



Chemistry Section, Physical Sciences Section
School of Sciences
Maulana Azad National Urdu University (Central University)
Gachibowli, Hyderabad, Telangana-500032, India

+91-9598066258

sakhan.manuu@gmail.com

Follow me on:



DR. SALMAN AHMAD KHAN | Professor

CURRENT DESIGNATION/ INVOLVEMENT Currently working as a **Professor** in Chemistry Section, Physical Sciences Section & **Dean School of Sciences**, Maulana Azad National Urdu University (Central University), Hyderabad, Telangana, India.

AREA OF: Organic Chemistry
SPECIALIZATION

-
- ONGOING ACADEMIC • RESEARCH/PROJECTS**
- Photophysical properties of donor- π -acceptor chromophores
 - Synthesis of Metal Complexes of heterocyclic compounds
 - Synthesis of heterocyclic compound, Pyrazoline pyrimidine
 - Multi-step synthesis of heterocyclic compounds
 - Synthesis and Photochemistry of some chromones
 - Synthesis of some conjugated dienes
 - Synthesis of some macromolecules
 - Optical Properties of some organic compounds
 - Fluorescent Chemosensor for detection of Metal ion

INNOVATION WITH FIELD OF STUDY AND COLLABORATIVE EFFORTS

Innovation with Field of Study

Developed the novel heterocyclic compounds as fluorescent Chemosensor for the detection of toxic metal ions

National Collaboration

- **Dr. S.M. Afzal**
Physics Department, Aligarh Muslim University, Aligarh 202002, India
- **Dr. Kamlesh Sharma**
Department of Applied Science,
School of Engineering & Technology, ITM University Sector23A, Gurgaon 122017, India
- **Dr. Sanjay Kumar**
Department of Chemistry, Multani Mal Modi College, Patiala, 147001, Punjab, India
- **Prof. Mohammed Yusuf**
Department of Chemistry, Punjabi University, Patiala, Punjab,

India

- **Dr. Athar Adil Hashmi**

Department of Chemistry, Jamia Millia Islamia, Jamia Nagar,
New Delhi-110025

International Collaborations

- **Prof. Abdullah M. Asiri (Highly Cited)**

Chemistry Department, King Abdul Aziz University, Jeddah, Saudi Arabia

- **Dr. Humaira Parveen**

Chemistry Department, Tabuk University, Tabuk,
Saudi Arabia

- **Dr. Mohammad Younus Wani**

Chemistry Department, University of Jeddah, Jeddah
Saudi Arabia

- **Prof. Michael B. Hursthouse (Highly Cited)**

School of Chemistry,
University of Southampton,
Southampton SO17 1BJ,
United Kingdom

**ACADEMIC AND
ADMINISTRATIVE
EXPERIENCE**

- Working as a Dean, School of Sciences, Maulana Azad National Urdu University since 28.10.2020.
- Working as a Professor & Section Head in the Chemistry Section, School of Sciences, **Maulana Azad National Urdu University** since 09.07.2020.
- Worked as an Associate Professor in the Department of Chemistry, **King Abdul-aziz University, Jeddah, Saudi Arabia**, since 01.01.2014 to 23.06. 2020
- Worked as an Assistant Professor in the Department of Chemistry, **King Abdul-aziz University, Jeddah, Saudi Arabia**, since 18.02.2009 to 31.12.2013.
- Worked as an Assistant Professor in the Department of Chemistry, **Integral University, and Lucknow-UP India** since 26. 07. 2008 to 13.02.2009

R & D EXPERIENCE:

- Worked as a Research Associate (RA) at Department of Chemistry, **Punjabi University Patiala, Panjab**, India since 01. 08. 2007 to 25. 07. 2008.

**EDUCATIONAL
QUALIFICATION**

DOCTOR OF PHILOSOPHY (Ph.D.), 2007

Department Chemistry, Jamia Millia Islamia, New Delhi, India

TEACHING PROFICIENCY

Urdu, English

RESEARCH PUBLICATION DETAILS	Number of Publication : 180 (Scopus) h-index : 25 (Scopus) 26 (Google) i10-Index : 78 (Google) Citations : 2100 (Scopus)
------------------------------	---

Achievements, Awards & Recognitions

Prof. Salman A Khan, Listed in Top-2% World Ranking of Scientists, published by Stanford University, USA (2022)
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4>

Prof. Salman A Khan, Listed in Top-2% World Ranking of Scientists, published by Stanford University, USA (2021)
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3>

Paper appeared on the cover page of the Journal
Journal of Coordination Chemistry, 2020, Vol. 73. Taylor & Francis (Impact Factor: 1.75).
<https://www.tandfonline.com/toc/gcoo20/73/20-22?nav=tocList>

Salman A. Khan et al., Ultrasound-assisted synthesis and photophysical investigation of a heterocyclic alkylated chalcone: a sensitive and selective fluorescent chemosensor for Fe³⁺ in aqueous media, Journal of Coordination Chemistry, 73 (2020) 2987-3002. Taylor & Fracis, Scopus, ISSN: 0378-1119. Listed as Most cited Paper

<https://www.tandfonline.com/action/showMostCitedArticles?journalCode=gcoo20>

Patent (Indian)

Salman A Khan, Abdullah M. Asiri, Mona Mohammad Al-Amari A method and composition for synthesizing Indeno-fluorene based fluorescent chemosensor for Cu²⁺ metal ion App. Number: 2022410443137 Published

LIST OF PUBLICATIONS

- 116. Mohd Mehkoom, S. M. Afzal, Shabbir Ahmad, **Salman A. Khan**, The new pyrazoline derivative 5-(3,4-Dimethoxy-phenyl) -3-(2,5-dimethyl-thiophen-3-yl), -4,5-dihydro-pyrazole-1-carbothioic acid amide (DDPA) as an advisable candidate for optical linearity, nonlinearity and limiting performance. Journal of Molecular Liqued 2022, 345, 117018.
- 115 Asad, M., Arshad, M.N., Asiri, A.M., **Salman A. Khan**, Rehan, M., Oves, M.Synthesis of N-Methylspiropyrrolidine Hybrids for Their Structural Characterization, Biological and Molecular Docking Studies Polycyclic Aromatic Compoundsthis link is disabled, 2022 (In) Press) Taylor & Francis, Scopus
- 114. F. M. Aqlan, A. S. Al-Bogami, N. F. Alqahtani, M. Y. Wani, **Salman A. Khan**, Thiazolidinone: A structural motif of great synthetic and biological importance Journal of Molecular Structure 2022, 1250, 131771

