

## CURRICULUM VITAE

### PERSONAL DATA

<b>Name</b>	Algethami, Faisal Khuwayshan L
<b>Nationality</b>	Saudi
<b>Position</b>	Associate Professor of Analytical Chemistry
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### EDUCATION

<b>Year</b>	<b>Academic Degree</b>	<b>Institution</b>
July 2017	Doctor of Philosophy in Chemistry	King Abdulaziz University
April 2012	Master's Degree in Analytical Chemistry	Taif University
July 2003	Bachelor's Degree in Chemistry	Teachers College at Taif

### WORK EXPERIENCE

<b>Period</b>	<b>Position</b>	<b>Address</b>
July 2022 to present	Associate professor	Department of Chemistry, College of Science, Imam Mohammad Ibn Saud Islamic University
May 2019 to present	Chair of Chemistry Department	Department of Chemistry, College of Science, Imam Mohammad Ibn Saud Islamic University
Sept 2018 to July 2022	Assistant Professor	Department of Chemistry, College of Science, Imam Mohammad Ibn Saud Islamic University
Sept 2003 to Sept 2018	Teacher	Ministry of Education, Taif, Saudi Arabia

## RESEARCH INTERESTS

- Development of analytical methods for quantitative analysis of chemical materials, especially the pharmaceutical products.
- Design and develop new electrochemical sensors and biosensors by using nanomaterials and their uses for food safety and environment monitoring.

## PUBLICATIONS

- 1- **Faisal K. Algethami\***, Amal Rabti, Mohamed Mastouri, Sami Ben Aoun, Babiker Y. Abdulkhair, Nouredine Raouafi\*, In silico selection of an aptamer for the design of aptamer-modified magnetic beads bearing ferrocene co-immobilized label for capacitive detection of acetamiprid. *Talanta*. (2023), 258, 124445. <https://doi.org/10.1016/j.talanta.2023.124445>
- 2- Y. G. Abou El-Reash, Eslam A. Ghaith, Osama El-Awady, **Faisal K. Algethami**, Haiqing Lin, Ehab A. Abdelrahman and Fathi S. Awad. Highly fluorescent hydroxyl groups functionalized graphitic carbon nitride for ultrasensitive and selective determination of mercury ions in water and fish samples. *Journal of Analytical Science and Technology*. (2023), 14, 16. [10.1186/s40543-023-00379-0](https://doi.org/10.1186/s40543-023-00379-0)
- 3- Nezar Al-Bataineh, **Faisal K. Algethami**, Hala I. Al-Jaber, Abdulrahman G. Alhamzani, Rand M. Bataineh, Yousef Al-Dalameh, Tareq T. Bataineh, Sultan T. Abu-Orabi, and Mahmoud A. Al-Qudah. Ballota saxatilis from Jordan: Evaluation of Essential Oil Composition and Phytochemical Profiling of Crude Extracts and Their In-Vitro Antioxidant Activity. *Separations*. (2023), 10, 114. <https://doi.org/10.3390/separations10020114>
