

CV, and List of Publications

PROF. DR. SAMMER YOUSUF

(Tenured Professor)

H. E. J. Research Institute of Chemistry
(International Center for Chemical and Biological Sciences)
University of Karachi, Karachi-75270
Pakistan

Tel: (92-21) 34824924, 34824925

Fax: 4819018, 4819019

E-mail: dr.sammer.yousuf@gmail.com, sammer.yousuf@iccs.edu

Web Page: www.iccs.edu

<https://www.webofscience.com/wos/author/record/54252502>

<https://orcid.org/0000-0002-8870-3581>

Prof. Dr. Sammer Yousuf

MAILING ADDRESS

H. E. J. Research Institute of Chemistry
International Center for Chemical and Biological Sciences,
University of Karachi, Karachi-74270, Pakistan
Tel: (92-21) 34824924-5
Fax: (92-21) 34819018-9
Email: dr.sammer.yousuf@gamil.com, sammer.yousuf@iccs.edu
Web: www.iccs.edu

EDUCATION

Ph.D. (Organic Chemistry) 2007
H. E. J. Research Institute of Chemistry
University of Karachi, Karachi-75270, Pakistan

M.Sc. (Organic Chemistry) 2000
Jinnah University for Women, Karachi, Pakistan

B.Sc. (Chemistry, Biochemistry, Microbiology) 1998
Jinnah University for Women, Karachi, Pakistan

AWARDS & HONORS (INTERNATIONAL)

- Fellow of the World Academy of Sciences (TWAS) 2026
- Member of the Winning Team of “MRC Impact Prize-2023” (Medical Research Council Prize, UK) under the category of “Outstanding Team Impact” 2024
- Member TYAN Executive Committee (2024-2026) 2024
- COMSTECH Distinguished Scholar 2024
- Elected as Pakistan Hub Participant of “A Global Network of the Tropical Neglected Diseases (NTD)”, funded by “Grand Challenge Research Fund (GCRF)” and managed by the Durham University, UK (<https://ntd-network.org/>) 2019
- TWAS (The World Academy of Sciences for the advancement of science in developing countries) Young Affiliate 2013
- Appointed as Visiting Scientist at Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), Malaysia 2013
- TWAS Regional Prize for Young Scientist from the Third World Academy of Sciences (TWAS) 2011

AWARDS & HONORS (NATIONAL)

- Member of Pakistan Academy of Sciences 2017
- Member of the Pakistan Crystallographic Association (<https://www.iucr.org/world/pk>) 2010
- Merit Scholarship for Ph. D. Students from HEC (Higher Education Commission, Pakistan), 2003
- 1st class 1st position in M. Sc. (Chemistry) 2001
- Al-Haj Molvi-Riazudin Gold Medal for Securing 1st Position in M.Sc. (Chemistry) 2001

EXPERIENCE**Professor (Tenured)**

H.E.J. Research Institute of Chemistry
International Center for Chemical and Biological Sciences
University of Karachi

August 2021
Present

Associate Professor

H.E.J. Research Institute of Chemistry
International Center for Chemical and Biological Sciences
University of Karachi

January 2017-
August 2021

Assistant Professor

H.E.J. Research Institute of Chemistry
International Center for Chemical and Biological Sciences
University of Karachi

July 2010-
Dec. 2016

Research Officer

H.E.J. Research Institute of Chemistry
International Center for Chemical and Biological Sciences
University of Karachi

July 2008 -
July 2010

Post Doctoral Research Associate

Single X-Ray Crystallography Laboratory, School of Chemical
Sciences and Food Technology, Faculty of Science and
Technology, Universiti Kebangsaan, Malaysia

Nov. 2007 -
April 2008

Senior Research Fellow

H.E.J. Research Institute of Chemistry
University of Karachi, Karachi-75270, Pakistan
“Isolation, Structure Elucidation and Biotransformation Studies
on Secondary Metabolites from *Withania somnifera* and related
Plants”

