

## (Resume Curriculum)

### First part

#### Personal Information:

Name: Asma Abdullah Mohammed Alothman

Nationality: Saudi

Languages: Arabic and English

Office Phone: +966118058497 Mobile Phone: +966504101969

Email: aaalothman@ksu.edu.sa

Current Affiliation: Chemistry Department, College of Science, King Saud University, Riyadh 11451, Saudi Arabia

Web of Science ResearcherID: AAE-9577-2019

Orchid ID: 0000-0002-4701-5424

#### Employment History:

- Currently Associate professor of inorganic chemistry in the department of Chemistry, King Saud University, Riyadh, Saudi Arabia (2021 till now).
- Assistance professor of inorganic chemistry in the department of Chemistry, King Saud University, Riyadh, Saudi Arabia (2017 - 2021).
- Graduate researcher in the department of chemistry, Oklahoma State University, Stillwater, Oklahoma, USA, with scholarship from King Saud University, Riyadh, Saudi Arabia (2010 - 2016).
- Lecturer Department of Chemistry, King Saud University, Riyadh, Saudi Arabia (2013).
- Teaching Assistant, Department of Chemistry, King Saud University, Riyadh, Saudi Arabia (2010).

#### Scientific Degrees:

##### 1) PhD degree:

Department: Chemistry. University: Oklahoma State University.

University location: (City, Country): Stillwater, Oklahoma, USA.

Date of Obtaining Degree: 9/12/2016.

Title of Master thesis: The Synthesis and Applications of Tungsten and Vanadium Oxides/Oxyhydroxides in Both Bulk and Nanoparticulate Forms, advisor's Name: Prof. Allen W. Apblett.

##### 2) Master's degree:

Department: Chemistry. University: King Saud University.

University location: (City, Country): Riyadh, Saudi Arabia. Date of Obtaining Degree: 1/7/2008.

Title of Master thesis: Kinetic formation of Magnesium Chromite before and after Gamma- irradiation, advisor's Name: Prof. Khalid Al-Farhan, co-advisor's Name: Prof. Refaat Mahfouz.

Major: Inorganic chemistry.

##### 3) B.Sc. degree:

Department: Chemistry. University: King Saud University.

University location: (City, Country): Riyadh, Saudi Arabia. Date of Obtaining Degree:

2/7/2003. Title of Research project: Synthesis and characterization of cobalt isomers, supervisor: Dr. Waad Al-Kayali

#### Management and committees' positions:

- Acting manager of the central laboratory in the summer semester for 58 days from 27/7/2019 (6/10/1440) to 7/8/2019 (4/12/1440).
- Chemical Analysis Unit, Supervisor, Central Laboratory /Female Students Campus/King Saud University, 1440/08/20 to 1441/02/26.
- College's Accounts with its Two Branches of Female and Male Students on Social Networking Sites Committee, Chairwoman, Science College, 1440/04/20 to 1440/09/18.
- Scientific Research Unit, Member, Science College, 1440/02/24 to 1440/09/18.
- Public Relations and Media Unit, Science College, 1440/02/04 to 1440/09/18.
- Coordinator between Science College and National Center of Assessment, Science College, 1442/03/17 to 1443/03/17.
- Advisory Committee in chemistry department, female branch, 1443/04/26 till now.
- Inorganic Chemistry Specialty coordinator, Chemistry department, 1443/06/13 till now.
- Public Relations and Media Unit, Science College, 1440/02/04 to 1441/02/04
- Public Relations and Community Partnership committee, Coordinator, Chemistry department, 1443/06/13 till now.
- Post-graduate committee, Coordinator, Chemistry department, 1443/06/13 till now.
- Study Plans and Learning Resources committee, Coordinator, Chemistry department, 1443/06/13 till now.
- Public Relations and Community Partnership committee, Coordinator, Chemistry department, 1443/06/13 till now.
- Public Relations and Community Partnership committee, Coordinator, Chemistry department, 1441/05/27 to 1443/06/12.
- Public Relations and Community Partnership committee, Coordinator, Chemistry department, 1439/05/04 to 1441/05/26.
- Safety and Laboratory committee, Member, Chemistry department, 1438/12/22 to 1443/06/12.
- Iso committee, Member, Chemistry department, 1438/12/22 to 1443/06/12.
- Public Relations and Community Partnership committee, Member, Chemistry department, 1438/12/22 to 1439/05/03.
- Public Relations Committee of the 7th International Chemistry Conference (7ICC), Member, Saudi Chemical Society, 1439/09/13 to 1440/03/04.
- Development of Computational Chemistry Course Committee, Member, Chemistry Department, 1438/10/23 to 1439/06/15.

