بسم الله الرحمن الرحيم

عبدالله بن محمد بن مبارك الصويلح

المملكة العربية السعودية- الرياض- جامعة الملك سعود- كلية العلوم- قسم الكيمياء

جوال ٠٥٥٥٤٧٧٦٧٥

ايميل aswieleh@ksu.edu.sa

التعليم:

جامعة الملك سعود - الرياض- المملكة العربية السعودية	*بكالوريوس (2005)*
جامعة هل- هل- المملكة المتحدة	*ماجستير (2010)*
جامعة شيفلد- شيفلد- المملكة المتحدة	*دكتوراه (2014)*

الخبرات التدريسية:

معيد- قسم الكيمياء, جامعة الملك سعود - المملكة العربية السعودية.	*(2007-2005)*
محاضر- قسم الكيمياء, جامعة الملك سعود - المملكة العربية السعودية.	*(2015-2014)*
استاذ مساعد- كيمياء فيزيائية - قسم الكيمياء, جامعة الملك سعود - المملكة العربية السعودية.	*(2015 -2020)*
استاذ مشارك-كيمياء فيزيائية- قسم الكيمياء, جامعة الملك سعود - المملكة العربية السعودية.	*(2020 حتى الان)*

الخبرات البحثية:

مساعد باحث- قسم الكيمياء, جامعة الملك سعود - المملكة العربية السعودية.

مساعد باحث- قسم الكيمياء, جامعة شيفلد - شيفلد - المملكة المتحدة.

باحث زائر- قسم الكيمياء, جامعة شيفلد - شيفلد - المملكة المتحدة.

عضويات اللجان والانشطة الادارية:

1- منسق مقرر الكيمياء العامة 1 (101 كيم)- قسم الكيمياء 1437-حتى الان.

2- عضو لجنة الموارد البشرية والخريجين - قسم الكيمياء 1438- 1441

3- مقرر لجنة خدمة المجتمع - قسم الكيمياء 1438-1439هـ

4- عضو لجنة خدمة المجتمع - كلية العلوم 1438-1439هـ.

5- مقرر لجنة المقررات الخدمية - قسم الكيمياء 1439-حتى الان.

6- عضو لجنة المقررات الخدمية - كلية العلوم 1438-حتى الان.

7- عضو لجنة الحقوق الطلابية - كلية العلوم 1438-حتى الان.

8- عضو لجنة توزيع الميزانية السنوية-كلية العلوم 1437-1438هـ.

9- لجنة الاعتماد الأكاديمي للدراسات العليا-قسم الكيمياء 1439-1441 هـ.

10- رئيس وحدة المقررات الخدمية- كلية العلوم 1439- 1442 هـ.

11- عضو لجنة الدراسات العليا- قسم الكيمياء 1439- حتى الان

12- عضو لجنة دراسة الية الاستثمار في الورش-كلية العلوم 1441 هـ.

13- عضو لجنة الدائمة للوقاية من الاشعاعات جامعة الملك سعود 1439-1442 هـ.

14- عضو مؤسس لجمعية العلوم للجميع 1442هـ

14- عضو جمعية العلوم للجميع 1442هـ - حتى الان

15- عضو اللجنة التأسيسية لبرنامج الماجستير فلم وتقنية النانو التطبيقية 1441-1442 هـ.

16- عضو مجلس برنامج الماجستير فلم وتقنية النانو التطبيقية 1443هـ - حتى الان.

الاهتمام البحثي:

Nanoparticles – Polymer brushes – Nanolithography – Drug delivery – Nanosensor

الابحاث المنشورة:

1-Alswieleh AM, Cheng N, Leggett GJ &Armes SP. Spatial control over crosslinking dictates the pH-responsive behavior of poly(2-(tert-butylamino)ethyl methacrylate) brushes. *Langmuir*, **2014**, 30 (5), 1391–1400

2-Alswieleh AM, Cheng N, Canton I, Ustbas B, Xue X, Ladmiral V, Xia S, Ducker RE, El Zubir O, Cartron ML, Hunter CN, Leggett GJ and Armes SP. Zwitterionicpoly(amino acid methacrylate) brushes. *J. Am. Chem. Soc*, **2014**, 136 (26), pp 9404–9413

3- Cunningham V, Alswieleh AM, Thompson K, Williams M, Leggett GJ, Armes SP, Musa O. Poly(glycerol monomethacrylate)-poly(benzyl methacrylate) diblock copolymer nanoparticles via RAFT emulsion polymerization: synthesis, characterization and interfacial activity. *Macromolecules,* **2014**, 47 (16), pp 5613–5623.