April. 2001-
April. 2007

**Administrative
Experience**

- Incharge Single-Crystal X-ray Diffraction Facility of the ICCBS 2010-2023
- Faculty Incharge HR Office ICCBS (Academic / TTS) 2016 - 2023
- Faculty Incharge HR Office ICCBS (Non-Academic) 2016-2021
- ICCBS Coordinator for “ICCBS-China Cooperation in Science and Technology” 2016 - 2023
- Faculty Incharge Biotechnology Section ICCBS 2017 - 2023
- Incharge Analytical Facility, ICCBS 2021 - 2023
- Incharge Muree campus, ICCBS 2021- 2023
- Incharge IT Section, ICCBS 2025-to date

**OTHER
SERVICES**

- Coordinator, PABIC (Pakistan Biotechnology Information Center, <https://www.pabic.com.pk/contact/>) 2007 - date
- Actively involved as team member for organizing scientific events, such as workshops and conferences for both ICCBS and PABIC (Pakistan Biotechnology Information Center).

A. BOOKS EDITED

- | | | |
|----|--|-----------|
| 1. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. 1”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2019). ISBN (Print): 978-1-68108-752-8, ISBN (online): 978-1-68108-751-1 | Singapore |
| 2. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. 1I”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2020). ISBN (Print): 978-981-14-4147-9, ISBN (Online): 978-981-14-4149-3 | Singapore |
| 3. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. 1II”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2020). ISBN (Print) : 978-981-14-6834-6, ISBN (Online): 978-981-14-6836-0 | Singapore |
| 4. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. 1V”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2021). ISBN (Print): 978-981-4998-13-0, ISBN: (Online)978-981-4998-12-3 | Singapore |
| 5. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. V”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2021). ISBN (Print): 978-981-4998-16-1, ISBN (Online): 978-981-4998-15-4 | Singapore |
| 6. | “Science of Spices and Culinary Herbs: Latest Laboratory, Pre-clinical and Clinical Studies Vol. VI”, Atta-ur-Rahman, Choudhary M. I. and Yousuf S. , Bentham Science Publishers, Singapore (2024). ISBN (Print): 978-981-5274-39-4, ISBN (Online): 978-981-5274-37-0 | Singapore |

B. CHAPTERS IN BOOKS**Published in**

- | | | |
|----|---|---------|
| 1. | “Seperation of Phenyl Propanoids and Evaluation of Their Antioxidant Activities”, Yousuf S. , Choudhary M. I. and Atta-ur-Rahman, Advance Protocols in oxidative Stress II (appear in a series, Methods in Molecular Biology, 594), <i>The Humana Press</i> , 357 (2010). | USA |
| 2. | Agriculture Biotechnology in OIC Countries-Role of COMSTECH and PABIC, Choudhary M. I., and Yousuf S. , Communication Challenges and Convergence in Crop Biotechnology, Published by ISAAA and SEARCA, (2011). | USA |
| 3. | Publications: Contributing to the Robust Knowledge on Crop Biotechnology and Science Communication, Arujnan M., Odhong J., Zhang T., Abdalla N., Choudhary B., Yousuf S. and Attathom S. published in ISAAA Breifs 45, From Monologue to Stakeholders Engagement: The Evaluation of Biotech. Communication. Published by ISAAA (2013). | USA |
| 4. | “Withanolides- Chemistry and Antitumor Activity”, Choudhary M. I. Yousuf S. , and Atta-ur-Rahman, Hand Book of Natural Products, published by Springer, 3465 (2013). | Germany |
| 5. | “Lichens: Chemistry and Biological Acitivites”, Yousuf S. , Choudhary M. I. and Atta-ur-Rahman, Studies in Natural Product Chemistry, published by Elsevier 3465 (2014). | USA |

C. RESEARCH PUBLICATIONS**Published in**

- | | | |
|----|---|-------------|
| 1. | Choudhary M. I., Yousuf S. , Nawaz S. A., Ahmed S., Atta-ur-Rahman, “Cholinesterase Inhibiting Withanolides from <i>Withania somnifera</i> ”, <i>Chem. Pharm. Bull.</i> , 58(11) 1358 (2004). | Japan |
| 2. | Choudhary M. I., Yousuf S. , Ahmed S., Samreen, Yasmeen K., Atta-ur-Rahman, “Antileishmanial physalins from <i>Physalis minima</i> ”, <i>Chemistry and Biodiversity</i> , 2 1164 (2005). | Switzerland |