#### University and community service:

- Coordinator for several courses: CHEM 101, 107, and 499
- Advisor of several talented students

- Supervisor of research projects for several undergraduate students
- Supervisor of research projects for several researchers
- Supervisor of undergraduate Student from Research Support Program
- Examiner for numerous undergraduate students' projects research
- Examiner for theses of four master students and one PhD student
- Supervisor of four master students
- Co-supervisor of six master students
- Reviewer for several scientific articles
- Participate in organizing College of Science, Chemistry Department, and Saudi Chemical Society activities
- Participate in organizing and presenting general and specialize Lecture, workshops, training courses, symposia

#### Scientific Societies:

- American Chemical Society, Active member since 2010.
- Saudi Chemical Society, Active member since 2007.
- Material Research Society, Active member since 2020.
- The Honor Society of Phi Kappa Phi, Member (23/05/2013 to 24/05/2017).

#### Second Part:

#### Scholarship Awards:

- Award for Excellence in Scientific Research at Science college, 2022
- SABIC Innovation Award, Riyadh, Saudi Arabia, 2016
- Award for the best posters in the third place at the 60<sup>th</sup> ACS Penta-sectional Meeting, Pittsburg, KS, USA, April 11, 2015.
- Honor for outstanding student from Phi Kappa Phi from chemistry department, Chapter at Oklahoma State University, Stillwater, OK, 2013.
- Honor from Saudi Arabian Cultural Mission to the USA for outstanding contribution to the Saudi Student Club served as a vice-president at Oklahoma State University, Stillwater, OK, 2013.
- Scholarship offered by King Saud University to Study Ph.D. degree in United States of America, 2010.
- Award for the best posters in the first scientific Conference of higher education for female and male students, female student branch, 2010.
- Honor with Excellence from King Saud University, Riyadh, Saudi Arabia, 2009.
- Gold Medal with excellence in the preparatory meeting for the first scientific Conference of female and male students of higher education, 2009.

- Honor for outstanding student from chemistry department, King Saud University, Riyadh, Saudi Arabia, 2003.

### The Third Part:

#### Participation in Conferences, Symposia and Other Activities

- 1) ACS Spring 2022, United States, March 20-24, 2022, San Diego, CA, Bonding Through Chemistry, participation type: presented a poster.
- 2) The International conference on Advanced Materials and Their Applications 2021 (ICAMA 2021) March 7-9, 2022 in the college of Science and Humanities in Alkarje Prince Sattam bin Abdelaziz University, Kingdom of Saudia Arabia.
- 3) ACS Fall Meeting 2021, American Chemical Society (ACS) National Meeting & exposition Atlanta, GA, USA, August 22-26, 2021, participation type: presented a poster virtually.
- 4) ACS Spring Meeting 2021, American Chemical Society (ACS) National Meeting & exposition, April 5-30, 2021, participation type: presented a poster virtually.
- 5) <sup>260</sup>th American Chemical Society (ACS) National Meeting & exposition San Francisco, CA, USA, August 23-27, 2020, participation type: presented a poster.
- 6) <sup>259</sup>th American Chemical Society (ACS) National Meeting & exposition Philadelphia, PA, USA, March 22-26, 2020, participation type: presented a poster.
- 7) <sup>24</sup>th Annual Green Chemistry & Engineering Virtual Conference, American Chemical Society (ACS), June 15-19, 2020, participation type: attendance.
- 8) <sup>14</sup>th International Conference on Chemistry and Its Role in Development Mansoura University-Hurghada, Egypt, March 25-28, 2019, participation type: presented a poster
- 9) <sup>7</sup>th International Chemistry Conference, 7thICC, Riyadh, Saudi Arabia, Nov12-14, 2018, participation type: organizer.
- 10) <sup>256</sup>th American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, August 19-23, 2018, participation type: presented a poster
- 11) <sup>252</sup>nd American Chemical Society (ACS) National Meeting & exposition Philadelphia, PA, USA, August 21-25, 2016, participation type: presented a poster
- 12) <sup>251</sup>st American Chemical Society (ACS) National Meeting & exposition San Diego, CA, USA, March 13-17, 2016, participation type: presented a poster
- 13) <sup>250</sup>th American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, August 16-20, 2015, participation type: presented a poster.
- 14) <sup>249</sup>th American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, March 22-26, 2015, participation type: oral presentation.
- 15) <sup>60</sup>th ACS Pentasectional Meeting, Pittsburg, KS, USA, April 11, 2015, participation type: presented a poster
- 16) <sup>248</sup>th American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, August 10-14, 2014, participation type: presented a poster.
- 17) <sup>247</sup>th American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, March 16-20, 2014, participation type: presented a poster.

