

Curriculum Vitae

Personal Information:

Name: Munirah Dukhi Albaqami

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Employment History:

- Assistant Professor of Physical Chemistry, Chemistry Department, College of Science college, King Saud University, Riyadh, Saudi Arabia. (2018- Present)
- Lecturer, Chemistry Department, College of Science, King Saud University, Riyadh, Saudi Arabia (2009-2017).
- Teaching Assistant, Chemistry Department, College of Science, King Saud University, Riyadh, Saudi Arabia (2007-2009).

Qualification:

- PhD of Physical Chemistry from University of Leicester.
- Master of Physical Chemistry from King Saud University.
- Bachelor of Chemistry from King Saud University,

Title of Master's theses: (Solvent Effects on the Kinetics of Aquation of Bromo Pentaamine cobalt(III) Penta chlorate Complex in mixed Aqueous Solvent).

Title of PhD's thesis: (Photoionization and infrared laser spectroscopy of molecular complexes: the transition from the molecular to the nanoscale)

Activities:

- Public Relations and Community Partnership Committee, Chemistry Department, King Saud University, Riyadh, Saudi Arabia, (Member 2019-2020)
- Investment Committee, college of science, King Saud University, Riyadh, Saudi Arabia, (Member 2019-2020)
- Statistics Committee, Chemistry Department, King Saud University, Riyadh, Saudi Arabia, (Member until now)
- Development and Quality Committee, Chemistry Department, King Saud University, Riyadh, Saudi Arabia, (Member until now)
- Public Relations and Community Partnership Committee, Chemistry Department, King Saud University, Riyadh, Saudi Arabia, (Coordinator 2020-until now)
- Coordinator of courses at Common First Year, college of science, King Saud University, Riyadh, Saudi Arabia, (2021)

- Supervisor of a number of research projects for undergraduates students
- Examiner for a number of undergraduate students' projects research
- Supervisor of master students
- Examiner for thesis of master student

Certificates:

- Training on how to write a scientific paper - certificate from training and developing centre, Girls College, Riyadh, Saudi Arabia
- Training on developing creative skills , King Saudi University, Riyadh, Saudi Arabia
- Training on The Top Tips & Tricks Most ChemDraw Users Don't Know (14 April 2021), Certificate from Deanship of Skills Development, King Saudi University
- Training course on Lab. Quality management system ISO/IEC 17025:2017 (24-27 January 2021), Certificate from Saudi Chemical Society and Advanced Materials Research Chair
- Training on Quality Assurance and Quality Control in Chemical Laboratory (28 February–3 March 2021), Certificate from Saudi Chemical Society and Advanced Materials Research Chair
- Training course on Basic Statistical Analysis in Chemical Testing (22-24 February 2021), Certificate from Saudi Chemical Society and Advanced Materials Research Chair
- Training course on Measurement Uncertainty in Chemical Analysis (15-16 February 2021), Certificate from Saudi Chemical Society and Advanced Materials Research Chair
- Completion of 'e-Learning Practitioner Program, (29/11-12/12/2021), Certificate from Deanship of Skills Development, King Saudi University, Riyadh, Saudi Arabia
- Training course on Scientific publishing in international journals ISI (3 March 2021), Certificate from Deanship of Skills Development, King Saudi University, Riyadh, Saudi Arabia
- Training course on Psychological First Aid (2 March 2021), Certificate from Deanship of Skills Development, King Saudi University, Riyadh, Saudi Arabia

Skills:

- Teaching experience
- Writing and presenting articles (orals and posters) in several conferences
- Participating in workshop (presenter and organizer)

Computer skills:

- Microsoft word, PowerPoint, excels.
- Some knowledge of Photoshop programs.
- Originlab
- Matlab
- Solidworks
- Some knowledge of Pov ray
- Adobe illustrator

Computational hardware and set up

- Gaussian 03 and 09 computational packages
- GaussView 03 and GaussView 05
- CHEMCRAFT
- MOLDEN

Membership of Scientific Associations

- Member of the Saudi Chemical Association.
- Member of the Royal Society of Chemistry.
- Member of American Chemical Society

Conference and seminars attended:

- Attendance the first workshop on Nano Research at Universities.
- Attendance of a workshop on: "Quality and its applications in higher education institutions" organized by the Deanship of Quality King Saud University, took place at the departments of science and medical studies.
- Attendance of a meeting cluster - University of Oxford, the UK
- Attendance of Midlands Universities Group Symposium meeting -University of WARWICK, the UK
- Attendance of annual northern university meeting of chemical physics - University of York, the UK
- Annual meeting of the Spectroscopy and Dynamics special interest group of the Royal Society of Chemistry.
- Attendance of a seminar on: Design, development and applications of catalytic phosphorus- based reactions- University of Leicester, the UK
- Attendance of a seminar on: Structure and Fragment Based Drug From Soluble Enzymes to Membrane Design Bound Receptors- University of Leicester, the UK
- Attendance of a seminar on: Quantifying the anthropogenic contributions to past and future changes in surface ozone- University of Leicester, the UK
- Attendance of a seminar on: Getting to grips with anisotropy in lanthanide molecular nanomagnets- University of Leicester, the UK
- Attendance of a seminar on: The Amination of C-H Bonds by RutheniumPorphyrin Catalysed Nitrene Transfer Reaction. A Synthetic and Mechanistic Investigation- University of Leicester, the UK
- Attendance of a seminar on: New catalytic methods for heteroaromatic chemistry- University of Leicester, the UK
- Attendance of a seminar on: Adventures in Non-chemistry from self-assembly protein surface recognition- University of Leicester, the UK
- Attendance of a seminar on: How metal works-let Me compute the ways- University of Leicester, the UK
- Attendance of a conference-Scientific Data and Springer Nature on: Better Science

- through Better Data 2017, London, the UK
- Attendance of a meeting on: From Spectral Data to Chemical Knowledge University of Bath, the UK
- Attendance of a conference-Scientific Data and Springer Nature on: Better Science through Better Data 2019, London, the UK

Presentations and posters given

- Oral presentation, Chemistry department - University of Leicester, the UK: the title of my talk is '*Photoionization and infrared laser spectroscopy of molecular clusters.*'
- Oral presentation, Chemistry department- University of Leicester, the UK: the title of my talk is '*Solvation of alkali and alkaline earth metals by ammonia: a combined experimental and theoretical study.*'
- Eighth Saudi Students Conference, London, the UK: the title of my poster is '*Photoionization of $\text{Ca}(\text{NH}_3)_n$ and $\text{Sr}(\text{NH}_3)_n$ complexes.*'
- SDGM, 2015-Spectroscopy and Dynamics Group (SDG) meeting-Royal Society of Chemistry, the University of Nottingham, the UK: the title of my poster is '*Solvation of Alkaline earth metal-ammonia cluster : combined experimental and theoretical study*'
- SDGM 2016-Spectroscopy and Dynamics Group (SDG) meeting, The University of Warwick, the UK: the title of my poster is '*Mass-selected infrared photodepletion spectroscopy of $\text{Sr}(\text{NH}_3)_n$ complexes: comparison with theory.*'
- 14th International Conference on Chemistry and its role in Development, 14th ICCRD 2019, Mansoura-Hurghada, Egypt, (25-29 March 2019): the title of my poster is '*Solvent Effect on the Kinetics of Aquation of Bromopentamine Cobalt (III) pentachlorate Complexes in Mixed Solvents.*'
- 260th ACS Fall Meeting 2021, American Chemical Society (ACS) National Meeting & exposition Atlanta, GA, USA, August 22- 26, 2021, participation type: presented a poster virtually, the title of my poster is '*Investigation of the structure of $\text{Sr}(\text{NH}_3)_n$ complexes using mass-selective IR depletion spectroscopy.*'
- ACS Spring Meeting 2021, American Chemical Society (ACS) National Meeting & exposition, (5-30 April 2021), participation type: presented a poster virtually, the title of my poster is '*Kinetics study for degradation of dye using bimetallic based composite*'.

Publications

- 1- **Munirah D. Albaqami.**, and Andrew M. Ellis. "Infrared spectroscopy of $\text{Ca}(\text{NH}_3)_n$ complexes." Chemical Physics Letters 706 (2018): 736-740. (Editor's choice)
- 2- Alothman, Asma A., and **Munirah D. Albaqami.** "Nano-sized Cu (II) and Zn (II) complexes and their use as a precursor for synthesis of CuO and ZnO nanoparticles: A study on their sonochemical synthesis, characterization, and DNA-binding/cleavage, anticancer, and antimicrobial activities." Applied Organometallic Chemistry 34.10 (2020): e5827.
- 3- Alothman, Asma A., **Munirah D. Albaqami**, and Razan A. Alshgari. "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 (2021): 128984.