- 4- Meriem Tekaya, Hechmi Chehab, Ahlem Guesmi, **Faisal K. Algethami**, Naoufel Ben Hamadi, Mohamed Hammami and Beligh Mechri. Study of phenolic composition of olive fruits: validation of a simple and fast HPLC-UV method. *OCL*. (2022), 29, 35. <https://doi.org/10.1051/ocl/2022028>
- 5- Asma S. Al-Wasidi, Abdulrahman A. Almehizia, Ahmed M. Naglah, Hamad M. Alkahtani, **Faisal K. Algethami**, Eida S. Al-Farraj, Maram T. Basha & Ehab A. Abdelrahman. Facile synthesis and characterisation of  $Mn_{0.5}Zn_{0.5}Fe_2O_4/Fe_2O_3$  as a novel nanocomposite for studying analytical parameters affecting on photocatalytic degradation of basic fuchsin dye. *International Journal of Environmental Analytical Chemistry*. (2022). In press. [10.1080/03067319.2022.2153044](https://doi.org/10.1080/03067319.2022.2153044)
- 6- Abdulrahman A. Almehizia, Mohamed A. Al-Omar, Ahmed M. Naglah, R.M.Hegazey, Asma S. Al-Wasidi, Hanadi A. Katouah, Maram T. Basha, Reem M. Alghanmi, Abdalla M. Khedr, **Faisal K. Algethami** & Ehab A. Abdelrahman. Facile synthesis of copper carbonate/cobalt carbonate/manganese carbonate and copper oxide/cobalt manganese oxide/manganese oxide as novel nanocomposites for efficient photocatalytic degradation of crystal violet dye. *International Journal of Environmental Analytical Chemistry*. (2022), In press. [10.1080/03067319.2022.2121164](https://doi.org/10.1080/03067319.2022.2121164)
- 7- Mayssa Zayene, **Faisal K. Algethami**, Hani Nasser Abdelhamid, Mohamed R. Elamin, Babiker Y. Abdulkhair, Youssef O. Al-Ghamdi, and Hichem Ben Janet. New synthetic quinaldine conjugates: Assessment of their anti-cholinesterase, anti-tyrosinase and cytotoxic activities, and molecular docking analysis. *Arabian Journal of Chemistry*. (2022), 15, 104177. <https://doi.org/10.1016/j.arabjc.2022.104177>
- 8- **Faisal K. Algethami**, Khaled Trabelsi, Anouar Hajjaji, Mohamed B. Rabha, Lotfi Khezami, Mohamed R. Elamin, Brahim Bessais and My Ali El Khakani. Photocatalytic Activity of Silicon Nanowires Decorated with PbS Nanoparticles Deposited by Pulsed Laser Deposition for Efficient Wastewater Treatment. *Materials*. (2022), 15, 4970. <https://doi.org/10.3390/ma15144970>
- 9- Lotfi Khezami, Mohamed Ali Ben Aissa, Abueliz Modwi, Ahlem Guesmi, **Faisal K. Algethami**, and Mohamed Bououdina. Efficient removal of organic dyes by Cr-doped ZnO nanoparticles. *Biomass*