4-Blakeston AC, Alswieleh AM, Heath GR, Roth J, Bao P, Cheng N, Armes SP, Leggett GJ, Bushby RJ, Evans SD. A new poly(amino acid methacrylate) brush supports the formation of well-defined lipid membranes. *Langmuir,* **2015**, 31 (12), pp 3668–3677.

5- Zhang ZJ, Moxey M, Alswieleh AM, Morse AJ, Lewis AL, Geoghegan M, Leggett GJ. Effect of Salt on Phosphorylcholine-based Zwitterionic Polymer Brushes. *Langmuir,* **2016**,32 (20), pp 5048–5057.

6- Zhang ZJ, Moxey M, Alswieleh AM, Armes SP, Lewis A, Geoghegan M, Leggett GJ. Nanotribological investigation of polymer brushes with lithographically defined and systematically varying grafting densities. *Langmuir*, **2017**, 33 (3), pp 706–713

7- Al-Jaf O, Alswieleh AM, Armes SP, Leggett GJ. Nanotribological properties of nanostructured poly (cysteine methacrylate) brushes. *Soft Matter*, **2017**, 13, 2075 – 2084.

8- Johnson A, Madsen J, Chapman P, Alswieleh A, Al-Jaf O, Bao P, Cartron ML, Armes SP, Evans SD, Hobbs JK, Hunter CN and Leggett GJ .Micrometre and Nanometre Scale Patterning of Binary Polymer Brushes, Supported Lipid Bilayers and Proteins. *Chem. Sci*, **2017**, 8, 4517-4526.

9- Selvakumar D, Alsalme A, Alswieleh A, Jayavel R. Freestanding flexible nitrogen doped-reduced graphene oxide film as an efficient electrode material for solid-state supercapacitors. *Journal of Alloys and Compounds* 723 (**2017**) 995-1000.

10- Venkatachalam V, Alsalme A, Alswieleh A, Jayavel R. Double hydroxide mediated synthesis of nanostructured $ZnCo_2O_4$ as high performance electrode material for supercapacitor applications. *Chemical Engineering Journal* 321 (**2017**) 474–483.

11- Sivaram H, Selvakumar D, Alsalme A, Alswieleh A, Jayavel R. Enhanced performance of PbO nanoparticles and PbO-CdO and PbO-ZnO nanocomposites for supercapacitor application. *Journal of Alloys and Compounds* 731 (**2018**) 55-63.

12- Alzahrani KE, Niazy AA, Alswieleh AM, Wahab R, El-Toni AM, Alghamdi HS. Antibacterial activity of trimetal (CuZnFe) oxide nanoparticles. *International Journal of Nanomedicine*, **2018**, 13, 77–87.

13- Madsen J, Ducker RE, Al Jaf O, Cartron ML, Alswieleh AM, Smith CH, Hunter CN, Armes SP and Leggett GJ. Fabrication of microstructured binary polymer brush "corrals" with integral pH sensing for studies of proton transport in model membrane systems. *Chem. Sci.*, **2018**, 9, 2238-2251.

14- Alsager OA, Alotaibi KM, Alswieleh AM and Alyamani BJ .Colorimetric Aptasensor of Vitamin D3: A Novel Approach to Eliminate Residual Adhesion between Aptamers and Gold Nanoparticles. *Scientific reports*, **2018**, 8 (1), 12947

15- Alswieleh A, Alshahrani M, Alzahrani K, Alghamdi H, Niazy A, Alsilme A, Beagan A, Alsheheri B, Alghamdi A, Almeataq M. Surface modification of pH-responsive poly(2-(tert-butylamino)ethyl methacrylate) brushes grafted on mesoporous silica nanoparticles. *Designed Monomers and Polymers* (**2019**) 22(1) 226-235.

16- Alswieleh A. Quantitative Determination of Thiol Groups Modified Mesoporous Silica Nanoparticles by Ellman's Reagent.

17- Alswieleh A, Beagan A, Alsheheri B, Alotaibi K, Alharthi M, Almeataq M. Hybrid mesoporous silica nanoparticles grafted with 2-(tert-butylamino)ethyl methacrylate-b-poly(ethylene glycol) methyl ether methacrylate diblock brushes as drug nanocarrier. *Molecules* (**2020**) 25(1).