- 18) 246<sup>th</sup> American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, September 8-12, 2013, participation type: presented a poster.
- 19) 240<sup>th</sup> American Chemical Society (ACS) National Meeting & exposition Boston, MA, USA, August 22-26, 2010, participation type: attendance.
- 20) The first scientific Conference of higher education for female and male students, Riyadh, Saudi Arabia, 1-4/3/2010, participation type: a poster.
- 21) The first preparatory meeting for Conference of higher education for female and male students, King Saud University, Riyadh, Saudi Arabia, 9-10/12/2009, participation type: organizer; member of the scientific committee and supervisor of the scientific exhibition team.
- 22) The International Conference for Nanotechnology Industries "The Leading Technology of 21st Century", Riyadh, Saudi Arabia, 5-7/03/2009, participation type; attendance.
- 23) International Conference on Nanotechnology: Opportunities and Challenges, Jeddah, Saudi Arabia, 17-19/06/2008, Participation type; poster entitled: "Synthesis and characterization of nanocrystalline Pirochromite spinel obtained through modified polymerized complex method".
- 24) The Third Saudi Conference on Science, (New Trends for Science and it's Applications), College of Science, King Saud University, Riyadh, Saudi Arabia, 10-13/3/2007, participation type: attendance.
- 25) The third Conference for The International Congress of Chemistry and Environment, Kuwait, 18-20/11/2007, participation type; oral presentation entitled: Kinetic studies for MgCr<sub>2</sub>O<sub>4</sub> formation before and after  $\gamma$ -irradiation by Nonisothermal Thermogravimetry

#### The Fourth Part:

##### Selected Research Papers:

- 1) Albaqami M.D., Alothman A.A., Nafady A., Medany S.S., Shah A.A., Aftab U., Ibupoto M.H., Mallah A.B., Tahira A., Tonezzer M., Vigolo B., and Ibupoto Z.H. (2022) Utilization of polyvinyl amine hydrolysis product in enhancing the catalytic properties of Co<sub>3</sub>O<sub>4</sub> nanowires: toward potentiometric glucose bio-sensing application. *Journal of Materials Science-Materials in Electronics*. 33:11555-11568.
- 2) Kaiser W., Ricciarelli D., Mosconi E., Alothman A.A., Ambrosio F., and De Angelis F. (2022) Stability of Tin- versus Lead-Halide Perovskites: Ab Initio Molecular Dynamics Simulations of Perovskite/Water Interfaces. *Journal of Physical Chemistry Letters*. 13:2321-2329.
- 3) Alothman A.A., El-Naggar M.E., Afifi M., Mushab M.S.S., Sillanpaa M., and Kenawy E.R. (2022) Optimizing Graphene Oxide Encapsulated TiO<sub>2</sub> and Hydroxyapatite; Structure and Biological Response. *Journal of Inorganic and Organometallic Polymers and Materials*. 32:1306-1318.
- 4) Kaiser W., Carignano M., Alothman A.A., Mosconi E., Kachmar A., Goddard W.A., and De Angelis F. (2021) First-Principles Molecular Dynamics in Metal-Halide Perovskites: Contrasting Generalized Gradient Approximation and Hybrid Functionals. *Journal of Physical Chemistry Letters*. 12:11886-11893.