*Conversion and Biorefinery.* (2022), 15. <https://doi.org/10.1007/s13399-022-02952-w>

- 10- **Faisal K. Algethami**, Ilyes Saidi, Hichem Ben Jannet, M. Khairy, Babiker Y. Abdulkhair, Youssef O. Al-Ghamdi, and Hani Nasser Abdelhamid. Chitosan-CdS Quantum Dots Biohybrid for Highly Selective Interaction with Copper (II) Ions. *ACS Omega.* (2022), 7 (24), 21014 – 21024. <https://doi.org/10.1021/acsomega.2c01793>
- 11- Lotfi Khezami, **Mohamed** Ali Ben Aissa, Abueliz Modwi, Mukhtar Ismail, Ahlem Guesmi, **Faisal K. Algethami**, Manel Ben Ticha, Aymen Amine Assadi, and Phuong Nguyen-Tri. Harmonizing the photocatalytic activity of g-C<sub>3</sub>N<sub>4</sub> nanosheets by ZrO<sub>2</sub> stuffing: From fabrication to experimental study for the wastewater treatment. *Biochemical Engineering Journal.* (2022), 182, 108411. <https://doi.org/10.1016/j.bej.2022.108411>
- 12- A. Modwi, L. Khezami, M.G. Ghoniem, P. Nguyen-Tri, O. Baaloudj, A. Guesmi, **F. K. Algethami**, M.S. Amer, and A.A. Assadi. Superior removal of dyes by mesoporous MgO/g-C<sub>3</sub>N<sub>4</sub> fabricated through ultrasound method: Adsorption mechanism and process modeling. *Environmental Research.* (2022), 205, 112543. <https://doi.org/10.1016/j.envres.2021.112543>
- 13- **Faisal K. Algethami**, Salma Jlizi, Mansour Znati, Naoufel Ben Hamadi, Anis Romdhane, Mohamed R. Elamin, Lotfi Khezami, and Hichem Ben Jannet. Design and Synthesis of new quinoline linked to Pyranotriazolopyrimidines conjugates as novel targets to discover promising Anti-SARS-COV-2. *Heterocycles.* (2022), 104(2), 288-309. [DOI: 10.3987/COM-21-14573](https://doi.org/10.3987/COM-21-14573)
- 14- **Faisal K. Algethami**, Maher Cherif, Salma Jlizi, Naoufel Ben Hamadi, Anis Romdhane, Mohamed R. Elamin, Mashael A. Alghamdi, and Hichem Ben Jannet. Design, Microwave-Assisted Synthesis and In Silico Prediction Study of Novel Isoxazole Linked Pyranopyrimidinone Conjugates as New Targets for Searching Potential Anti-SARS-CoV-2 Agents. *Molecules.* (2021), 26, 6103. <https://doi.org/10.3390/molecules26206103>
- 15- Oussama Baaloudj, Nouredine Nasrallah, Hamza Kenfoud, **Faisal Algethami**, Abueliz Modwi, Ahlem Guesmi, Aymen Amine Assadi, and Lotfi Khezami. Application of Bi<sub>12</sub>ZnO<sub>20</sub> Sillenite as an efficient Photocatalyst for Wastewater Treatment: Removal of Both Organic and Inorganic Compounds. *Materials.* (2021), 14, 5409. <https://doi.org/10.3390/ma14185409>
- 16- **Faisal K. Algethami**, Ilyes Saidi, Hani Nasser Abdelhamid, Mohamed R. Elamin, Babiker Y. Abdulkhair, Amani Chrouda, and Hichem Ben Jannet. Trifluoromethylated Flavonoid-Based Isoxazoles as Antidiabetic and Anti-Obesity Agents: Synthesis, In Vitro  $\alpha$ -Amylase Inhibitory Activity, Molecular Docking and Structure–Activity Relationship Analysis. *Molecules.* (2021), 26, 5214. <https://doi.org/10.3390/molecules26175214>
- 17- **Faisal K. Algethami**. An Internal Standard High-Performance Liquid Chromatography Method for Simultaneous Quantification of Candesartan and Hydrochlorothiazide in Combined Formulations. *ORIENTAL JOURNAL OF CHEMISTRY.* (2021), 37(5), 1077-1082. <http://dx.doi.org/10.13005/ojc/370509>
- 18- **Faisal K. Algethami**, Mohamed R. Elamin, Babiker Y. Abdulkhair, Mohammed Al-Zharani, Nagib A. S. Qarah, and Mashael A. Alghamdi. Fast fabrication of bismuth oxyiodide/carbon-nanofibers composites for efficient anti-proliferation of liver and breast cancer cells. *Zeitschrift für anorganische und allgemeine Chemie.* (2021), 647(19), 1921-1929. <https://doi.org/10.1002/zaac.202100205>
- 19- **F. K. Algethamia**, M. R. Elamina, and B. Y. Abdulkhair. Simple preparation of a sunshine-like bismuth oxyiodide nanosheets for photocatalytic degradation of organic pollutant under sunlight. *Journal of Optoelectronic and Biomedical Materials.* (2021), 13(2), 57-65.
- 20- **Faisal K. Algethami**, Hanadi A. Katouah, Mohamed A. Al-Omar, Abdulrahman A. Almehizia, Abd El-Galil E. Amr, Ahmed M. Naglah, Nasser S. Al-Shaklah, Mohammed E. Fetoh, and Hany M. Youssef. Facile Synthesis

of Magnesium Oxide Nanoparticles for Studying Their Photocatalytic Activities Against Orange G Dye and Biological Activities Against Some Bacterial and Fungal Strains. *Journal of Inorganic and Organometallic Polymers and Materials*. (2021), 31(5), 2150-2160. <https://doi.org/10.1007/s10904-021-01920-7>

