

## CURRICULUM VITAE

**Prof. Mohamed Rahmtalla Elamin Abuzaid**

### PERSONAL DATA

<b>Name</b>	<b>Mohamed Rahmtalla Elamin Abuzaid</b>
<b>Nationality</b>	Sudanese
<b>Position</b>	Staff member
<b>E-Mail</b>	mrabuzaid@imamu.edu.sa
<b>Phone</b>	00966507984498

### EDUCATION

<b>Year</b>	<b>Academic Degree</b>	<b>Institution</b>
1986	BSc. Honors, Chemistry	University of Khartoum
1995	MSc. Analytical Chemistry	University of Khartoum
2009	PhD. In Analytical Chemistry	University of Sudan for Science and Technology

### WORK EXPERIENCE

<b>Period</b>	<b>Position</b>	<b>Address</b>
2013- up-to-date	Staff Member	Imam Mohammad Ibn Saud Islamic University, College of Science- Chemistry Department, Riyadh, KSA
2012 - 2013	Administrative and financial manager	Industrial research and consultancy center. Sudan
2012-2009	Head of Chemical Industries Research Department,	IRCC, M. of Sc. And Technology. Sudan
2007 – 2013	Part-time Lecturer of General Chemistry, Atomic and Molecular Spectroscopy,	Faculty of Hygiene and Health Science, University of Khartoum, Sudan. And Faculty of Science, Sudan University of Science and Technology.

## RESEARCH INTERESTS

**analytical and environmental chemistry fields**, in addition to synthesis, characterization and applications of nanomaterials. Development of Mineral resources, conduction of applied research, analysis, ore estimation, and extraction on laboratory and pilot scales.

## PUBLICATIONS

### Patents:

1- Babiker Yagoub and Mohamed Rahmtalla Elamin, 2023, **METHOD OF FABRICATING METAL OXIDE ANOMATERIALS USING A THERMALLY DECOMPOSABLE SOLID SUBSTRATE**. United States Patent, 28-11-2023. US Patent No. 11,827525, BI

### Publications:

1-Saad Aldoihi, Abdulrahman Mallah, Abdullah H Alluhayb, Mohamed R Elamin, Nuha Y Elamin, Laila S Alqarni, Mohamed Ali Ben Aissa, Abueliz Modwi. [Utilization of efficient Al<sub>2</sub>O<sub>3</sub>@ g-C<sub>3</sub>N<sub>4</sub> nano sorbent for eliminated Ni \(II\) ions from polluted water](#), Journal of Science: Advanced Materials and Devices 9 (3), 100742.

2- Mohamed R Elamin, Nuha Y Elamin, Abdullah H Alluhayb, Kamal K Taha, Mohamed Ali Ben Aissa, Abdulrahman Mallah, Abueliz Modwi, [Efficient NiFe<sub>2</sub>O<sub>4</sub>@ g-C<sub>3</sub>N<sub>4</sub> Nanosorbent for Oxytetracycline Adsorption: Removal Modeling and Selectivity](#) , Journal of Electronic Materials, 1-17

3- Heba E Saad, Gaber M Abu El-Reash, Mohamed A Hashem, Yasmeen G Abou El-Reash, Nuha Y Elamin, Mohamed R Elamin, Yusif S El-Sayed, A novel isatin Schiff based cerium complex: synthesis, characterization, antimicrobial activity and molecular docking studies, 2024, BMC genomics, vol. 25, 1, pp. 1-10

4- MR Elamin, BY Abdulkhair, NY Elamin, A Albadri, M Ismail, R Bakheit, ... , Ru@ Co<sub>3</sub>O<sub>4</sub>@ g-C<sub>3</sub>N<sub>4</sub> as a Novel Adsorbent for Enhanced Copper and Cadmium Abolition, 2024, Journal of Science: Advanced Materials and Devices, 100725,

5- FK Algethami, M Mastouri, A Rabti, S Ben Aoun, S El Ghoul, A Mosbah, ...2024, Detection of Ochratoxin A Mycotoxin with Graphene Nanosheets Functionalized with Selective Peptides Using Molecular Dynamics, 2024, Arabian Journal for Science and Engineering, 1-12

6- FK Algethami, S Jlizi, M Znati, MR Elamin, N Ben Hamadi, H Ben Jannet,2024, Phytochemistry and Biological Assessment of Thuja articulata Trunk Barks: HPLC-PDA-ESI-MS Analysis, Bioevaluation, and Molecular Docking, 2024, Current Bioactive Compounds 20 (3), 83-92.