- 5) Akhtar N., Rani M., Mahmood A., Tariq K., Murtaza G., Alothman A.A., Al-zahrani R.S., Ali S., Janjua N.K., and Shah A. (2021) Synthesis and characterization of graphene oxide-based nanocomposite NaCr2O4/GO for electrochemical applications. *Journal of Materials Research and Technology-Jmr&T*. 15:6287-6294.
- 6) Sultana S., Al Mamun A., Aktar S., Mahbub S., Yusuf K., Alothman A.A., Wabaidur S.M., Rana S., Islam M.A., and Hoque M.A. (2022) Impacts of polyols and temperature on the micellization, interaction and thermodynamics behavior of the mixture of tetradecyltrimethylammonium bromide and polyvinyl alcohol. *Zeitschrift Fur Physikalische Chemie-International Journal of Research in Physical Chemistry & Chemical Physics*. 236:405-424.
- 7) Nafady A., Al-Enizi A.M., Alothman A.A., and Shaikh S.F. (2022) Design and fabrication of green and sustainable vapochromic cellulose fibers embedded with natural anthocyanin for detection of toxic ammonia (vol 230, 122292, 2021). *Talanta*. 237.
- 8) Hussain Z., Nafady A., Anderson S.R., Al-Enizi A.M., Alothman A.A., Ramanathan R., and Bansal V. (2021) Increased Crystallization of CuTCNQ in Water/DMSO Bisolvent for Enhanced Redox Catalysis (vol 11, 954, 2021). *Nanomaterials*. 11.
- 9) Priyadharshini M., Sandhiya M., Sathish M., Pazhanivel T., Mani G., Alothman A.A., and Alqahtani K.N. (2022) Surfactant-dependant self organisation of nickel pyrophosphate for electrochemical supercapacitors. *Journal of Materials Science-Materials in Electronics*. 33:9269-9276.
- 10) Govindasamy M., Wang S.F., Alothman A.A., Alshgari R.A., and Ganesh P.S. (2022) Synergetic effect of the ultrasonic-assisted hydrothermal process on the photocatalytic performance of MoS2 and WS2 nanoparticles. *Journal of Materials Science-Materials in Electronics*. 33:8858-8867.
- 11) Aravind M., Amalanathan M., Mary M.S.M., Parvathiraja C., Alothman A.A., Wabaidur S.M., and Islam M.A. (2022) Enhanced Photocatalytic and Biological Observations of Green Synthesized Activated Carbon, Activated Carbon Doped Silver and Activated Carbon/Silver/Titanium Dioxide Nanocomposites (September, 10.1007/s10904-021-02096-w, 2021). *Journal of Inorganic and Organometallic Polymers and Materials*. 32:365-365.
- 12) Younas U., Gulzar A., Ali F., Pervaiz M., Ali Z., Khan S., Saeed Z., Ahmed M., and Alothman A.A. (2021) Antioxidant and Organic Dye Removal Potential of Cu-Ni Bimetallic Nanoparticles Synthesized Using *Gazania rigens* Extract. *Water*. 13.
- 13) Sheikh M.S., Shafi N., Khanam A.J., Yusuf K., Alothman A.A., and Wabaidur S.M. (2021) Influence of hydrotrope on micellization behaviour of zwitterionic dimeric surfactants carrying ammonium and phosphodiester headgroups at different temperatures in aqueous medium. *Journal of Molecular Liquids*. 341.
- 14) Siyal S.H., Javed M.S., Ahmad A., Sajjad M., Batool S., Khan A.J., Akram S., Alothman A.A., Alshgari A.R., and Najam T. (2021) Free-standing 3D Co(3)O4@NF micro-flowers composed of porous ultra-long nanowires as an advanced cathode material for supercapacitor. *Current Applied Physics*. 31:221-227.
- 15) Aravind M., Amalanathan M., Mary M.S.M., Parvathiraja C., Alothman A.A., Wabaidur S.M., and Islam M.A. (2022) Enhanced Photocatalytic and Biological Observations of Green Synthesized Activated Carbon, Activated Carbon Doped Silver and Activated Carbon/Silver/Titanium Dioxide Nanocomposites. *Journal of Inorganic and Organometallic Polymers and Materials*. 32:267-279.