- 21- Mohamed R. Elamin, Babiker Y. Abdulkhair, **Faisal K. Algethami**, and L. Khezami. Linear and nonlinear investigations for the adsorption of paracetamol and metformin from water on acid-treated clay. *Scientific Reports*. (2021), 11(1), 13606. <https://doi.org/10.1038/s41598-021-93040-y>
- 22- Abualiz Modwi, Abdullah S. Al-Ayed, Damra E. Mustafa, Abdulaziz A. Bagabas, M. R. Elamin, **Faisal K. Algethami**, Rasheed Arasheed, Mohammed Q. Alfaifi, Ali Alqarni, Fayeز Alotaibi, and Kamal K. Taha. Ultrasound-assisted green biosynthesis of ZnO nanoparticles and their photocatalytic application. *ZEITSCHRIFT FÜR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES*. (2021), 76(6), 535-547. <https://doi.org/10.1515/zna-2021-0009>
- 23- S.A.M. Abdulrahman, F.K. Algethami, N.A.S. Qarah, K. Basavaiah, and E. El-Maaiden. Development of non-aqueous titrimetric and spectrophotometric methods for the determination of valganciclovir hydrochloride in bulk drug and tablets. *Annales Pharmaceutiques Françaises*. (2021), 79(5), 489-499. <https://doi.org/10.1016/j.pharma.2021.01.010>
- 24- Ahmed Alharbi, Reem K. Shah, Ali Sayqal, Abdu Subaihi, Ahmad A. Alluhaybi, **Faisal K. Algethami**, Ahmed M. Naglah, Abdulrahman A. Almehizia, Hanadi A. Katouah, and Hany M. Youssef. Facile synthesis of novel zinc sulfide/chitosan composite for efficient photocatalytic degradation of acid brown 5G and acid black 2BNG dyes. *Alexandria Engineering Journal*. (2021), 60(2), 2167-2178. <https://doi.org/10.1016/j.aej.2020.12.025>
- 25- Ahmed Alharbi, Reem K. Shah, Ali Sayqal, Zainy A. Alshikh, **Faisal K. Algethami**, Ahmed M. Naglah, Abdulrahman A. Almehizia, and Hany M. Youssef. Facile hydrothermal synthesis of glutamine-assisted tin oxide nanorods for efficient photocatalytic degradation of crystal violet dye. *International Journal of Environmental Analytical Chemistry*. (2020). <https://doi.org/10.1080/03067319.2020.1836172>
- 26- Hany M. Youssef, Reem K. Shah, **Faisal K. Algethami**, R. M. Hegazey, Ahmed M. Naglah, Mohamed A. Al-Omar, Ahmad A. Alluhaybi, Hatim A. Alherbish, E. M. Mabrouk, and Ehab A. Abdelrahman. Facile Hydrothermal Procedure for the Synthesis of Sodium Aluminum Silicate Hydrate/Analcime and Analcime for Effective Removal of Manganese (II) Ions from Aqueous Solutions. *Journal of Inorganic and Organometallic Polymers and Materials*. (2020), 31(3), 1035-1046. <https://doi.org/10.1007/s10904-020-01699-z>
- 27- Abdu Subaihi, Moataz Morad, Ahmed M. Hameed, Ahmed Alharbi, Y. G. Abou El-Reash, **Faisal K. Algethami**, R. M. Hegazey, and Ehab A. Abdelrahman. Studying some analytical parameters affecting the removal of Mn (II) ions from aqueous media using facilely synthesised analcime. *International Journal of Environmental Analytical Chemistry*. (2020). <https://doi.org/10.1080/03067319.2020.1750608>
- 28- Ehab A. Abdelrahman, Ahmed Alharbi, Abdu Subaihi, Ahmed M. Hameed, Mohammed A. Almutairi, **Faisal K. Algethami**, and Hany M. Youssef. Facile fabrication of novel analcime/sodium aluminum silicate hydrate and zeolite Y/faujasite mesoporous nanocomposites for efficient removal of Cu (II) and Pb (II) ions from aqueous media. *Journal of Materials Research and Technology-JMR&T*. (2020), 9(4), 7900-7914. <https://doi.org/10.1016/j.jmrt.2020.05.052>
- 29- Mahjoub Jabli, Youssef O. Al-Ghamdi, Nouha Sebeia, Sami G. Almalki, Wael Alturaiki, Jamal M. Khaled, Ayman S. Mubarak, and **Faisal K. Algethami**. Green synthesis of colloid metal oxide nanoparticles using *Cynomorium coccineum*: Application for printing cotton and evaluation of the antimicrobial activities. *Materials Chemistry and Physics*. (2020), 249, 123171. <https://doi.org/10.1016/j.matchemphys.2020.123171>