113. Mohie E. M. Zayed, Khalid Ahmed Alzahrani, **Salman A. Khan**, Multi-step synthesis, characterization and photophysical investigation of novel biologically active heterocyclic chalcone (AECO) Journal of Fluorescence 2021 Nov;31(6):1823-183.
112. Qasim Ullah, **Salman A. Khan**, Ali Mohammad, Applications of green solvents in thin-layer chromatography (TLC)—an overview, JPC - Journal of Planar Chromatography - Modern TLC, 2021-03-16.DOI: 10.1007/s00764-021-00085-w Springer, Scopus
111. **Salman A. Khan**, Qasim Ullah, Salahuddin Syed, Alimuddin, A. S. A. Almalki, R. J. Obaid, M. A. Alsharif, S. Y. Alfaifi, H. Parveen, S. Kumar, Multi-Step Synthesis, Physicochemical investigation and optical properties of pyrazoline derivative: A Donor- π -Acceptor chromophore. Bioorganic Chemistry, 112 (2021) 104964.
110. **Salman A. Khan**, Q. Ullah, H. Parveen, S. Mukhtar, K. A. Alzahrani, Synthesis and photophysical investigation of novel imidazole derivative an efficient multimodal chemosensor for Cu(II) and fluoride ions J. Phorochem Phorobio. Chem A. 406 (2021) 113022 .
109. M. Asad, **Salman A. Khan**, M. N. Arshad, A. M. Asiri, M. Rehan, Design and synthesis of novel pyrazoline derivatives for their spectroscopic, single crystal X-ray and biological studies. J. Mol. Struc. 1234 (2021) 130131.
108. **Salman A. Khan**, Q. Ullah, A. S. A. Almaliki, S. Kuamr, R. J. Obaid, M. A. Alsharif, S. Y. Alfaifi, A. A. Hashmi, Synthesis and photophysical investigation of (BTHN) Schiff base as off-on Cd²⁺ fluorescent chemosensor and its live cell imaging. Journal of Molecular Liquid 328 (2021) 115407.
107. A. M. Asiri, M. M. Al-Amari, Q. Ullah, **Salman A. Khan** Ultrasound-assisted synthesis and photophysical investigation of a heterocyclic alkylated chalcone: a sensitive and selective fluorescent chemosensor for Fe³⁺ in aqueous media, Journal of Coordination Chemistry, 73 (2020) 2987-3002
106. M. Asad, M. N. Arshad, M. Oves, M. Khalid, **Salman A. Khan**, A. M. Asiri, M. Rehan, H. D. Cancarg, N-Trifluoroacetylated pyrazolines: Synthesis, characterization and antimicrobial studies. Bioorganic Chemistry, 99 (2020) 103842 .
105. **Salman A. Khan**, Multi-step synthesis, photophysical and physicochemical investigation of novel pyrazoline a heterocyclic D- π -A chromophore as a fluorescent chemosensor for the detection of Fe³⁺ metal ion. Journal of Molecular Structure 1211 (2020) 128084.
104. M. A.; Malik, S. A. Al-thabaiti, **Salman A. Khan**,, Bioactive Macroyclic Ni(II) Metal Complex: Synthesis, Spectroscopic Elucidation, and AntimicrobialStudies Polycyclic Aromatic Compounds DOI: 10.1080/10406638.2019.1681011.
103. M. E. M. Zayed, P. Kumar, **Salman A. Khan**, Microwave assisted synthesis, spectroscopic and photophysical properties of novel pyrazol-3-one

- containing push -pull chromophore Journal of Molecular structure 1202 (2020) 127103.
102. M. Asad, M. N. Arshad, **Salman A. Khan**, M. Oves, M. Khalid, Abdullah M. Asiri, A. A.C. Braga, Cyclization of chalcones into N-propionyl pyrazolines for their single crystal X-ray, computational and antibacterial studies. Journal of Molecular structure 1202 (2020) 127186 .
 101. M. A. N. Razvi, S. M. Afzal, **Salman A. Khan**, Ahmed H. Bakry, An efficient ultrasonic-assisted synthesis and nonlinear optical property of Donor (D) Acceptor (A) Chalcone (DDFP) Zeitschrift fur Physikalische Chemie234 (2019) 145–152.
 100. H. M. A. Gassan, I. Denetiu, **Salman A. Khan**, M. Rehan, K. Sakkaf, K. Gauthaman, Synthesis and biological evaluation of novel triazolyl 4-anilinoquinazolines as anticancer agents. Medical Chemistry Research. (2019) 28:1766–1772.
 99. **Salman A. Khan**, A. M. Asiri, M. Y. Wani, K. S. Sharma, M. Asad Synthesis and evaluation of Quinoline-3-carbonitrile derivatives as potential antibacterial agents Bioorganic Chemistry 88 (2019) 102968.
 98. **Salman A. Khan**, A. M. Asiri, N. N. M. Al-Ghamdi, M. Y. Wani, K. S. Sharma, M. Asad, Microwave assisted synthesis of chalcone and its polycyclic heterocyclic analogues as promising antibacterial agents: In vitro, in silico and DFT studies Journal of Molecular structure 1190 (2019) 77-85.
 97. Asiri, A.M., Al-Ghamdi, N.S.M., Dzudzevic-Cancar, H., Kumar, P., **Salman A. Khan**, Physicochemical and Photophysical investigation of newly synthesized carbazole containing pyrazoline-benzothiazole as fluorescent chemosensor for the detection of Cu²⁺, Fe³⁺ & Fe²⁺ metal ion. Journal of Molecular structure 1195 (2019) 670-680.
 96. **Salman A. Khan**, A. M. Asiri, S. H. Al-Thaqafy, -ThaqfPhotophysical and Physicochemical investigation of Highly fluorescent environmentally benign biologically active pyrrol-containing push-π-pull chromophore: Colloidal silver nanoparticles as fluorescence quencher RSC Advance (Communicated)
 95. **Salman A. Khan**, P. Kumar, Photophysical and physicochemical investigation of newly synthesized polycyclic pyrazoline-benzothiazole as fluorescence chemosensor for the detection of Cu²⁺ metal ion Polycyclic Aromatic Compounds (Accepted In Press)
 94. A. M. Al-Dies, A. M. Asiri, **Salman A. Khan**, E. R. T. Tiekkink Crystal structure of 8,8'-di-p-tolyl-8'H-7,8'-biacenaphtho[1,2-d]imidazole, C 40 H 26 N 4 Zeitschrift fur Kristallographie - New Crystal Structures, (In Press).
 93. A. M. Al-Dies, A. M. Asiri, **Salman A. Khan**, E. R. T. Tiekkink, Crystal structure of 4,4',5,5'-tetraphenyl-2,2'-di-p-tolyl-2'H-1,2'-biimidazole, C44H34N4, Zeitschrift fur Kristallographie - New Crystal Structures, (In Press)
 92. **Salman A. Khan**, A. M. Asiri, M. E. Zayed, H. Parveen, F. M. S. Aqlan, K. Sharma, Microwave-assisted Synthesis, Characterization, and Density Functional