- 16) Priscilla I.J.D., Allothman A.A., Wang S.F., and Arumugam R. (2021) Lanthanide type of cerium sulfide embedded carbon nitride composite modified electrode for potential electrochemical detection of sulfaguanidine. *Microchimica Acta*. 188.
- 17) Tahira A., Mazzaro R., Rigoni F., Nafady A., Shaikh S.F., Allothman A.A., Alshgari R.A., and Ibupoto Z.H. (2021) A simple and efficient visible light photodetector based on Co<sub>3</sub>O<sub>4</sub>/ZnO composite. *Optical and Quantum Electronics*. 53.
- 18) Chokkiah B., Eswaran M., Allothman A.A., Alsawat M., Ifseisi A.A., Alqahtani K.N., and Dhanusuraman R. (2022) Facile fabrication of hollow polyaniline/carbon nanofibers-coated platinum nanohybrid composite electrode as improved anode electrocatalyst for methanol oxidation. *Journal of Materials Science-Materials in Electronics*. 33:8768-8776.
- 19) Lal R., Bhatia B.L., Tahira A., Shaikh S.F., Alsahme A.M., Al-Othman A.A., Nafady A., and Ibupoto Z.H. (2021) Synthesis of composite material of cobalt oxide (Co<sub>3</sub>O<sub>4</sub>) with hydroxide functionalized multi-walled carbon nanotubes (MWCNTs) for electrochemical determination of uric acid. *Journal of Materials Science-Materials in Electronics*. 32:20047-20057.
- 20) Ali I., Sekkoum K., Belboukhari N., Rebizi M.N., Zaid M.E., Yusuf K., Allothman A.A., AlJumah B.A., and Ouladsmane M. (2021) Determination of enantio-separation, absolute configuration and chiral recognition mechanism of ofloxacin and flumequine by HPLC and modeling studies. *Journal of Chemical Technology and Biotechnology*. 96:2901-2908.
- 21) El-Barbary G., Ahmed M.K., El-Desoky M.M., Al-Enizi A.M., Allothman A.A., Alotaibi A.M., and Nafady A. (2021) Cellulose acetate nanofibers embedded with Ag nanoparticles/CdSe/ graphene oxide composite for degradation of methylene blue. *Synthetic Metals*. 278.
- 22) Qureshi I.N., Tahira A., Aljadoo K., Alsahme A.M., Allothman A.A., Nafady A., Karsy A., and Ibupoto Z.H. (2021) Polyaniline as a sacrificing template for the synthesis of controlled Co<sub>3</sub>O<sub>4</sub> nanoparticles for the sensitive and selective detection of methotrexate (MTX). *Journal of Materials Science-Materials in Electronics*. 32:15594-15604.
- 23) Hoque M.A., Alam M.M., Rana S., Allothman A.A., and Alsawat M. (2022) Aggregation behavior and thermodynamic properties of the mixture of sodium carboxymethyl cellulose and cetyltrimethylammonium bromide in numerous temperatures and mixed solvents. *Zeitschrift Fur Physikalische Chemie-International Journal of Research in Physical Chemistry & Chemical Physics*. 236:107-129.
- 24) Kaiser W., Mosconi E., Allothman A.A., Meggiolaro D., Gagliardi A., and De Angelis F. (2021) Halide-driven formation of lead halide perovskites: insight from ab initio molecular dynamics simulations. *Materials Advances*. 2:3915-3926.
- 25) Khand A.A., Lakho S.A., Tahira A., Ubaidullah M., Allothman A.A., Aljadoo K., Nafady A., and Ibupoto Z.H. (2021) Facile Electrochemical Determination of Methotrexate (MTX) Using Glassy Carbon Electrode-Modified with Electronically Disordered NiO Nanostructures. *Nanomaterials*. 11.
- 26) Aqel A., Allothman A.A., Alghamdi W.J., Alkatheri N., Al-Mohaimed A.M., Ghfar A., AlOthman Z.A., and Badjah-Hadj-Ahmed A.Y. (2021) Synthesis of value-added MIL-53(Cr) from waste polyethylene terephthalate bottles for the high-performance liquid chromatographic determination of methylxanthines in tea. *Microchemical Journal*. 167.
- 27) Ricciarelli D., Meggiolaro D., Belanzoni P., Allothman A.A., Mosconi E., and De Angelis F. (2021) Energy vs Charge Transfer in Manganese-Doped Lead Halide Perovskites. *Acs Energy Letters*. 6:1869-1878.
- 28) Madaswamy S.L., Allothman A.A., Al-Anazy M.M., Ifseisi A.A., Alqahtani K.N., Natarajan S.K., Angaiah S., and Ragupathy D. (2021) Polyaniline-based nanocomposites for direct

