimetallic PtPdRu Spheres as Superior Electrocatalysts. *Chemistry–A European Journal* **22**:7174-8 (2016).
- [93] Guo Q, Sun H, Yang D, Qiao X, Chen J, Ahamad T, **S. M. Alshehri**, Dongge Ma, C70/Pentacene Organic Heterojunction as Charge Generator to Realize Highly Efficient Charge Carrier Injection in Organic Light-Emitting Diodes: Performance and Mechanism Analysis. *Advanced Materials Interfaces* **3** (14) (2016).
- [94] Darabdhara G, Boruah PK, Borthakur P, Hussain N, Das MR, Ahamad T, **S. M. Alshehri**, Malgras, V.; Wu, K. C. W.; Yamauchi, Y. Reduced graphene oxide nanosheets decorated with Au–Pd bimetallic alloy nanoparticles towards efficient photocatalytic degradation of phenolic compounds in water. *Nanoscale* **8**:8276-87 (2016).
- [95] Cuiling Li BJ, Hungru Chen, Masataka Imura, Liwen Sang, Victor Malgras, Yoshio Bando, Tansir Ahamad, **S. M. Alshehri**, Satoshi Tominaka, Yusuke Yamauchi. Superior electrocatalytic activity of mesoporous Au film templated from diblock copolymer micelles. *Nano Research* **1-11** (2016).
- [96] Chu WC, Peng DR, Bastakoti BP, Pramanik M, Malgras V, Ahamad T, **S. M. Alshehri**, Yusuke Yamauch,. Co-templating Synthesis of Bimodal Mesoporous Silica for Potential Drug Carrier. *ChemistrySelect* **1339-46** (2016).
- [97] Bastakoti BP, Li Y, Guragain S, Pramanik M, **S. M. Alshehri**, Ahamad T, Liu, Z.; Yamauchi, Y. Synthesis of Mesoporous Transition-Metal Phosphates by Polymeric Micelle Assembly. *Chemistry–A European Journal* **22**:7463-7 (2016).
- [98] **S. M. Alshehri**, Almuqati T, Almuqati N, Al-Farraj E, Alhokbany N, Ahamad T. Chitosan based polymer matrix with silver nanoparticles decorated multiwalled carbon nanotubes for catalytic reduction of 4-nitrophenol. *Carbohydrate Polymers* **151**:135-43 (2016).
- [99] **S. M. Alshehri**, Al-Lohedan HA, Chaudhary AA, Al-Farraj E, Alhokbany N, Issa Z, et al. Delivery of ibuprofen by natural macroporous sporopollenin exine capsules extracted from Phoenix dactylifera L. *European Journal of Pharmaceutical Sciences* **88**:158-65(2016).