7- MR Elamin, NY Elamin, KK Taha, A Modwi, 2024, Fabrication of ternary Co<sub>3</sub>O<sub>4</sub>@ β-Bi<sub>2</sub>O<sub>3</sub>@ g-C<sub>3</sub>N<sub>4</sub> nanosorbent for efficacy Basic Fuchsin (BF) dye decontamination. 2024, Inorganic Chemistry Communications 159, 111840

- 8- MR Elamin, NY Elamin, KK Taha, A Modwi , 2023, [Fabrication of ternary Co<sub>3</sub>O<sub>4</sub>@ β-Bi<sub>2</sub>O<sub>3</sub>@ g-C<sub>3</sub>N<sub>4</sub> nanosorbent for efficacy Basic Fuchsin \(BF\) dye decontamination](#), , *Inorganic Chemistry Communications*, 111840.
- 9- FK Algethami, A Rabti, M Mastouri, S Ben Aoun, LS Alqarni, MR Elamin, ...2023, [Sub-femtomolar capacitance-based biosensing of kanamycin using screen-printed electrodes coated with redox-active polymeric films](#),...*Microchimica Acta* 190 (11), 434
- 10 -Mohamed R. Elamin <sup>a</sup>, Babiker Y. Abdulkhair <sup>a b</sup>, Abueliz Modwi <sup>c</sup>, Nuha Y. Elamin, 2023, Surfactants enhanced short durations synthesis of bismuth oxyiodide quantum dots. *Inorganic Chemistry Communications*, Volume 157, November 2023, 111450
- 11- Faisal K. Algethami, Mayssa Ben Mustapha, Mohamed R. Elamin, Babiker Y. Abdulkhair & Hichem Ben Jannet (11 Sep 2023): Biotransformation of isocostic acid from *Ditrichia viscosa* essential oil by *Saccharomyces cerevisiae*: in vitro anti-tyrosinase effect, insights from molecular docking and drug-likeness prediction, *Plant Biosystems - An International Journal Dealing with all Aspects of Plant Biology*, DOI: 10.1080/11263504.2023.2257703.
- 12- Mohamed R Elamin, Tarek A Yousef, Amin O Elzupir, 2023, Insight into Tyrosine-Containing Pharmaceuticals as Potential Inhibitors of SARS-CoV-2 3CL<sup>pro</sup> and NSP16: Structural Analysis, Docking Studies, Molecular Dynamics Simulations, and Density Functional Theory Investigations. *Chemistry* 2023, 5(2), 762-777; <https://doi.org/10.3390/chemistry5020054>.
- 13- ELAMIN, MOHAMED R.; ALMAHMOUD, SONDOS ABDULLAH J.; YOUSEF, TAREK A.; FARH, IBRAHIM K.; IDRIS, HAJO; ELZUPIR, AMIN OSMAN. 2023, Synthesis and Design of novel morpholinyl mannich bases for Potential Inhibitory Activity of SARS-CoV-2 Main Protease. *Oriental Journal of Chemistry* . 2023, Vol. 39 Issue 2, p284-289. 6p.
- 14- Mayssa Ben Mustapha, Faisal K. Algethami, Mohamed R. Elamin, Babiker Y. Abdulkhair, Ikbaleh Chaieb, Hichem Ben Jannet, .2023, Chemical Composition, Toxicity and Repellency of *Inula graveolens* Essential Oils from Roots and Aerial Parts against Stored-Product Beetle *Tribolium castaneum* (Herbst). *Chemistry and biodiversity*, Volume 20, Issue 3, March 2023, e202200978
- 15 -Mohamed R. Elamin <sup>a b</sup>, Babiker Y. Abdulkhair <sup>a c</sup>, Amin O. Elzupir <sup>d</sup>, 2023, Removal of ciprofloxacin and indigo carmine from water by carbon nanotubes fabricated from a low-cost precursor: Solution parameters and recyclability. *Ain Shams Engineering Journal* Volume 14, Issue 1, February 2023, 101844.
- 16-Elamin, M.R.; Abdulkhair, B.Y.; Elamin, N.Y.; Ibnaouf, K.H.; Idriss, H.; Bakheit, R.; Modwi, A. Application of Synthesized Vanadium–Titanium Oxide Nanocomposite to Eliminate Rhodamine-B Dye from Aqueous Medium. *Molecules* 2023, 28, 176. <https://doi.org/10.3390/molecules28010176>.
- 17- Modwi, A.; Elamin, M.R.; Idriss, H.; Elamin, N.Y.; Adam, F.A.; Albadri, A.E.; Abdulkhair, B.Y. Excellent Adsorption of Dyes via MgTiO<sub>3</sub>@g-C<sub>3</sub>N<sub>4</sub> Nanohybrid: Construction, Description and Adsorption Mechanism. *Inorganics* 2022, 10, 210. <https://doi.org/10.3390/inorganics10110210>.
- 18- Mayssa Zayene, Faisal K. Algethami, Hani Nasser Abdelhamid, Mohamed R. Elamin, Babiker Y. Abdulkhair, Youssef O. Al-Ghamdi, Hichem Ben Jannet, .2023. New synthetic quinaldine conjugates: Assessment of their anti-cholinesterase, anti-tyrosinase and cytotoxic activities, and molecular docking analysis, *Arabian Journal of Chemistry*, Volume 15, Issue 11, 2022,
- 19- Abdulkhair, B.Y.; Elamin, M.R. Low-Cost Carbon Nanoparticles for Removing Hazardous Organic Pollutants from Water: Complete Remediation Study and Multi-Use Investigation. *Inorganics* 2022, 10, 136. <https://doi.org/10.3390/inorganics10090136>.