3. Choudhary M. I., Nawaz S. A., Zaheer-ul-Haq, Lodhi A., Jalil S., Riaz N., **Yousuf S.**, Malik A., Atta-ur-Rahman, "Withanolides, a new calss of cholinesterase inhibitors with calcium antagonistic properties", *BBRC*, 334, 276-287 (2005). UK
4. Choudhary M. I., **Yousuf S.**, Anjum S., Atta-ur-Rahman, Fun Hoong-Kun, Ali S., "5 α -Chloro-16,24-cyclo-13,14-secoergost-2-ene-18,26-dioic acid-14:17,14:27-diepoxy-6 α ,13,20,22-tetrahydroxy-1,15-dioxo- γ -lactone δ -lactone meth- anolsolvate monohydrate", *Acta cryst. E*, **61** 3523 (2005). USA
5. Choudhary M. I., **Yousuf S.**, Samreen, Shah S. A. S., Ahmed S., Atta-ur-Rahman "Biotransformation of physalin H and antileishmanial activity of transformed products", *Chem. Pharm. Bull.* **54(7)** 927-930, (2006). Japan
6. Yamin B. M., Deris H., Malik Z. M., **Yousuf S***, "N-(Biophenyl-4-yl-carbonyl)-N-(2-pyridyl-methyl) thiourea", *Acta Cryst. E*, **64** o360 (2007). USA
7. Choudhary M. I., **Yousuf S.**, Samreen, Ahmed S., Atta-ur-rahman, "New leishmanicidal physalins from *Physalis minima*", *Nat. Prod. Res.*, **21(10)** 877 (2007). UK
8. Yamin B. M., **Yousuf S***, Yousof M. S. M., Joushu R. H., "N-(2,4-dimethylphenylcarbamoithioryl)-2-methylbenzamide", *Acta Cryst. E*, **64** o832 (2008). USA
9. Yamin B. M., **Yousuf S.**, Yousof M. S. M., Joushu R. H., "2-Methyl-N-(3-methylpyridine-2-yl)carbamoithiorylbenzamide", *Acta Cryst. E*, **64** o833 (2008). USA
10. Yamin B. M., **Yousuf S***, Yousof M. S. M., Zakaria T. N. T. D., "(2-Methylbenzoyl)-3m-tolythiourea", *Acta Cryst. E*, **64** o1227 (2008). USA
11. Koko W. S., Mesaik M. A., **Yousuf S.**, Choudhary M. I., 'In Vitro immunomodulatory properties of selected sudanese medicinal plants", *J. Ethnopharmacology.*, **118** 26, (2008). The Netherlands
12. Ashiq U., Jamal R. A., Tahir M. N., **Yousuf S***, Khan I. U., "4-Methoxybenzohydrazide", *Acta Cryst. E*, **65** o1551 (2009). USA
13. Owoeye O., **Yousuf S.**, Akhter M. N., Qamar K., Dar A., Farombi E O., Onwuka S., Choudhary M. I., "Another anticancer elemanolide from *Vernonia amygdalina* Del", *Int. J. Biol. Chem. Sci.*, **4(1)** 226 (2010). Australia
14. Choudhary M. I., Hussain S., **Yousuf S.**, Muddasar, Dar A., Atta-ur-Rahman, "Chlorinated and diepoxy withanolides from *Withania somnifera* and their cytotoxic effects against human cancer cell lines", *Phytochemistry*, **17(16)** 2205 (2010). UK