- Theory Study of Biologically Active Ferrocenyl Bis-pyrazoline and Bis-pyrimidine as Organometallic Macromolecules. *Journal of Heterocyclic Chemistry*, 56 (2019) 312-318 .
91. A. M. Asiri, T. R. Sobahi, M. M. Al-Amari, M. Asad, M. E. M. Zyed, **Salman A. Khan**, Physicochemical Investigation of HDDP Azomethine Dye as Turn-On Fluorescent Chemosensor for High Selectivity and Sensitivity of Al³⁺ Ion. *Journal of Solution Chemistry*, 2018 ,
90. A. A. P. Khan, A. Khan, A. M. Asiri, **Salman A. Khan**, A. Mohad, Complexation and oxidation of Flutamide with Fe³⁺ and 1,10-phenanthroline: Few analytical applications. *Arabian Journal of Chemistry*, 2018, 11, 240-246.
89. **Salman A. Khan**, A. M. Asiri, A. M. Al-Dies, O. I. Osman, M. Asad, M. E. M. Zayed, One-pot synthesis, physicochemical and photophysical properties of deep blue light-emitting highly fluorescent pyrene-imidazole dye: A combined experimental and theoretical study *Journal of Photochemistry and Photobiology A: Chemistry* 2018, 364, 390-399.
88. H. Parveen, R. A. S. Alatawi, M.A. Alsharif, M. I. Alahmdi, S. Mukhtar, **Salman A. Khan**, S. Hasan, A. U. Khan, Novel Pyrazoline-based Organometallic Compounds Containing Ferrocenyl and Quinoline units: Synthesis, Characterization and Microbial susceptibilities. *Applied Organometallic Chemistry* 2018, 32,4257-4263 .
87. M. A. Alsharif, S. Mukhtar, A. M. Asiri, **Salman A. Khan**, One pot synthesis, physicochemical and photophysical investigation of biologically active pyridine-3-carboxylate (ECPC) as probe to determine CMC of surfactants in organized media, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2018, 543, 38-45
86. **Salman A. Khan**, A. M. Asiri, Multi-step synthesis, spectroscopic studies of biological active steroidal thiosemicarbazones and their palladium (II) complex as macromolecules , *International Journal of Biological Macromolecules*, 2018, 107, 105-111.
85. **Salman A. Khan**, A. M. Asiri, R. M. Rhaman, S. A. Elorby, F. M. S. Aqlan, M. Y. Wani, K. Sharma, Document Multistep Synthesis of Fluorine-Substituted Pyrazolopyrimidine Derivatives With Higher Antibacterial Efficacy Based on In Vitro Molecular Docking and Density Functional Theory, *Journal of Heterocyclic Chemistry* 2017, 54, 3099-3107 .
84. A. M. Asiri, A. A. M. Al-Dies, **Salman A. Khan**, Optical and Photophysical Investigation of (2E)-1-(2,5-Dimethylfuran-3-Yl)-3-(9-Ethyl-9H-Carbazol-3-Yl)Prop-2-en-1-One (DEPO) by Spectrofluorometer in Organized Medium, *Journal of Fluorescence*, 2017, 27(4), pp. 1487-1494.
83. **Salman A. Khan**, A. M. Asiri, Green synthesis, characterization and biological evaluation of novel chalcones as anti bacterial agents, *Arabian Journal of Chemistry*, 2017, 10, pp. S2890-S2895.

82. **Salman A. Khan**, A. M. Asir, N. S. M. Al-Ghamdi, K. Sharma, H. Parveen, Optical properties of novel environmentally benign biologically active ferrocenyl substituted chromophores: A detailed insight via experimental and theoretical approach, *Journal of Molecular Structure*, 2017, 1139, pp. 137-148
81. **Salman A. Khan**, A. M. Asiri, Synthesis and spectroscopic studies of Ru(II) complexes of steroidal thiosemicarbazones by multi step reaction: As anti-bacterial agents *Steroids*, 2017, 124, pp. 23-28.
80. **Salman A. Khan**, A. M. Asiri, Physicochemical properties of novel methyl 2-(E)-[(2-hydroxynaphthalen-1-yl)methylidene] amino-4,5,6,7-tetrahydro-1-benzothiophene-3-carboxylate as turn-off fluorometric chemosensor for detection Fe³⁺ ion, *Journal of Molecular Liquids*, 2017, 243, pp. 85-90
79. **Salman A. Khan**, A. M. Asiri, Spectroscopic, photophysical investigation and micellization for critical micelle concentration (CMC) of 3-(3,4-dimethoxyphenyl)-1-(2,5-dimethylfuran-3-yl)prop-2-en-1-one (DDFP) dye. *Journal of Applied Spectroscopy* 2017 84(4), pp. 687-693.
78. **Salman A. Khan**, A. M. Asiri, K. Sharma, Efficient microwave assisted synthesis and computational study of isoxazole Schiff base as an antibacterial agent, *Indian J. Chemistry B*. 2017 56B, 453-457 .
77. **Salman A. Khan**, Green Synthesis, Spectrofluorometric Characterization and Antibacterial Activity of Heterocyclic Compound from Chalcone on the Basis of in vitro and Quantum Chemistry Calculation. *Journal of Fluorescence*, 2017, 27(3), pp. 929-937.
76. Abdullah M. Asiri, Osman I. Osman, Saad H. Al-Thaqafy, **Salman A Khan**, Optical properties and fluorescence quenching of carbazole containing (D-π-A) push-pull chromophores by silver nanoparticle: A detailed insight via experimental and theoretical approach, *RSC Advance* 2017, 7(14), pp. 8402-8414.
75. A M Asiri, T R Sobahi, O I Osman, **Salman A. Khan**, Photophysical investigation of (D-π-A) DMHP dye: Dipole moments, photochemical quantum yield and fluorescence quantum yield, by solvatochromic shift methods and DFT studies, *Journal of Molecular Structure*, 2017; 1128; 636-644
74. S. M. Afzal, M. A. N. Razvi, **Salman A. Khan**, Osman I. Osman, Ahmed H. Bakry, A. M. Asiri^{2,3} Physicochemical and Nonlinear Optical Properties of Novel Environmentally Benign Heterocyclic Azomethine Dyes: Experimental and Theoretical Studies, *PLoS One*. 11 (2016) e0161613 .
73. **Salman A. Khan**, A. M. Asiri , S. H. Al-Thaqafy, Physicochemical Investigation, Fluorescence Quenching and Micellization of Ethyl 4-(2,4,5-trimethoxyphenyl)-2-methyl-5-oxo-4,5-dihydro-1H-indeno[1,2-b]pyridine-3-carboxylate (EIPC) in Organized Media. *Journal of Solution Chemistry*, 45 (2016) 1115-1129 .
72. **Salman A. Khan**, A. M. Asiri , S. H. Al-Thaqafy, Optical properties and fluorescence quenching of biologically active ethyl 4-(4-N,N-dimethylamino