- 20-** Ghoniem, M.G.; Ali, F.A.M.; Abdulkhair, B.Y.; Elamin, M.R.A.; Alqahtani, A.M.; Rahali, S.; Ben Aissa, M.A. Highly Selective Removal of Cationic Dyes from Wastewater by MgO Nanorods. *Nanomaterials* 2022, 12, 1023. <https://doi.org/10.3390/nano12061023>,
- 21-** Faisal K. Algethami, Salma Jlizi, Mansour Znati, Naoufel Ben Hamadi, Anis Romdhane, Mohamed R. Elamin, Lotfi Khezami, Hichem Ben Jannet, DESIGN AND SYNTHESIS OF NEW QUINOLINE LINKED TO PYRANOTRIAZOLOPYRIMIDINES CONJUGATES AS NOVEL TARGETS TO DISCOVER PROMISING ANTI-SARS-COV-2 Heterocycles : an international journal for reviews and communications in heterocyclic chemistry 104 (2), 288-309, 2022-02-01. Japan Institute of Heterocyclic Chemistry.
- 22-** Fatima A. Adam,\*a M. G. Ghoniem,a Moussa Diawara,b Seyfeddine Rahali, \*c Babiker Y. Abdulkhair,a M. R. Elamin,a Mohamed Ali Ben Aissa\*c and Mahamadou Seydou, 2022, Enhanced adsorptive removal of indigo carmine dye by bismuth oxide doped MgO based adsorbents from aqueous solution: equilibrium, kinetic and computational studies . *RSC Adv.*, 2022, 12, 24786.
- 23-** Algethami, F.K.; Trabelsi, K.; Hajjaji, A.; Rabha, M.B.; Khezami, L.; Elamin, M.R.; Bessais, B.; El Khakani, M.A. 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>.
- 24-** Algethami, F.K.; Cherif, M.; Jlizi, S.; Ben Hamadi, N.; Romdhane, A.; Elamin, M.R.; Alghamdi, M.A.; Ben Jannet, H. 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>.
- 25-** M. R. Elamin B. Y. Abdulkhair F. K. Algethami. Simple preparation of a sunshine -like bismuth oxyiodide nanosheets for photocatalytic degradation of organic pollutant under sunlight. *Journal of Optoelectronic and Biomedical Materials*, Volume 13, Issue 2, Pages 57- 65.
- 26-** Faisal K. Algethami<sup>1,\*</sup>, Ilyes Saidi<sup>2</sup>, Hani Nasser Abdelhamid, Mohamed R. Elamin<sup>1</sup>, Babiker Y. Abdulkhair, Amani Chrouda<sup>4</sup> and Hichem Ben Jannet , Trifluoromethylated Flavonoid-Based Isoxazoles as Anti Diabetic and Anti-Obesity Agents: Synthesis, In Vitro,  $\alpha$ -Amylase Inhibitory Activity, Molecular Docking and Structure–Activity Relationship Analysis, . *Molecules* 2021, 26, x. <https://doi.org/10.3390>
- 27-** Mohamed R. Elamin, Babiker Y. Abdulkhair, Faisal K. Algethami & L. Khezami. , 2021, Linear and nonlinear investigations for the adsorption of paracetamol and metformin from water on acid-treated clay. 2021, *NATURE ,SCIENTIFIC REPORTS*. <https://doi.org/10.1038/s41598-021-93040-y>
- 28-** Faisal K. Algethami, Mohamed R. Elamin , Babiker Y. Abdulkhair, Mohammed Al-Zharani, Nagib A. S. Qarah, and Masha'el A. Alghamdi , Fast fabrication of bismuth oxyiodide/carbon-nanofibers composites for efficient anti-proliferation of liver and breast cancer cells 2021,. *Z. Anorg. Allg. Chem.* 2021, 647, 1–10 <https://doi.org/10.1007/s00033-021-01600-0>
- 29-** Mohamed R. Elamin a,b, Amin O. Elzupir c, Babiker Y. Abdulkhair , Synthesis and characterization of functionalized carbon nanofibers for efficient removal of highly water-soluble dextromethorphan and guaifenesin from environmental water samples. *Environmental Nanotechnology, Monitoring & Management* 15 (2021) 100397
- 30-** 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,