18- Alzahrani K, Shukla A, Alam J, Niazy A, Alsouwaileh A, Alhoshan M, Khalid J, Alghamadi H. Probing the surface ultrastructure of Brevibacillus laterosporus using atomic force microscopy. *Micron* (**2020**) 131.

19- Alswieleh A. Modification of Mesoporous Silica Surface by Immobilization of Functional Groups for Controlled Drug Release. *Journal of Chemistry* (**2020**) 2020 1-9.

20- Beagan A, Lahmadi S, Alghamdi A, Halwani M, Almeataq M, Alhazaa A, Alotaibi K, Alswieleh A. Glucosamine Modified the Surface of pH-Responsive Poly (2-(diethylamino) ethyl Methacrylate)

Brushes Grafted on Hollow Mesoporous Silica Nanoparticles as Smart Nanocarrier. *Polymers* **2020**, 12(11), 2749.

21- Beagan A, Alghamdi A, Lahmadi S, Halwani M, Almeataq M, Alhazaa A, Alotaibi K, Alswieleh A. Folic acid-terminated poly (2-diethyl amino ethyl methacrylate) brush-gated magnetic mesoporous nanoparticles as a smart drug delivery system. *Polymers* **2021**, 13(1), 59.

22- Alotaibi K, Almethen A, Beagan A, Alfhaid L, Ahamed 2M, El-Toni A, Alswieleh A. Poly(oligo(ethylene glycol) methyl ether methacrylate) Capped pH-Responsive Poly(2-(diethylamino)ethyl methacrylate) Brushes Grafted on Mesoporous Silica Nanoparticles as Nanocarrier. *Polymers* **2021**, 13(5), 823.

23- Alswieleh A, Remediation of cationic and anionic dyes from water by histidine modified mesoporous silica. *International Journal of Environmental Analytical Chemistry* **2021**, 1-13.

24- Alswieleh A, Cysteine-and glycine-functionalized mesoporous silica as adsorbents for removal of paracetamol from aqueous solution. *International Journal of Environmental Analytical Chemistry* **2021**, 1-12.

25- Ahmad A, Al-Swaidan H, Alghamdi A, Alotaibi K, Alswieleh A, Albalwi A, Bajuayfir E. Efficient sequester of hexavalent chromium by chemically active carbon from waste valorization (Phoenix Dactylifera). *Journal of Analytical and Applied Pyrolysis* **2021**, 155, 105075.

26- Sreekanth S, Alodhayb A, Assaifan A, Alzahrani K, Muthuramamoorthy M, Alkhammash H, Pandiaraj S, Alswieleh A, Le Q, Mangaiyarkarasi R, Grace A, Raghavan V. Multi-walled carbon nanotube-based nanobiosensor for the detection of cadmium in water. *Environmental Research* **2021**, 197, 111148.

27- Assaifan A, Hezam M, Al-Gawati M, Alzahrani K, Alswieleh A, Arunachalam P, Al-Mayouf A, Alodhayb A, Albrithen H. Label-free and simple detection of trace Pb (II) in tap water using non-faradaic impedimetric sensors. *Sensors and Actuators A: Physical* **2021**, 329, 112833.

28- A. Alswieleh, H. Albahar, A. Alfawaz, A. Alsilme, A. Beagan, A. Alsalme, M. Almeataq, A. Alshahrani, K. Alotaibi. Evaluation of the Adsorption Efficiency of Glycine-, Iminodiacetic Acid -, and Amino Propyl-Functionalized Silica Nanoparticles for the Removal of Potentially Toxic Elements from Contaminated Water Solution. *Journal of Nanomaterials* **2021**, 2021, 12.

29- K. Alzahrani, A. Alodhayb, M. Algwati, A. Alanazi, Qura Tul Ain, A. Assaifan, S. Manoharadas, A. Alshammari, A. Alswieleh, H. Albrithen. Nanomechanical Detection of Bacteria–Bacteriophage Interactions Using Microchannel Microcantilevers. *Journal of The Electrochemical Society* **2021**, 168, 87509.

30- H. AlQahtani, A. Alswieleh, I. Al-Khurayyif, S. AlGarni, M. Grell. Parallel Potentiometric and Capacitive Response in a Water-Gate Thin Film Transistor Biosensor at High Ionic Strength. *Sensors* **2021**, 21, 5618.