- phenyl]-2-methyl-5-oxo-4,5-dihydro-1H-indeno[1,2-b]pyridine-3-carboxylate (DDPC) dye as a probe to determine CMC of surfactants RSC Adv., 2016,6, 102218-102225.
71. K. Narasimharao, R. A. Shiekh, M. A. Malik, M. A. Said, Z. **Salman A. Khan**. Al-Thabaiti, Salman A. Khan,, Design, Spectroscopic Characterization, Electrical Conductivity and Molecular Modelling Studies of Biologically Puissant Co(II) and Ni(II) Complexes of N,N'-bis(furan-2-ylmethyl)benzene-1,2-dicarboxamide. Int. J. Electrochem. Sci., 11 (2016) 7282 – 7307.
70. A. A. P. Khan, A. Khan, A. M. Asiri, **Salman A. Khan**,, Studies on the oxidation of levofloxacin by N-bromosuccinimide in acidic medium and their mechanistic pathway, Journal of Molecular Liquids, 218 (2016) 604-610 .
69. H. Parveen, R. A. S. Alatawi, **Salman A. Khan**,, M. I. Al-Ahmdi, S. Mukhtar, A. Azam, N. H. Elsayed, Synthesis, Characterization and Biological Evaluation of Novel 1-N-Substituted Thiocarbomoyl-3-ferrocenyl-2-pyrazoline Derivatives Asian J. Chem. 28 (2016) 1835-1840 .
68. **Salman A. Khan**, A. M. Asiri, F. M. S Aqlan, Microwave Assisted Synthesis, Optical Properties and Physicochemical Investigations on the Powerful Fluorophore: Donor (D) -π-Acceptor (A) Chalcone J. of Fluorescence, 26 (2016) 2133-2140.
67. M. A. Zayed, A. M. Asiri, **Salman A. Khan**,. Microwave Assisted Synthesis, Spectrofluorometric Characterization of Azomethine as Intermediate for Transition Metal Complexes with Biological Application J. of Fluorescence, 26 (2016) 937-947 559-566 .
66. **Salman A Khan** A M Asiri, Fluorescence quenching of environmentally benign highly fluorescence donor (D)-π-acceptor (A)-π-donor (D) quinoline dye by silver nanoparticles and anionic surfactant in liquid stage Journal of Molecular Liqued. 2016; 221; 381-38
65. **Salman A. Khan**, A. M. Asiri, Physicochemical, photophysical investigation and micellization of 3 1-(2,5-dimethylfuran-3-yl)-3-(2,4,5-trimethoxyphenyl)prop-2-en-1-one (DFTP) dye by fluorophotometry. Journal of Molecular Liqued. 2016; 216; 423-428
64. A.M. Asiri, **Salman A. Khan**, H. M. Basisi, Single X-ray crystal and spectroscopic investigation of novel biologically active donor-acceptor chalcones as specific application for opto-electronics and photonics Journal of the Taiwan Institute of Chemical Engineers 2016, 59; 457-464
63. **Salman A. Khan**, S.M. Afzal, A. M. Asiri, M.A.N. Razvi, A. H. Bakry, M. A. M. Zayed , Synthesis, Spectrofluorometric Studies, Micellization and non Linear Optical Properties of Blue Emitting Quinoline. (AMQC) Dye. J. of Fluorescence, 26 (2016) 559-566.
62. **Salman A. Khan**, A. M. Asiri, H. M. Basisi, M. N. Arshad, K. Sharma, Microwave Assisted Synthesis, Physicochemical, Photophysical, Single Crystal X-ray and DFT Studies of Novel Push-Pull Chromophores. J. of Fluorescence, 25, (2015) 1585-1593