- 4- Rajabather, Jothi Ramalingam, **Munirah D. Albaqami**, Hamad A. Lohedan, Prabhakarn Arunachalam, Kandasamy Thirunavukkarasu, and Jimmy Nelson Appaturi. "Preparation, characterization, and morphology insight of ZnO nanodisk–TiO₂-coated SWCNT thin film composites for catalytic sensor application." *Surface and Interface Analysis* 53, no. 4 (2021): 395-405.
- 5- Radhika, T., Rajabathar Jothi Ramalingam, V. Aneesha, and **Munirah D. Albaqami**. "Synthesis and characterization of Photochromic inkless coating based on WO₃-Titania nanocomposite under sun light and solar simulation condition." *Optik* 228 (2021): 166145.
- 6- Jeyaseelan, Antonysam, **Munirah D. Albaqami**, and Natrayasamy Viswanathan. "Facile design of metal ion fabricated benzene-1, 3, 5-tricarboxylic acid based metal organic frameworks for defluoridation of water." *Journal of Environmental Chemical Engineering* 9, no. 1 (2021): 104995.
- 7- Saleem, Muhammad, Muhammad Irfan, Sobia Tabassum, **Munirah D. Albaqami**, Muhammad Sufyan Javed, Shahid Hussain, Muhammad Pervaiz, Ikram Ahmad, Awais Ahmad, and Muhammad Zuber. "Experimental and theoretical study of highly porous lignocellulose assisted metal oxide photoelectrodes for dye-sensitized solar cells." *Arabian Journal of Chemistry* 14, no. 2 (2021): 102937.
- 8- Long, Jérôme, Aleksei O. Tolpygin, Ekaterina Mamontova, Konstantin A. Lyssenko, Dan Liu, **Munirah D. Albaqami**, Liviu F. Chibotaru, Yannick Guari, Joulia Larionova, and Alexander A. Trifonov. "An unusual mechanism of building up of a high magnetization blocking barrier in an octahedral alkoxide Dy³⁺-based single-molecule magnet." *Inorganic Chemistry Frontiers* 8, no. 5 (2021): 1166-1174.
- 9- Liu, Xiaohong, Shuaihua Zhang, Guilin Feng, Zhen-Guo Wu, Dong Wang, **Munirah D. Albaqami**, Benhe Zhong et al. "Core–Shell MOF@ COF Motif Hybridization: Selectively Functionalized Precursors for Titanium Dioxide Nanoparticle-Embedded Nitrogen-Rich Carbon Architectures with Superior Capacitive Deionization Performance." *Chemistry of Materials* 33, no. 5 (2021): 1657-1666.
- 10- Hoque, Md Anamul, Mohammad Majibur Rahman, Md Masud Alam, Shamim Mahbub, Mohammed Abdullah Khan, Dileep Kumar, **Munirah D. Albaqami**, and Saikh Mohammad Wabaidur. "Interaction of cephalixin monohydrate with surfactants in aqueous and sodium chloride solution at variable temperatures: Conductivity and spectroscopic measurements." *Journal of Molecular Liquids* 326 (2021): 115337.
- 11- Shah, Noor S., Jibran Iqbal, Murtaza Sayed, Sajid Rauf, **Munirah D. Albaqami**, Javed Ali Khan, Zia Ul Haq Khan et al. "Ionic liquid functionalized nano-zerovalent cerium for catalytic degradation of carbamazepine and colorimetric sensing of H₂O₂." *Journal of Water Process Engineering* 40 (2021): 101964.
- 12- Huang, Zhishuo, **Munirah D. Albaqami**, Tohru Sato, Naoya Iwahara, and Liviu F. Chibotaru. "Jahn-Teller effect in the cubic fullerides A₃C₆₀." *Physical Review B* 103, no. 13 (2021): 134102.
- 13- Wahab, Md A., Chaobin He, Tariq Altalhi, **Munirah D. Albaqami**, Zeid A. Allothman, and Rezwanul Haque. "Nanopore engineered tortuosity towards thermo-mechanically enhanced low-k polymer-mesoporous organosilica composite membranes." *Composites Science and Technology* (2021): 108854.
- 14- Radhika, T., Rajabathar Jothi Ramalingam, V. Aneesha, and **Munirah D. Albaqami**. "Synthesis and characterization of Photochromic inkless coating based on WO₃-Titania

nanocomposite under sun light and solar simulation condition." Optik 228 (2021): 166145.

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- Grant from the distinguished Scientist Fellowship program, King Saudi University, Riyadh, Saudi Arabia
- Grant from researchers Supporting Project, King Saudi University, Riyadh, Saudi Arabia