15. **Yousuf S***, Zafar S., Choudhary M. I., Ng S. W., "17 β -Hydroxy-17 α -(hydroxymethyl)estr-4-en-3-one", *Acta cryst. E* **66** o2894 (2010). USA
16. **Yousuf S***, Latif A., Arfan M., Choudhary M. I., "1,2,4-Trimethoxy dibenzofuran-3-ol", *Acta Cryst. E*, **66** o3066 (2010). USA
17. Ali Q., **Yousuf S***, M. R. Shah,Ng S. W., "tert-Butyl 2-[4-(2-{4-[(tert-butoxycarbonyl)methoxy]-3-methylphenyl}-2-propyl)-2- methylphenoxy]- acetate", *Acta Cryst. E*, **66** o1750 (2010). USA
18. Ali Q., **Yousuf S***, M. R. Shah,Ng S. W., "Di-tert-butyl 2,2'-[(biphenyl-4,4'-diyl)dioxy]diacetate", *Acta Cryst. E*, **66** o1739 (2010). USA
19. K. Shah, **S. Yousuf***, Shah M. R., S. W. Ng, "Di-tert-butyl 2,2'-[9H-fluorene-9,9-diylbis(p-phenyleneoxy)]diacetate", *Acta Cryst. E*, **66** o1705 (2010). USA
20. **Yousuf S***, Ahmad R., Ali Z., Choudhary M. I., Ng S. W., "(20S)-20-Acetoxy-4-pregnene-3,16-dione from *Commiphora weightii*", *Acta Cryst. E*, **66** o3301 (2010). USA
21. Yousaf A., **Yousuf S***, Yu P., Nighat A., Ali M. K., "1-Oxo-2,3-dihydro-1-H-pyrrolizine-2,2-diyl)bis(methylene)dibenzoate", *Acta Cryst. E*, **67** 0172 (2011). USA
22. Musharraf S. G., Ali A., Ali R. A., **Yousuf S***, Atta-ur-Rahman, Choudhary M. I., "Analysis and development of structure-fragmentation relationships in withanolides using an electrospray ionization quadropole time-of-flight tandem mass spectrometry hybrid instrument", *Rapid Commun. Mass Spectrom.*, **25** 104 (2011). UK
23. **Yousuf S.**, Kamdem R. S. T., Nagadjui B. T., Wafo P., Hoog-kun Fun, "3 α -Hydroxytriucalla-8,24-diene-21-oic acid", *Acta Cryst. E*, **67** o937-o938 (2011). USA
24. **Yousuf S.**, Kamdem R. S. T., Nagadjui B. T., Wafo P., Hoog-kun Fun, "A cocrystal of 3 α -Hydroxytricucalla-8,24-diene-21-oic acid and 3 β -flurotriucalla-7,24-diene-21-oic acid (0.897:0.103)", *Acta Cryst. E*, **67** o1015-o1016 (2011). USA
25. **Yousuf S.**, Johnson A. S., Kazmi S. A., Offiong O. E., Hoog-kun Fun, "3,5-Diamino-4H-1-1,2,4-triazol-1-ium(6-carboxylacto)cuprate (II) trihydarte", *Acta cryst. E*, **67** m509-m510 (2011). USA
26. **Yousuf S.**, Musharraf S. G., Khan I., Samiullah., Hoog-kun Fun, "Absolute configuration of (2S)-4-(4-hydroxyphenyl)butane-2-ol", *Acta Cryst. E*, **67** o952-o0960 (2011). USA
27. Sultana R., Hossain R., Adhikari A., Ali Z, **Yousuf S***, Choudhary M. I., Ali M. Y., Zaman M. S., "Drimane-type sesquiterpenes from *Polygonum hydropiper*", *Planta Medica*, **77(16)**, 1848-51 (2011). USA