61. **Salman A. Khan**, A. M. Asiri, Physicochemical and Critical Micelle Concentration (CMC) of Cationic (CATB) and Anionic (SDS) Surfactants with Environmentally Benign Blue Emitting TTQC Dye J. of Fluorescence, 25, (2015) 1595-1599.
60. **Salman A. Khan**, A. M. Asiri, Physicochemical Investigation of 2,4,5-Trimethoxybenzylidene Propanedinitrile (TMPN) Dye as Fluorescence off-on Probe for Critical Micelle Concentration (CMC) of SDS and CTAB. J. of Fluorescence, 25, (2015) 1749-1755
59. M. Rani, M. Yusuf, **Salman A. Khan**, P.P. Sahota, G. Pandove, Synthesis, studies and in-vitro antibacterial activity of N-substituted 5-(furan-2-yl)-phenyl pyrazolines. Arabian J of Chemistry, 8 (2015) 174-180 .
58. A. M. Asiri, **Salman A. Khan**, H. M. Basisi, Synthesis, Characterization, Physicochemical and Electrochemical Studies of Novel Donor Acceptor Chromophore. Int. J. Electrochem. Sci., 10 (2015) 6092-6105
57. **Salman A. Khan**, A. Y. Obaid, L. M. Al-Harbi, M. N. Arshad, O. Şahin, C. C. Ersanlı, R.M. Abdel-Rehman, A. M. Asiri, M. B. Hursthouse, Synthesis, Spectroscopic, Physicochemical, Crystal Structure and DFT Studies of 4,5,6,7-tetrahydro-1-benzothiophene-3- carbonitrile Based Azomethine Dyes Int. J. Electrochem. Sci., 10 (2015) 2306-2323.
56. A. M. Asiri, **Salman A. Khan**, S. H. Al-Thaqafy, K. Sharma, One Pot Synthesis, Photophysical and X-ray Studies of Novel Highly Fluorescent Isoquinoline Derivatives with Higher Antibacterial Efficacy Based on the In-vitro and Density Functional Theory J. of Fluorescence, 25, (2015) 503-518 .
55. A. M. Asiri, **Salman A. Khan**, S. H. Al-Thaqafya. One-Pot Synthesis, Spectroscopic and Physicochemical Studies of Quinoline Based Blue Emitting Donor—Acceptor Chromophores with Their Biological Application J. of Fluorescence, 25, (2015) 1203-1213 .
54. **Salman A. Khan**, A. M. Asiri, H. M. Basisi. Synthesis, Single X-ray Crystal, Spectroscopic and Photophysical Studies of Novel Heterocyclic Chalcones with Their Biological Application. S. A. Khan, A. M. Asiri, H. M. Basisi. J. of Fluorescence, 25, (2015) 825-834 .
53. **Salman A. Khan**, M.A.N. Razvi, A. H. Bakry, S.M. Afzal, A. M. Asiri, S. A. El-Daly, Microwave assisted synthesis, spectroscopic studies and non linear optical properties of bis-chromophores. Spectrochimica Acta. A: 137, 2015, 1100-1105.
52. M.A.N. Razvi, A. H. Bakry, S.M. Afzal, **Salman A Khan**, A M. Asiri, Synthesis, characterization and determination of third-order optical nonlinearity by cw z-scan technique of novel thiobarbituric acid derivative dyes. Materials Lett., 144 (2015) 131-134.
51. **Salman A. Khan**, A. Y. Obaid, L. M. Al-Harbi, M. N. Arshad, O. Şahin, C. C. Ersanlı, R.M. Abdel-Rehman, A. M. Asiri, M. B. Hursthouse Synthesis, spectroscopic (UV-vis and GIAO NMR), crystallographic and theoretical

- studies of triazine heterocyclic derivatives, J Molecular Stru., 1096 (2015) 29-37.
50. **Salman A Khan**, A. M. Asiri, S. A. K. Elroby, Green Synthesis, Characterization, Antibacterial Activity of Heterocyclic Compounds from Chalcone on Basis of in vitro and Quantum Chemistry Calculation. Asian J. Chemistry, 21, 2014, 7283-7288.
49. H. M. Faidallah, K. AS. Alamry, M. A. M. Zayed, **Salman A. Khan**, Design, synthesis and biological evaluation of some novel hexahydroquinoline-3-carbonitriles as anticancer and antimicrobial agents. Asian J. Chemistry, 26, 2014, 8139-8144.
48. A. M. Asiri, **Salman A Khan**, Samy El-Daly, Excitation energy transfer from rhodamine 6G to photochromic fulqide, Asian J. Chemistry, 26, 2014, 7364-7368.
47. **Salman A. Khan**, A. M. Asiri, K. Alamary, S. El-daly, H. M. Marwani, Green synthesis, physicochemical and polarity studies of some novel biologically active donor acceptor chromophores Asian J of Chemistry, 26, (2014) 7364-7368 .
46. **Salman A. Khan**, A. M. Asiri, Selective reduction of α,β -unsaturated steroidal carbonyl compounds by NaBH₄in presence of guanidine hydrochloride in dioxane, Asian J of Chemistry, 26 (2014) 6331-6334.
45. M. Asiri, H. M. Marwani, **Salman A. Khan**, Spectroscopic investigation of novel donor-acceptor chromophores as specific application agents for opto-electronics and photonics Journal of Saudi Chemical Society, 18, 2014, 392 396.
44. H. M. Marwani, A. M. Asiri, **Salman A. Khan**, Spectrophotometric and spectrofluorimetric studies of novel heterocyclic Schiff base dyes, Arabian J. Chem., 7, 2014, 609-614.
43. A. M. Asiri. **Salman A. Khan**, S. Al-Daly, S. H. Al-Thaqafya, H. Faidullah, . Synthesis, characterization and spectroscopic behavior of novel 2-oxo-1,4-disubstituted-1,2,5,6-tetrahydrobenzo[h]quinoline-3-carbonitrile dyes. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 133, 10 December 2014, Pages 141-148 .
42. **Salman A Khan**, A. M. Asiri, S. Kumar, K. Sharma Green synthesis, antibacterial activity and computational study of pyrazoline and pyrimidine derivatives from 3-(3,4-dimethoxy-phenyl-1-(2,5-dimethyl-thiophen-3-yl)-propenone, Eur. J. Chemistry,5 (1) (2014) .90-85
41. A. M. Asiri, H.M. Marwani, K. A. Alamry, M. S. Al-Amoudi, **Salman A. Khan**, S. A. El-Daly, Green Synthesis, Characterization, Photophysical and Electrochemical Properties of Bis-chalcones, Int. J. Electrochem. Sci., 9 (2014) 799 – 809.
40. **Salman A. Khan**, A. M. Asiri, K. Alamary, M. A. Malik, Synthesis, Characterization, Electrochemical Studies, In Vitro Antibacterial Activity of