31- K. Alotaibi, A. Almethen, A. Beagan, H. Al-Swaidan, A. Ahmad, S. Bhawani, A. Alswieleh. Quaternization of poly (2-diethyl aminoethyl methacrylate) brush-grafted magnetic mesoporous nanoparticles using 2-Iodoethanol for removing anionic dyes. *Appl. Sci.* **2021**, 11(21), 10451.

32- A. Alotaibi, A. Shukla, M. Mrad, A. Alswieleh, K. Alotaibi. Fabrication of Polysulfone-Surface Functionalized Mesoporous Silica Nanocomposite Membranes for Removal of Heavy Metal Ions from Wastewater. *Membranes* **2021**, 11(12), 935.

33- A. Alotaibi, C. Ayari, E. Bajuavfir, A. Ahmad, F. Al-Nahdi, A. Alswieleh, K. Alotaibi, J. Mi, C. Nasr, M. Mrad. Stabilization of Tetrachloride with Mn (II) and Co (II)Complexes and 4-Tert-Butylpyridinium Organic Cation: Elaboration of the Structure and Hirshfeld Surface, Optical, Spectroscopic and Thermal Analyses. *Crystals* **2022**, 12(2), 140.

34- A. Beagan, K. Alotaibi, M. Almakhlafi, W. Algarabli, N. Alajmi, M. Alanazi, H. Alwaalah, F. Alharbi, R. Alshammari, A. Alswieleh. Amine and sulfonic acid functionalized mesoporous silica as an effective adsorbent for removal of methylene blue from contaminated water. *Journal of King Saud University – Science* **2022**, 34 (2), 101762.

35- S. Hermi, A. Alotaibi, A. Alswieleh, K. Alotaibi, M. Althobaiti, C. Jelsch, E. Wenger, C. Nasr, M. Mrad. The Coordination Behavior of Two New Complexes, [(C7H10NO2)CdCl3]n(I) and [(C7H9NO2)CuCl2] (II), Based on 2,6-Dimethanolpyridine; Elaboration of the Structure and Hirshfeld Surface, Optical, Spectroscopic and Thermal Analysis. *Materials* **2022**, 15(5), 1624.

36- A. Almethen, K. Alotaibi, H. Alhumud, A. Alswieleh. Highly Efficient and Rapid Removal of Methylene Blue from Aqueous Solution Using Folic Acid-Conjugated Dendritic Mesoporous Silica Nanoparticles. *Processes* **2022**, 10(4), 705.

37- A. Alfawaz, K. Alzahrani, A. Niazy, H. Alghamadi, R. Lambarte, A. Beagan, L. Alfhaid, K. Alotaibi, A. Alswieleh. Smart Nanocarrier Based on Poly(oligo(ethylene glycol) methyl ether acrylate) Terminated pH-Responsive Polymer Brushes Grafted Mesoporous Silica Nanoparticles. *Appl. Sci.* **2022**, 12(7), 3688.

38- A. Alswieleh. Aspartic Acid- and Glycine-Functionalized Mesoporous Silica as an Effective Adsorbent to Remove Methylene Blue from Contaminated Water. *Journal of Chemistry.* **2022**, 2022, 14.

39- A. Alfawaz, A. Alsalme, A. Alkathiri, A. Alswieleh. Surface functionalization of mesoporous silica nanoparticles with brønsted acids as a catalyst for esterification reaction. *Journal of King Saud University – Science* **2022**, 34 (5), 102106.

40- A. Alswieleh. Efficient Removal of Dyes from Aqueous Solution by Adsorption on L-Arginine-Modified Mesoporous Silica Nanoparticles. *Processes* **2022**, 10(6), 1079.

41- A. AlFawaz, A. Alsalme, A. Alswieleh, M. Abdel-Messih, A. Galal, M. Shaker, M. Ahmed, A. Soltan. A low cost and green curcumin/ZnO nanocomposites: Preparation, characterization and photocatalytic aspects in removal of amaranth dye and hydrogen evolution generation. *Optical Materials* **2022**, 128, 112331.

42- Abeer Beagan, Riyadh Alshammari, Lamya Alotaibi, Hadeel Albarrak, Khalid Alotaibi, Abdullah Alswieleh. High-Efficient Anionic Dyes Removal from Water by Cationic Polymer Brush Functionalized Magnetic Mesoporous Silica Nanoparticles. *Processes* **2022**, 10(8), 1565.