- [100] **S. M. Alshehri**, Al-Lohedan HA, Al-Farraj E, Alhokbany N, Chaudhary AA, Ahamad T. Macroporous natural capsules extracted from Phoenix dactylifera L. spore and their application in oral drugs delivery. *International journal of pharmaceutics* **504**:39-47 (2016).
- [101] **S. M. Alshehri**, Al-Fawaz, A.; Al-Ghamdi, F.; Ahamad, T., Synthesis, Characterization, and Antimicrobial Activity of Salisaldehyde-Based Terpolymeric Ligand and Its Transition Metal Complexes. *Advances in Polymer Technology* (2016).
- [102] **S. M. Alshehri**, Aldalbahi A, Al-Hajji AB, Chaudhary AA, in het Panhuis M, Alhokbany N, et al. Development of carboxymethyl cellulose-based hydrogel and nanosilver composite as antimicrobial agents for UTI pathogens. *Carbohydrate polymers* **138**:229-36 (2016).
- [103] **S. M. Alshehri**, Aldalbahi A, Ahamad T, Alhokbany N. Synthesis and characterization of mackinawite nanocrystals (FeSm) and their application in recovery of aqueous Hg (II) solution. *Desalination and Water Treatment* **57**:6594-603 (2016).
- [104] **S. M. Alshehri**, Ahamad T, Aldalbahi A, Alhokbany N. Pyridylimine Cobalt (II) and Nickel (II) Complex Functionalized Multiwalled Carbon Nanotubes and Their Catalytic Activities for Ethylene Oligomerization. *Advances in Polymer Technology* **35(1)** (2016).
- [105] Alqadami AA, Naushad M, Abdalla MA, Ahamad T, Alothman ZA, **S. M. Alshehri**. Synthesis and characterization of Fe<sub>3</sub>O<sub>4</sub>@TSC nanocomposite: highly efficient removal of toxic metal ions from aqueous medium. *RSC Advances* **22679-89** (2016).
- [106] Alothman ZA, Ahamad T, Naushad M, **S. M. Alshehri**. Preparation of new thermoluminescent material (100- x) B<sub>2</sub>O<sub>3-x</sub>Li<sub>2</sub>O:Cu<sup>2+</sup> for sensing and detection of radiation. *Bulletin of Materials Science* **39**:331-6 (2016).
- [107] Aldalbahi A, Feng P, Alhokbany N, Ahamad T, **S. M. Alshehri**. Synthesis, characterization, and CH<sub>4</sub>-sensing properties of conducting and magnetic biopolymer nano-composites. *Journal of Environmental Chemical Engineering* **4(3)**, 2841-2847 (2016).
- [108] Ahmed, J., Poltavets, V. V., Prakash, J., **S. M. Alshehri**, & Ahamad, T., Sol-gel synthesis, structural characterization and bifunctional catalytic activity of nanocrystalline delafossite CuGaO<sub>2</sub> particles. *Journal of Alloys and Compounds*, **688**, 1157-1161 (2016).
- [109] **S. M. Alshehri**, Almuqati, T., Almuqati, N., Al-Farraj, E., Alhokbany, N., & Ahamad, T., Chitosan based polymer matrix with silver nanoparticles decorated multiwalled carbon nanotubes for catalytic reduction of 4-nitrophenol. *Carbohydrate Polymers*, **151**, 135-143 (2016).
- [110] Chen, J. E., Chiang, Y.-D., Ahamad, T., **S. M. Alshehri**, Yamauchi, Y., Malgras, V., & Wu, K. C.-W., Ethanol Dissolution-Assisted Synthesis of Ordered Mesostructured Titania Spheres. *Journal of Nanoscience and Nanotechnology*, **16(9)**, 9245-9249 (2016).