- Novel Thiosemicarbazone and Its Cu(II), Ni(II), and Co(II) Complexes. Scientific World Journal, 2014, 4, 592375 .
39. M. Hursthouse, R. Montis, L. Niitsoo, J. Sarson, T. L. Threlfall, A. M. Asiri, **Salman A. Khan**, A. Y. Obaid, L. M. Al-Harbi, Anhydrates and/or hydrates in nitrate, sulphate and phosphate salts of 4 aminopyridine, (4-AP) and 3,4-diaminopyridine (3,4-DAP): the role of the water molecules in the hydrates CrystEngComm, 2014, 16,2205.
38. **Salman A Khan**, A. M. Asiri, K. Sharman Green synthesis of novel pyrazole containing Schiff base derivatives as antibacterial agents on the bases of in-vitro and DFT, , Eur. J. Chem., 2013, 4, 454-458.
37. **Salman A. Khan**, Abdullah M. Asiri, Aftab Aslam Parwaz Khan, Khalid Ali Khan,Synthesis of Novel Schiff bases by microwave irradiation and their In-vitro antibacterial activity Asian Journal of Chemistry, 2013, 25, 8643-8646. 96.
36. A. O. Baghlaif, R. M. Abdel-Rahman, Salman A Khan, M. Ishaq Synthesis and spectroscopic studies of Ru(II) complexes of 1,2,4-triazoles, 1,2,4-triazines and pyrimidine derivative ABDULLAH M. ASIRI,, Asian Journal of Chemistry, 2013, 25, 7779-7782.
35. **Salman A. Khan**, Abdullah M. Asiri, Khalid A. Alamry, Samy A. El_Daly, Mohie A. M. Zayed,Eco_Friendly Synthesis and in vitro Antibacterial Activities of Some Novel Chalcones Russian Journal of Bioorganic Chemistry. 2013, 39, 353-357.
34. Abdullahj M. Asiri, **Salman A Khan**, Hadi M. Marwani, K. Sharma, Synthesis, spectroscopic and physicochemical investigations of environmentally benign heterocyclic Schiff base derivatives as antibacterial agents on the bases of in vitro and density functional theory. Journal of Photochemistry and Photobiology B: Biology, 120, 2013, 82-89
33. Samy A. El-Daly, Abdullah M. Asiri, Khaled Alamry, **Salman A. Khan** Spectroscopic studies and laser activity of 3-(4-Dimethylamino-phenyl)-1-(2, 5-dimethyl-furan-3-yl)- propenone (DDFP): A new green laser dye, Journal of Luminescence, 2013, 137, 2013, 6-14
32. **Salman A. Khan**, Abdullah M. Asiri, Kamlesh Sharma Synthesis of steroidal thiazolidinones as antibacterial agents based on the In- vitro and quantum chemistry calculation, Medicinal Chemistry Research, 2013, 22, 1998, 2004.
31. Hadi M. Marwani, Abdullah M. Asiri, **Salman A Khan**, Spectral, stoichiometric ratio, physicochemical, polarity and photostability studies of newly synthesized chalcone dye in organized media Hadi M. Marwani, Abdullah M. Asiri, Salman A Khan Journal of Luminescence, Volume 136, April 2013, Pages 296-302.
30. **Salman A. Khan**, Khalid A. Alamry, Mahmoud A. Hussien, Abdullah G. Al-Sehemi Photophysical parameters and laser activity of 3(4-dimethylamino-phenyl)-1-(2, 5-dimethyl-thiophen-3-yl)-propenone (DDTP): A new potential

- laser dye Samy A. El-DalyAbdullah M. Asiri, Abdullah Y. Obeid, Optics & Laser Technology, Volume 45, February 2013, Pages 605-612.
- 29. Abdullah M. Asiri, **Salman A. Khan**, Khalid A. Alamry Spectral Properties and Micellization of 1-(2, 5-Dimethyl-thiophen-3-yl)-3-(2,4,5-trimethoxyphenyl)-propenone (DTTP) in Fifferent Media Journal of Luminescence, Volume 134, February 2013, Pages 819-824.
 - 28. Synthesis and in vitro-antibacterial activity of [5-(furan-2-yl)-phenyl]-4,5-carbothioamide-pyrazolines. Mamta Rani, M. Yusuf, Salman A. Khan, Journal of Saudi Chemical Society, 2012, 16, 431-436 .
 - 27. Chalcon Abdullah M. Asiri, **Salman A. Khan** Synthesis, Characterization, and In Vitro Antibacterial Activities of Macromolecules Derived from Bis-Chalcon Abdullah M. Asiri, Salman A. Khan, Journal of Hetrocyclic Chemistry, 2012, 49, 1434-1438 .
 - 26. **Salman A. Khan**, Abdullah M. Asiri Synthesis and In Vitro Antibacterial Activity of Novel Steroidal (6R)-Spiro-1,3,4-Thiadiazoline Derivatives. Journal of Heterocyclic Chemistry, 2012, 49, 6, 1452-1457.
 - 25. Abdullah M. Asiri, Ibrahim S. El-Hallag, A.O. Al-Youbi, Khalid A. Alamry and Salman A. Khan Electrochemical Properties of 4-[(Anthracen -9-ylmethylene)-amino]-1, 5-dimethyl-2-phenyl-1,2-dihydro-pyrazol-3-one at a Platinum Electrode in Acetonitrile Solvent, Journal of New Materials for Electrochemical Systems (2012) , 15, 113-121.
 - 24. **Salman A. Khan** A. M. Asiri, K. Saleem Synthesis and biological evaluation of new oxime-ether derivatives of steroid as anti-bacterial agents Journal of Saudi Chemical Society, 16, 2012, 7-11.
 - 23. **Salman A Khan**, Abdullah M. Asir Novel Steroidal (6R)-Spiro-1,3,4-thiadiazoline Derivatives as Anti-bacterial Agents, Chinese Journal of Chemistry, 30, 2012, 1901-1905.
 - 22. Hadi M. Marwani, Abdullah M. Asir, **Salman A Khan** Green -Synthesis Charearization, Phtostability and Polarity studies of Novel Schiff base dyes using Spectroscopic methods. Russ. J. Bioorgan. Chemistry, 38, 2012, 533-538 .
 - 21. Andullah M. Asiri, **Salman A. Khan**, Muhammed S. Al-Amodi, Kalid A. Alamry Synthesis, characterization, absorbance, fluorescence and non linear optical properties of some donor acceptor chromophores Bulletin of the Korean Chemical Society, 33, 2012, 1900-1906.
 - 20. Abdullah M. Asiri, Samy A. El-Daly, **Salman A. Khan** Spectral characteristics of 4-(p-N,N-dimethyl-aminophenylmethylene)-2-phenyl-5-oxazolone (DPO) in different media, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 95,2012, 679-684.