- methanol fuel cells (DMFCs)-A Recent Review. *Journal of Industrial and Engineering Chemistry*. 97:79-94.
- 29) Rehan M., El-Naggar M.E., Al-Enizi A.M., Alothman A.A., Nafady A., and Abdelhameed R.M. (2021) Development of silk fibers decorated with the in situ synthesized silver and gold nanoparticles: antimicrobial activity and creatinine adsorption capacity. *Journal of Industrial and Engineering Chemistry*. 97:584-596.
  - 30) Kumar H., Kumar V., Sharma S., Katal A., and Alothman A.A. (2021) Volumetric and acoustic properties of amino acids L-Leucine and L-Serine in aqueous solution of ammonium dihydrogen phosphate (ADP) at different temperatures and concentrations. *Journal of Chemical Thermodynamics*. 155.
  - 31) Nafady A., Al-Enizi A.M., Alothman A.A., and Shaikh S.F. (2021) Design and fabrication of green and sustainable vapochromic cellulose fibers embedded with natural anthocyanin for detection of toxic ammonia. *Talanta*. 230.
  - 32) Vinoth S., Govindasamy M., Wang S.F., Alothman A.A., and Alshgari R.A. (2021) Hydrothermally synthesized cubical zinc manganite nanostructure for electrocatalytic detection of sulfadiazine. *Microchimica Acta*. 188.
  - 33) Sharma R., Jasrotia T., Kumar R., Kumar R., Alothman A.A., Al-Anazy M.M., Alqahtani K.N., and Umar A. (2021) Multi-biological combined system: A mechanistic approach for removal of multiple heavy metals. *Chemosphere*. 276.
  - 34) Vinoth S., Govindasamy M., Wang S.F., Alothman A.A., and Alshgari R.A. (2021) Surface engineering of rose-like lanthanum molybdate electrocatalyst modified screen-printed carbon electrode for robust and highly sensitive sensing of antibiotic drug. *Microchemical Journal*. 164.
  - 35) Rajaji U., Chinnapaiyan S., Chen S.M., Mani G., Alothman A.A., and Alshgari R.A. (2021) Bismuth telluride decorated on graphitic carbon nitrides based binary nanosheets: Its application in electrochemical determination of salbutamol (feed additive) in meat samples. *Journal of Hazardous Materials*. 413.
  - 36) Kumar H., Sharma R., Kumar V., and Alothman A.A. (2021) Exploration of the solvation behavior of the synthesized 1-hexyl-3-methylimidazolium bromide C(6)mim Br ionic liquid with L-cysteine and N-acetyl L-cysteine in aqueous medium at different temperatures. *Journal of Molecular Liquids*. 324.
  - 37) Bhanja P., Kim Y., Paul B., Kaneti Y.V., Alothman A.A., Bhaumik A., and Yamauchi Y. (2021) Microporous nickel phosphonate derived heteroatom doped nickel oxide and nickel phosphide: Efficient electrocatalysts for oxygen evolution reaction. *Chemical Engineering Journal*. 405.
  - 38) Lu T., Liu Y., Xu X.T., Pan L.K., Alothman A.A., Shapter J., Wang Y., and Yamauchi Y. (2021) Highly efficient water desalination by capacitive deionization on biomass-derived porous carbon nanoflakes. *Separation and Purification Technology*. 256.
  - 39) Umesh N.M., Jesila J.A., Wang S.F., Devi K.S.S., Govindasamy M., Alothman A.A., and Alshgari R.A. (2021) An enhanced electrochemical performance of in milk, pigeon meat and eggs samples using se nanorods capped with Co<sub>3</sub>O<sub>4</sub> nanoflowers decorated on graphene oxide. *Colloids and Surfaces B-Biointerfaces*. 200.
  - 40) Jesila J.A., Umesh N.M., Wang S.F., Mani G., Alothman A.A., and Alshgari R.A. (2021) An electrochemical sensing of phenolic derivative 4-Cyanophenol in environmental water using a facile-constructed Aurivillius-structured Bi<sub>2</sub>MoO<sub>6</sub>. *Ecotoxicology and Environmental Safety*. 208.