- [111] Liu, N.-L., Dutta, S., Salunkhe, R. R., Ahamad, T., S. M. Alshehri, Yamauchi, Y., Wu, K. C.-W., ZIF-8 Derived, Nitrogen-Doped Porous Electrodes of Carbon Polyhedron Particles for High-Performance Electrosorption of Salt Ions. *Scientific Reports*, **6** (2016).
- [112] Naushad, M., Ahamad, T., Sharma, G., Ala'a, H., Albadarin, A. B., Alam, M. M., **S. M. Alshehri**, Ghfar, A. A. Synthesis and characterization of a new starch/SnO<sub>2</sub> nanocomposite for efficient adsorption of toxic Hg<sup>2+</sup> metal ion. *Chemical Engineering Journal*, **300**, 306-316 (2016).
- [113] Pathania, D., Gupta, D., Ala'a, H., Sharma, G., Kumar, A., Naushad, M., **S. M. Alshehri**. Photocatalytic degradation of highly toxic dyes using chitosan-g-poly (acrylamide)/ZnS in presence of solar irradiation. *Journal of Photochemistry and Photobiology A: Chemistry*, **329**, 61-68.
- [114] Pramanik, M., Malgras, V., Lin, J., **S. M. Alshehri**, Ahamad, T., Kim, J. H., & Yamauchi, Y., Electrochemical Property of Mesoporous Crystalline Iron Phosphonate Anode in Li-Ion Rechargeable Battery. *Journal of Nanoscience and Nanotechnology*, **16(9)**, 9180-9185 (2016).
- [115] Tang, J., Salunkhe, R. R., Zhang, H., Malgras, V., Ahamad, T., **S. M. Alshehri**, Kim, J. H., Bimetallic Metal-Organic Frameworks for Controlled Catalytic Graphitization of Nanoporous Carbons. *Scientific Reports*, **6** (2016).
- [116] Zhou, X., Yang, D., Ma, Dongge., Vadim, A., Ahamad, T., **S. M. Alshehri**. Ultrahigh Gain Polymer Photodetectors with Spectral Response from UV to Near Infrared Using ZnO Nanoparticles as Anode Interfacial Layer. *Advanced Functional Materials* (2016).
- [117] J Ahmed, VV Poltavets, J Prakash, SM Alshehri, T Ahamad, Sol-gel synthesis, structural characterization and bifunctional catalytic activity of nanocrystalline delafossite CuGaO<sub>2</sub> particles, *Journal of Alloys and Compounds* 688, 1157-1161 (2016)
- [118] BP Bastakoti, Y Li, S Guragain, **S. M Alshehri**, MJA Shiddiky, Z Liu, K Shim, Yusuke Yamauchi, Formation of mesopores inside platinum nanospheres by using double hydrophilic block copolymers, *Materials Letters* 182, 190-193(2016).
- [119] K. Eid, H. Wang, V. Malgras, **S. M. Alshehri**, T. Ahamad, Y. Yamauchi, L. Wang, One-step solution-phase synthesis of bimetallic PtCo nanodendrites with high electrocatalytic activity for oxygen reduction reaction, *Journal of Electroanalytical Chemistry*, (2016, *In press*).
- [120] Chen C-T, Dutta S, Wang Z-Y, Chen JE, Ahamad T, **S. M. Alshehri**, Yamauchi, Y.; Lee, Y. F.; Wu, K. C. W., An unique approach of applying magnetic nanoparticles attached commercial lipase acrylic resin for biodiesel production. *Catalysis Today* (2016, *In press*).
- [121] Deepak Pathania, Divya Gupta, H Ala'a, Gaurav Sharma, Amit Kumar, Mu Naushad, Tansir Ahamad, **S. M. Alshehri**, Photocatalytic degradation of highly toxic dyes using chitosan-g-poly (acrylamide)/ZnS in presence of solar irradiation, *Journal of Photochemistry and Photobiology A: Chemistry* 329, 61-68 (2016).

- [122] A. Aldalbahi, Peter Feng, Norah Alhokbany, Eida Al-Farraj, **S. M. Alshehri**, Tansir Ahamad, Synthesis and characterization of hybrid nanocomposites as highly-efficient conducting CH<sub>4</sub> gas sensor, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, (2016, in Press)

## **Patents :**

1. **S. M. Alshehri**, Tansir Ahamad Phosphazene-Formaldehyde Polymers and their Polymer Metal Complexes, **US patent, 9193834, 2015.**
2. **S. M. Alshehri**, Tansir Ahamad Synthesis of Phosphazene formaldehyde resin and their application for removal of heavy metal from industrial waste water. **US patent, 9006299, 2015.**
3. **S. M. Alshehri**, Tansir Ahamad, Method for removal of heavy metal from industrial waste water. **European patent, EP2598445B1, 2015.**
4. **S. M. Alshehri**, Tansir Ahamad, Hamad A. Al-lohedan, Yusuke Yamauchi. Method of fabricating macroporous carbon capsules from pollen grains. **US Patent 9,346,678; 2016.**
5. **S. M. Alshehri**, Tansir Ahamad, Naushad M, Al-othman ZA, Aldalbahi A. Method for removing organic dye from wastewater. **US Patent 9,334,176; 2016.**