19. **Salman A. Khan**, Abdullah M. Asiri, Synthesis of novel steroidal oxazolo quinoxaline as antibacterial agents, 2011, Arabin Journal of Chemistry, 4, 349-354.
18. S.A., El-Daly, A. M. Asiri, **Salman A. Khan**, K. A. Alamry, K.A.,Hussein Effect of medium acidity and photostability of 3-(4-dimethylamino-phenyl)- 1-(2,5-dimethyl-thiophen-3-yl)-propenone (DDTP): A new green emitting laser dye. , M.A. Chinese Journal of Chemistry 2011, 29 (11) , pp. 2557-2561
17. Abdullah M. Asiri, **Salman A. Khan**, S. I. El-Hallag, Electrochemical studies of some carbazole derivatives via cyclic voltammetry and convolution - Deconvolution transforms. Journal of new Materials for Electrochemical Systems. 14, 2011, 251-258.
16. Abdullah M. Asiri, **Salman A. Khan**, Synthesis and anti-bacterial activities of a bis-chalcone derived from thiophene and its bis-cyclized products, Molecules 2011, 16 , 523-531.
15. **Salman A. Khan**, Zaheer Khan, Formation of nanosize water-soluble colloidal MnO₂: A kinetic study, Journal of Experimental Nanoscience 2011, 6 (2) , pp. 149-158.
14. Abdullah M. Asiri, **Salman A. Khan** Synthesis, characterization and optical properties of mono- and bis-chalcone. Abdullah M. Asiri, Salman A. Khan, Material Letters, 2011, 65 , 12, 1749-1752.
13. Rajkumar Joshi, Naushad Ahmad, **Salman A. Khan**, Athar Adil Hashmi Antimicrobial studies of newly synthesized organotin(IV) complexes of dihydروبis(2-mercaptopthiazolinyl)borate Journal of Coordination Chemistry Vol. 63, No. 5, 10 March 2010, 906-915.
12. Abdullah M. Asiri,* Abdullah G. Al-Sehem , Khadija O. Badahdah , Muhammed S. Al-Amoudi, **Salman A Khan**, Abeer A. Bukhari Synthesis and Electronic Spectra of some New N-(2-Hydroxy-1-Naphthylidene) Anils Derived from substituted 2-Aminothiophene , Organic Chemistry Insight, (2010), Vol. 3, Pp 1-8.
11. . A. M. Asiri, **Salman A. Khan** Palladium(II) Complexes of NS Donor Ligands Derived from Steroidal Thiosemicarbazones as Antibacterial Agents Molecules. 2010; 15(7):4784-4791.
10. A. M. Asiri and **Salman A. Khan** Synthesis, anti-bacterial activities of some novel Schiff bases derived from amino phenazone, , Molecules 2010, 15(10), pp. 6850-6858.
9. A. M. Asiri, G. A. Baghaffar, K. O. Badahdah, A. G. M. Al-Sehem, **Salman A. Khan**, A. A. Bukhari, Multifunctional switches based on bis-imidazole derivative J. Chem. Sci.,121 (2009) 983.
8. **Salman A. Khan**, A. M. Asiri, M. Yusuf, "Synthesis and biological evaluation of some thiazolidinone derivatives of steroid as antibacterial agents,, Eur. J. Med. Chem. 44 (2009) 2597.

7. **Salman A. Khan**, M. Yusuf, New Palladium (II) Complexes of Steroidal -6-one thiosemecarbazones and In Vitro antibacterial activity European Journal of Med. Chemistry 44 (2009) 2270-2274.
6. **Salman A. Khan**, Synthesis, characterization and in vitro antibacterial activity of new steroidal 5-en-3-oxazolo and thiazoloquinoxalin, European Journal of Med. Chemistry 43 (2008) 2040-2044
5. **Salman A. Khan**, N. Shing, K. Saleem, Synthesis, Characterization and in vitro antibacterial activity of new steroidal thiourea and urea derivatives European Journal of Med. Chemistry 43 (2008) 2272-2277
4. **Salman A. Khan**, P. Kumar, R. Kumar, P. Iqbal, K. Saleem K, Synthesis, Characterization and in vitro antibacterial activity of new steroidal thiosemicarbazone derivatives. European Journal of Med. Chemistry 43(2008)2029-2034
3. **Salman A. Khan**, K. Saleem, Z. Khan, Synthesis, Characterization and in vitro antibacterial activity of new steroidal 5-en- 7- thiazozlo quinoxalines, European Journal of Med. Chemistry. 43 (2008) 2257-2261.
2. **Salman A. Khan** K. Saleem, Z. Khan, Synthesis, Characterization and in vitro antibacterial activity of new steroidal thiazozlo quinoxalines European Journal of Med. Chemistry 42 (2007)103-108.
1. MnO₂ in the reduction of permanganate by thiourea A Kinetic Study Colloids Surf. A: Physicochem. Eng. 302 (2007) 102-106.

DETAILS OF
CONFERENCE/SEMINA
R /WORKSHOP/ FDP
(ATTENDED/PRESENTE
D)

ABSTRACTS PUBLISHED IN NATIONAL CONFERENCES

- Abdullah M. Asiri, Mona Mohammad Al-Amari, Salman A. Khan, Synthesis and photophysical study of the Schiff base (E)-diethyl 5-((4-(diethylamino)-2-hydroxybenzylidene)amino)-3-methylthiophene-2,4-dicarboxylate as on-off fluorescent chemosensor for Fe³⁺ metal ion Frontiers in Organometallic and Catalysis (FOMC – 2021) Department of Chemistry Malaviya National Institute of Technology Jaipur 20th to 22nd January 2021
- Najat Saeed M. Al-Ghamdi, Abdullah M. Asiri, Salman A. Khan, Synthesis and Phtophysical investigation of pyrazoline derivative as on-off fluorescent chemosensor for the detection of Fe³⁺ metal ion Frontiers in Organometallic and Catalysis (FOMC – 2021) Department of Chemistry Malaviya National Institute of Technology Jaipur 20th to 22nd January
- A. M. Asiri, Najat Saeed M. Al-Ghamdi, Salman A. Khan, "Physicochemical and Photophysical investigation of (2E)-6-methoxy-2-(4-nitrobenzylidene)-3,4-dihydronaphthalen-1(2H)-one (MNDO) dye in organized medium " has been accepted for ORAL presentation in 6th National Conference On Chemical & Environmental Sciences: Emerging

Dimensions & Challenges Ahead (A Multi-Disciplinary Conference for All Discipline) Sponsored by DG. Higher Education Haryana, on April 1, 2017.