- 41) Wahab M.A., Na J., Masud M.K., Hossain M.S.A., Alothman A.A., and Abdala A. (2021) Nanoporous carbon nitride with a high content of inbuilt N site for the CO<sub>2</sub> capture. *Journal of Hazardous Materials*. 408.
- 42) Alothman A.A., Albaqami M.D., and Alshgari R.A. (2021) Synthesis, spectral characterization, quantum chemical calculations, thermal studies and biological screening of nitrogen and oxygen donor atoms containing Azo-dye Cu(II), Ni(II) and Co(II) complexes. *Journal of Molecular Structure*. 1223.
- 43) Rahman N., Nasir M., Alothman A.A., Al-Enizi A.M., Ubaidullah M., and Shaikh S.F. (2021) Synthesis of 2-mercaptopropionic acid/hydrous zirconium oxide composite and its application for removal of Pb(II) from water samples: Central composite design for optimization. *Journal of King Saud University Science*. 33.
- 44) Siyal, S. H.; Jogi, S. A.; Muhammadi, S.; Laghari, Z. A.; Khichi, S. A.; Naseem, K.; Algarni, T. S.; Alothman, A.; Hussain, S.; Javed, M. S., Mechanical Characteristics and Adhesion of Glass-Kevlar Hybrid Composites by Applying Different Ratios of Epoxy in Lamination. *Coatings* 2021, 11.(1)
- 45) Sharma, R.; Jasrotia, T.; Kumar, R.; Kumar, R.; Alothman, A. A.; Al-Anazy, M. M.; Alqahtani, K. N.; Umar, A., Multi-biological combined system: A mechanistic approach for removal of multiple heavy metals. *Chemosphere* 2021, 276.
- 46) Madaswamy, S. L.; Alothman, A. A.; Al-Anazy, M. M.; Ifseisi, A. A.; Alqahtani, K. N.; Natarajan, S. K.; Angaiah, S.; Ragupathy, D., Polyaniline-based nanocomposites for direct methanol fuel cells (DMFCs)-A Recent Review. *Journal of Industrial and Engineering Chemistry* 2021, 97, 79-94.
- 47) Zhang, X. Z.; Xu, P. H.; Liu, G. W.; Ahmad, A.; Chen, X. H.; Zhu, Y. L.; Alothman, A.; Hussain, S.; Qiao, G. J., Synthesis, Characterization and Wettability of Cu-Sn Alloy on the Si-Implanted 6H-SiC. *Coatings* 2020, 10.(9)
- 48) Saruchi; Verma, R.; Kumar, V.; Alothman, A. A., Comparison between removal of Ethidium bromide and eosin by synthesized manganese (II) doped zinc (II) sulphide nanoparticles: kinetic, isotherms and thermodynamic studies. *Journal of Environmental Health Science and Engineering* 2020, 18 (2), 1175-1187.
- 49) Saharan, Y.; Singh, J.; Kumar, R.; Alothman, A. A.; Ifseisi, A. A.; Aljadoa, K. A.; Umar, A., Trapping of oil molecules in clathrates: Oil trapping mechanism, soil composition and thermal studies. *Journal of Molecular Liquids* 2020, 319.
- 50) Park, H.; Masud, M. K.; Na, J. B.; Lim, H.; Phan, H. P.; Kaneti, Y. V.; Alothman, A. A.; Salomon, C.; Nguyen, N. T.; Hossain, M. S. A.; Yamauchi, Y., Mesoporous gold-silver alloy films towards amplification-free ultra-sensitive microRNA detection. *Journal of Materials Chemistry B* 2020, 8 (41), 9512-9523.
- 51) Jia, Y. H.; Alothman, A. A.; Liang, R.; Li, X. Y.; Ouyang, W. Y.; Wang, X. D.; Wu, Y.; Osman, S. M.; Li, Z. R.; Gao, M.; Sun, Y., Oligomeric (Salen)Mn(III) Complexes Featuring Tartrate Linkers Immobilized over Layered Double Hydroxide for Catalytically Asymmetric Epoxidation of Unfunctionalized Olefins. *Materials* 2020, 13.(21)
- 52) Iqbal, M.; Kim, Y.; Saputro, A. G.; Shukri, G.; Yuliarto, B.; Lim, H.; Nara, H.; Alothman, A. A.; Na, J.; Bando, Y.; Yamauchi, Y., Tunable Concave Surface Features of Mesoporous Palladium Nanocrystals Prepared from Supramolecular