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- 32-** B. Y. ABDULKHAIR M. R. ELAMIN, A. O. ELZUPIR. 2019, COMPREHENSION TO DEXTROMETHORPHAN AND GUAIFENESIN ANTIBIOTICS ADSORPTION ON ACTIVATED CHARCOAL FROM WATER: KINETICS, THERMODYNAMICS, AND SOLUTION PARAMETERS. Journal of Optoelectronic and Biomedical Materials. vol. 11, issue 2
- 33-** M. R. Elamin, Kamal K. Taha, Babiker Y. Abdulkhair and L. Khezami. (2018) Preparation of Large Carbon Nanofibers on a Stainless Steel Surface and Elucidation of their Growth Mechanisms, De gruyter, Z. Naturforsch, Vol. 74, Issue 3.
- 34-** Kamal K. Taha· M. R. Elamin · Babiker Y. Abdulkhair. . 2018. In situ non-catalyst synthesis of multiwall carbon nanotubes and nanofibers on commercial stainless steel cylinder. Journal of Porous Materials. Vol.26. issue 2.
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- 38-** Abubaker Tajelsir Osman, Mohamed Rahmtalla Elamin and Mohammed Hassan Almalki , 2017· Treatment of Tannery Wastewater with Nano -Electrocoagulation Process. Journal of Environmental & Analytical Toxicology. J Environ Anal Toxicol 2017, 7:5 DOI: [10.4172/2161-0525.1000508](https://doi.org/10.4172/2161-0525.1000508)
- 39-** K. T. Kamal, K. Lotfi , K. D. Omar, R. E. Mohamed, K. M. Abu Eliz and H. Nassir, (2015). Heavy Metals Concentrations in Fish from Red Sea and Arabian Gulf: Health Benefits and Risk Assessments Due to their Consumption. (2015) , Asian Journal of Chemistry, Vol. 27 , No. 12 (2015), 4411-4416.
- 40-** El-Nagerabi S A F, Elshafie A E and Elamin M R. 2014. 11- Efficacy of Balanites aegyptiaca and Olea europaea Essential Oils on the Growth and Production of Aflatoxin by Aflatoxigenic Fungi Aspergilli Species.. Journal of Experimental Biology and Agricultural Sciences, April - 2014; Volume – 2(2).
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- 42-** Saifeldin A. F. El-Nagerabi, Abdulkadir E. Elshafie, Suleiman S. AlKhanjari, Saif N. Al-Bahry & Mohamed R. Elamin . 2013. The Potential of Baobab (Adansonia digitata L.) Extracts as Biocontrol on the Growth and Aflatoxin Production by Aspergillus flavus and A. parasiticus, , Received: April 9, 2013 Accepted: May 12,

2013 Online Published: May 16, 2013 doi:10.5539/jfr.v2n3p93 URL:

<http://dx.doi.org/10.5539/jfr.v2n3p93> Abstract, Journal of Food Research; Vol. 2, No. 3; 2013 ISSN 1927-0887 E-ISSN 1927-0895, Published by Canadian Center of Science and Education.

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**44-** Saifeldin A. F. El-Nagerabi, Abdulkadir E. Elshafie & Mohamed R. Elamin . 2013. In Vitro Activity of Balanites aegyptiaca and Tamarindus indica Fruit Extracts on Growth and Aflatoxigenicity of Aspergillus flavus and A.parasiticus. *Journal of Food Research*; Vol. 2, No. 4; 2013 ,ISSN 1927-0887 E-ISSN 1927-0895. Published by Canadian Center of Science and Education.

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