- Salman A. Khan, A. M. Asiri, Parveen Kumar, "Synthesis, spectroscopic studies of bis-pyrazolines and their palladium (II) complex as anti-bacterial agent" has been accepted for ORAL presentation in 6th National Conference On Chemical & Environmental Sciences: Emerging Dimensions & Challenges Ahead (A Multi-Disciplinary Conference for All Discipline) Sponsored by DG. Higher Education Haryana, on April 1, 2017
- Salman A. Khan, Nasibullah M., Yusuf M., New derivatives of steroidal thiazolidinone: Synthesis and activity against bacteria, National Seminar on Recent Trends in Chemistry (January 21- 22, 2009), PS-31, pp. 37, Deptt. of Chemistry, Punjabi University, Patiala,
- Salman A. Khan, Jain P., Kumar R., Rani M., Yusuf M., Photochemical selective dealkylation of some 1,4-bisalkoxy Anthraquinone, National Seminar on Recent Trends in Chemistry (January 21- 22, 2009), PS-20, pp. 22, Deptt. of Chemistry, Punjabi University, Patiala.
- Salman A. Khan, Nasibullah M., Synthesis Characterization and in vitro antibacterial activity of new steroidal oxime ether derivative. st Annual conference on Recent Advances in Chemical and Environmental Sciences (January 16-17, 2009), S. No. 59, pp. 63, Multani Mal College, Patiala.
- A. M. Asiri, Salman A. Khan, Synthesis, Characterizations of Some Novel Pyrazole Ring Containing Schiff Bases. 2nd National Conference on Recent Advances in Chemical & Environmental Sciences (2010) 82. Multani Mal College, Patiala.
- A. M. Asiri, Salman A. Khan, Synthesis, Characterizations of some novel Schiff bases derived from 4- aminophenazone National Symposium on Emerging Trends in Chemistry (NSETC-10) (2010) 30, Deptt. of Chemistry, Punjabi University, Patiala., Deptt. of Chemistry, Punjabi University, Patiala.
- A. M. Asiri, Salman A. Khan, Selective reduction of bis- α , β -unsaturated Carbonyl compound by NaHBH4 in the Presence of Guanidine Hydrochloride in water National Symposium on Emerging Trends in Chemistry (NSETC-10) (2010) 31. Deptt. of Chemistry, Punjabi University, Patiala., Deptt. of Chemistry, Punjabi University, Patiala.

Books published

1. Salman A Khan et al. Advances in Metallodrugs: Preparation and Applications in Medicinal Chemistry, John Wiley & Sons, Edition April 2020 250 Pages, ISBN: 978-1-119-64042-4
2. Salman A. Khan et al., Handbook of Biomass Valorization for Industrial applications. 2021, ISBN: 9781119818731, Weley
3. Salman el al., Organic Chemistry CHEM101 TH (CBCS BASED) SEC. C & D B. Sc. Ist Year H. P. U. Shimla, R. D. Publications Jalandhar, ISBN: 978-81-952545-5-2.
4. Anish Khan, M. Muzibur Rahman, M Ramesh, Salman Ahmad Khan, Abdullah Mohammed Ahmed Asiri, Furans Derivatives - Recent Advances and Applications

Book Chapter

1. Salman A. Khan, et al., Polymer-Inorganic Nanocomposite and Biosensors
2018 Wiley-VCH Verlag GmbH & Co. KGaA. Published 2018 by Wiley (In Press)
2. Salman Ahmad Khan, et al., Bio-Mediated Synthesis of Nanoparticles for Fluorescence Sensors, Bioinspired Nanomaterials, Materials Research Foundations, Vol. 111, pp 155-184, 2021 Materials Research Forum (Publisher)

DETAILS OF KEYNOTE
SPEAKER/RESOURCE
PERSON/ SESSION CHAIR
ETC.

1. Environmental Consciousness, Student Induction Programme-2021, Maulana Azad National Urdu University 3rd November 2021
2. Science and Society , School of Sciences , Student Induction Programme-2021, Maulana Azad National Urdu University
3. Green Chemistry-A way for sustainable future, School of Sciences 9 October 2021.

DETAILS OF
SUPERVISION
(M.PHIL/M.TECH/P.HD.)

No. of Ph. D students (Thesis Supervision) : 4 Awarded

1: Saad H. Al-Thaqafy

Awarded 2016

Title

Synthesis, Spectral studies and photovoltaic properties of some organic dyes

2: Al-anood Mohamed Al-Dies

Awarded 2018

Title

Photochromic performance and photophysical studies of some photocromic compounds

3: Mona Mohammad Al-Amari

Awarded 2021

Title

Synthesis of some heterocyclic conjugated system as fluorescent chemosensor for the detection of various metal ions

4: Najat Saeed M.Al-Ghamdi

Awarded 2021

Title

Synthesis, Spectroscopic Studies of some novel donor (D) -π- Acceptor containing organic dye

Ph. D Under Supervision

2 Students

1. Mr. Md. Mohasin**Enrolled 2021**

Title

Synthesis and photophysical properties of novel heterocyclic donor- π -acceptor chromophores as fluorescent chemosensor for the detection of metal ions

2. Md. Zafer Alam**Enrolled 2022**

Title

Synthesis and Physicochemical investigation of Novel Biologically active compounds

**PROFESSIONAL
MEMBERSHIPS****EDITORIAL BOARD MEMBER**

- **ASIAN JOURNAL OF CHEMISTRY**
 - **JOURNAL OF MODERN NANOTECHNOLOGY (JMN)**
 - **JOURNAL OF NIGERIAN SOCIETY OF PHYSICAL SCIENCES (JNSPS)**
-

PERSONAL DETAILS

Father's Name	: Mr. Naseer Khan
Date of Birth	: 07/06/1981
Gender	: Male
Marital Status	: Married
Nationality	: Indian
Language Known	: Urdu, Hindi, English
	Etc..

Date: 02/07/2022

Place: MANUU, Hyderabad

(Prof. Salman Ahmad Khan)

[Last update on: 02 /12/ 2022]