28. **Yousuf S.**, Johnson A. S., Kazmi S. A., Hemamalini. M., Hoog-kun Fun, “3,5-Diamino-4H-1-1,2,4-triazol-1-ium hydroxonium bis (pyridine-2,6-dicarboxylato)Cobalt (II) pyridine-2,6-dicarboxylic acid monohydrate”, *Acta Cryst. E* **67**, m1105-m1106 (2011). USA
29. Jamal R. A., Ashiq U., **Yousuf S***, Qurat-ul-Ain, “3-Amino-N₂-(2-oxo-2,3-dihydro-1H-indol-3-ylidene)benzohydrazide”, *Acta Cryst. E*, **67** o2166- (2011). USA
30. Ashiq U., Jamal R. A., **Yousuf S***, “3,4,5-Trihydroxybenzohydrazide”, *Acta Cryst. E*, **67** o2462-o2463 (2011). USA
31. Zeb. A., **Yousuf S***, “(E)-1-(1-(3-nitrophenyl)ethylidene)-2-O-tolylhydrazine”, *Acta Cryst. E*, **67** o2801-o2802 (2011). USA
32. **Yousuf S.**, Musharraf S. G., Iqbal N., Adhikari A., Choudhary M. I., “3 α -Dimethylamino-20-(N-methylacetamido)pregn-5-ene”, *Acta Cryst. E*, **67** o2918-o22920 (2011). USA
33. **Yousuf S***, Bibi M., Choudhary M. I., “21-Hydroxypregna-1,4-diene-3,20-dione”, *Acta Cryst. E*, **67** o2122-o2124 (2011). USA
34. Ramsay S. T. K., Wafo P., **Yousuf S.**, Ali, Adhikari A., Rasheed S., Khan I. A., Ngadjui B. T., Hoong-Kun Fun, and Choudhary M. I., “Canarene: A triterpenoid with a unique carbon skeleton from *Canarium schweinfurthii*”, *Org. Lett.*, **13** (20), 5492–5495 (2011). USA
35. Choudhary M. I., Alam M. S., Atta-ur-Rahman, **Yousuf S.**, Wu Yang-Chang, Lin An-Shen, and Shaheen F. “Pregnenolone derivatives as anticancer agents”, *Steroids*, **76**, 1554–1559 (2011). The Netherlands
36. Aslam M., Anis I., **Yousuf S***, Afza N., Nelofar A., “5-Chloro-2-(4-nitrobenzylideneamino)phenyl(phenyl)methanone”, *Acta Cryst. E.*, **67** o3215-o03216 (2011). USA
37. Aslam M., Anis I., **Yousuf S***, Afza N., Nelofar A., “5-Chloro-2-(2-hydroxybenzylideneamino)phenyl(phenyl)methanone”, *Acta Cryst. E*, **67** o3442-o3443 (2011). USA
38. Jamal R. A., Ashiq U., **Yousuf S***, “(3Z)-3-Hydrazinylideneindoline-2-one”, *Acta Cryst. E*, **67** o2576 (2011). USA
39. Choudhary M. I., Zafar S., **Yousuf S.**, Kayani H. F., Saifullah, Khan S., “Biotransformation of oral contraceptive ethynodiol diacetate and methyloestrenolone by cell suspension cultures of medicinal plants”, *Chemistry Central Journal*, **6**(1), 109 (2012). USA
40. Khan T. M., Bibi M., **Yousuf S.**, Qureshi I. H., Atta-ur-Rahman, Al-Majid A. M., Mesaik M. A., Khalid S., Sattar S., Atia-tul-Wahab, Choudhary M. I., “Synthesis of some potent immunomodulatory and anti-inflammatory metabolites by fungal transformation of anabolic steroid oxymetholone”, *Chemistry Central Journal*, **6**, 153 (2012). USA
41. Atta-ur-Rahman., Haroone M. S., Tareen R. B., Mesaik M. A., Jan S., Abbaskhan A., Asif M., Gulzar T., Al-Majid A. M., **Yousuf S.**, Choudhary, M. I. M.I., “Secondary Metabolites of *Sophora mollis* subsp. griffithii (Stocks) Ali”, *Phytochem. Lett.*, **5**, 613–616 (2012). UK
42. Elhassan O. M. G., **Yousuf S.**, Adhikari A., Rehman M. H., Khalid A., Omer H., Hoong-Kun Fun., Jahan H., Choudhary M. I., Yagi S., “Phytochemistry and antiglycation activity of *Aloe sinkatana* Reynolds”, *Phytochem. Lett.*, **5**, 725–728 (2012). UK
43. Musharraf, S. G., Uddin J., Akhter M., Parvez M., Khan S., **Yousuf S.**, Khan S., Choudhary M. I., “Biotransformation of an antimalarial drug, artemether by plant and fungal cell cultures”, *J. Molecular Catalysis B. Enzymatic*, **82** 80-85 (2012). UK
44. Firdous S., Ansari, N. H., Ng S. W., **Yousuf S***, Malik A., “Crystal structure of a novel furo-furan lactone from *Heliotropium eichwaldi*”, *Z. Naturforsch.*, **67(B)** 269-271 (2012). UK
45. Hameed A., Anwar A., **Yousuf S.**, Khan K. M., Basha F. Z., “Tetra-*n*-butylammonium fluoride-mediated dimerization of (α -methylbenzylidene)malononitriles to form polyfunctional 5,6-dihydropyridines derivatives under solvent-free conditions”, *Eur. J. Chem.*, **3**(2) 179-185 (2012). UK
46. Aslam M., Anis I., Afza N., Ibrahim M., **Yousuf S***, “17-(Pyrimidin-2-yl)-8,16-dioxo-17-azatetracyclo[7.7.1.0^{2,7}.0^{10,15}]heptadeca-2,4,6,10,12,14-hexaene”, *Acta Cryst. E*, **68** o440 (2012). USA
47. Aslam M., Anis I., Afza N., Safdar M., **Yousuf S***, “{2-[(3-Bromobenzylidene)amino]-5-chlorophenyl}(phenyl)methanone”, *Acta Cryst. E*, **68** o645 (2012). USA
48. **Yousuf S.**, Khan M., Fazal S., Butt N., Basha, F. Z., 5-(Prop-2-ynyl)-5H-dibenzo[b,f]azepine”, *Acta Cryst. E*, **68** o1101 (2012). USA
49. Warad I., Alruwaili A., Al-Resayes S. I., Choudhary M. I., **Yousuf S***, “5,5-Dimethyl-2,2-bis(pyridin-2-yl)-1,3-diazinane”, *Acta Cryst. E*, **68** o1786 (2012). USA
50. **Yousuf S***, Zeb. A., Basha, F. Z., “2-(2-Methyl-5-nitro-1H-imidazol-1-yl)-ethyl 4-fluorobenzoate”, *Acta Cryst. E*, **68** o952 (2012). USA
51. Aslam M., Anis I., Afza N., Yasmeen S., **Yousuf S***, “{5-Chloro-2-[(4-chlorobenzylidene)-amino]phenyl}(phenyl)methanone”, *Acta Cryst. E*, **68** o644 (2012). USA