- Micellar Templates. *Acs Applied Materials & Interfaces* 2020, 12 (46), 51357-51365.
- 53) Gopi, P. K.; Muthukutty, B.; Chen, S. M.; Chen, T. W.; Liu, X. H.; Allothman, A. A.; Ali, M. A.; Wabaidur, S. M., Platelet-structured strontium titanate perovskite decorated on graphene oxide as a nanocatalyst for electrochemical determination of neurotransmitter dopamine. *New Journal of Chemistry* 2020, 44 (42), 18431-18441.
  - 54) Fan, H. H.; Bahmani, F.; Kaneti, Y. V.; Guo, Y. N.; Allothman, A. A.; Wu, X. L.; Yamauchi, Y.; Li, W. L.; Zhang, J. P., Pseudocapacitive Lithium Storage of Cauliflower-Like  $\text{CoFe}_2\text{O}_4$  for Low-Temperature Battery Operation. *Chemistry-a European Journal* 2020, 26 (60), 13652-13658.
  - 55) Faisal, A. A. H.; Alquzweeni, S. S.; Naushad, M.; Allothman, A. A.; Sharma, G., Removal of dissolved benzaldehyde from contaminated water stream using granular iron slag by-product in the permeable reactive barrier technology. *Desalination and Water Treatment* 2020, 203, 315-326.
  - 56) Allothman, A. A.; Ammar, R. A. A., Synthesis, characterization, DNA binding/cleavage, and anticancer and antimicrobial activities: Nano-sized  $\text{Co(II)}$  and  $\text{Cd(II)}$  complexes and their use as a precursor for  $\text{CoO}$  and  $\text{CdO}$  nanoparticles. *Applied Organometallic Chemistry* 2020, 34.(10)
  - 57) Allothman, A. A.; Almarhoon, Z. M., Nano-sized some transition metal complexes of Schiff base ligand based on 1-aminoquinolin-2(1H)-one. *Journal of Molecular Structure* 2020, 1206.
  - 58) Allothman, A. A.; Albaqami, M. D., Nano-sized  $\text{Cu(II)}$  and  $\text{Zn(II)}$  complexes and their use as a precursor for synthesis of  $\text{CuO}$  and  $\text{ZnO}$  nanoparticles: A study on their sonochemical synthesis, characterization, and DNA-binding/cleavage, anticancer, and antimicrobial activities. *Applied Organometallic Chemistry* 2020, 34.(10)
  - 59) Allothman, A. A.; Al-Farraj, E. S.; Al-Onazi, W. A.; Almarhoon, Z. M.; Al-Mohaimeed, A. M., Spectral characterization, electrochemical, antimicrobial and cytotoxic studies on new metal (II) complexes containing  $\text{N}_2\text{O}_4$  donor hexadentate Schiff base ligand. *Arabian Journal of Chemistry* 2020, 13 (2), 3889-3902.
  - 60) Alharthi, F. A.; Alghamdi, A. A.; Allothman, A. A.; Almarhoon, Z. M.; Alsulaiman, M. F.; Al-Zaqri, N., Green Synthesis of  $\text{ZnO}$  Nanostructures Using *Salvadora Persica* Leaf Extract: Applications for Photocatalytic Degradation of Methylene Blue Dye. *Crystals* 2020, 10.(6)
  - 61) Al-Onazi, W. A.; Al-Mohaimeed, A. M.; Almarhoon, Z. M.; Al-Farraj, E. S.; Allothman, A. A., Potentiometric, spectral characterization, and antioxidant activity studies of ternary complexes involving  $\text{Cu(II)}$  and carbamoylcholine chloride drug with amino acids. *Journal of the Chinese Chemical Society* 2020, 67 (1), 125-134.