- 30- Ahmed M. Hameed, Ahmed Alharbi, Ehab A. Abdelrahman, E. M. Mabrouk, R. M. Hegazey, **Faisal K. Algethami**, Youssef O. Al-Ghamdi, and Hany M. Youssef. Facile Hydrothermal Fabrication of Analcime and Zeolite X for Efficient Removal of Cd (II) Ions from Aqueous Media and Polluted Water. *Journal of Inorganic and Organometallic Polymers and Materials*. (2020), 30(10), 4117-4128. <https://doi.org/10.1007/s10904-020-01565-y>
- 31- Amani Chrouda, Khouala Zinoubi, Raya Soltane, Noof Alzahrani, Gamal Osman, Youssef O. Al-Ghamdi, Sameer Qari, Albandary Al Mahri, **Faisal K. Algethami**, Hatem Majdoub, and Nicole Jaffrezic Renault. An Acetylcholinesterase Inhibition-Based Biosensor for Aflatoxin B1 Detection Using Sodium Alginate as an Immobilization Matrix. *Toxins*. (2020), 12(3), 173. <https://doi.org/10.3390/toxins12030173>
- 32- Abdullah Nawaz, Waseem Raza, Hajera Gul, Abdullah Khan Durrani, **Faisal K. Algethami**, Christian Sonne, and Ki-Hyun Kim. Upscaling feasibility of a graphite-based truncated conical microbial fuel cell for bioelectrogenesis through organic wastewater treatment. *Journal of Colloid and Interface Science*. (2020), 570, 99-108. <https://doi.org/10.1016/j.jcis.2020.02.099>
- 33- Ehab F. Elkady, Asmaa A. Mandour, **Faisal K. Algethami**, Ahmed A. Aboelwafa, and Faten Farouk. Sequential liquid-liquid extraction coupled to LC-MS/MS for simultaneous determination of amlodipine, olmesartan and hydrochlorothiazide in plasma samples: Application to pharmacokinetic studies. *Microchemical Journal*. (2020), 155, 104757. <https://doi.org/10.1016/j.microc.2020.104757>
- 34- **Faisal K. Algethami**, Sherif M. Eid, Khadiga M. Kelani, Mohamed R. Elghobashy and Mohamed K. Abd El-Rahman. Chemical fingerprinting and quantitative monitoring of the doping drugs bambuterol and terbutaline in human urine samples using ATR-FTIR coupled with a PLSR chemometric tool. *RSC Advances*. (2020), 10(12), 7146-7154. <https://doi.org/10.1039/C9RA10033D>
- 35- A. B. Jemai, A. Mannai, L. Khezami, S. Mokraoui, **Faisal K. Algethami**, A. Al-Ghyamah, and M. Ben Rabha. Aluminum Nanoparticles Passivation of Multi-Crystalline Silicon Nanostructure for Solar Cells Applications. *Silicon*. (2020), 12(11), 2755-2760. <https://doi.org/10.1007/s12633-019-00368-2>
- 36- Nagib A. S. Qarah, Sameer A. M. Abdulrahman, **Faisal K. Algethami**, Kanakapura Basavaiah, and Ezzouhra El-Maaiden. New applications for amoxicillin determination in pure form and pharmaceuticals based on iodate-iodide mixture: titrimetry and spectroscopy studies. *Quimica Nova*. (2019), 43(1), 44-49. <http://dx.doi.org/10.21577/0100-4042.20170455>
- 37- Kamal K. Taha, A. Modwi, M.R. Elamin, Rasheed Arasheed, Ahmed J. AL-Fahad, Ibrahim Albutairi, Haza'a Arasheed, Muhamad Alfaify, Khalid Anojaidi, **Faisal K. Algethami**, and A. Bagabas. Impact of Hibiscus extract on the structural and activity of sonochemically fabricated ZnO nanoparticles. *Journal of Photochemistry & Photobiology A: Chemistry*. (2019), 390, 112263. <https://doi.org/10.1016/j.jphotochem.2019.112263>
- 38- **Faisal K. Algethami**, Hadi M. Marwani, Abdullah M. Asiri, and Mohammed M. Rahman. Comparative performances of phenolic sensors based on various CeO<sub>2</sub>-carbon material nanocomposites for environmental safety. *Sensor Review*. (2018), 38(4), 467-477. <https://doi.org/10.1108/SR-11-2017-0235>
- 39- Mohammed M. Rahman, Hadi M. Marwani, **Faisal K. Algethami**, and Abdullah M. Asiri. Xanthine sensor development based on ZnO-CNT, ZnO-CB, ZnO-GO and ZnO nanoparticles: an electrochemical approach. *NEW JOURNAL OF CHEMISTRY*. (2017), 41(14), 6262-6271. <https://doi.org/10.1039/C7NJ00278E>