52. Zeb. A., **Yousuf S***, Basha, F. Z., "2-(2-Methyl-5-nitro-1*H*-imidazol-1-yl)-ethyl 2-bromobenzoate", *Acta Cryst. E*, **68** o1218 (2012). USA
53. Aslam M., Anis I., Afza N., Hussain, M. T., **Yousuf S***, "2-[(2-Methoxybenzylidene)amino]phenol", *Acta Cryst. E*, **68** o1447 (2012). USA
54. **Yousuf S***, Arshad M., Butt, M. H., Saeed S., Basha, F. Z., "2-Azido-1-(4-fluorophenyl)ethanone", *Acta Cryst. E*, **68** o1268 (2012). USA
55. **Yousuf S***, Bano S., Choudhary M. I., "17 α -Acetoxy-11 β -hydroxy-6 α -methylpregn-4-ene-3,20-dione", *Acta Cryst. E*, **68** o2006 (2012). USA
56. Arshad M., **Yousuf S***, Butt, M. H., Saeed S., Basha, F. Z., "2-Azido-1(4-methylphenyl)ethanone", *Acta Cryst. E*, **68** o1608 (2012). USA
57. **Yousuf S***, Arshad M., Butt, M. H., Saeed S., Basha, F. Z., "2-Azido-1(4-nitrophenyl)ethanone", *Acta Cryst. E*, **68** o1952 (2012). USA
58. **Yousuf S***, Khan M., Fazal S., Butt M., Basha, F. Z., "5-(Prop-2-ynyl)-5*H*-dibenzo[b,f]azepine", *Acta Cryst. E*, **68** o1101 (2012). USA
59. **Yousuf S***, Siddiqui H., Farooq R., Choudhary M. I., "N-(4-Methoxy-2-nitrophenyl)-N-(methylsulfonyl)methanesulfonamide", *Acta Cryst. E*, **68** o2090 (2012). USA
60. **Yousuf S***, Younas S. M., Ambreen N., Khaild K. M., Miana G. A., "3,5a,9-Trimethyl-8-(2-phenylhydrazin-1-ylidene)-4,5,5a,9btetrahydro-3a*H*,8*H*-naphtho[1,2-*b*]furan-2(3*H*)-one", *Acta Cryst. E*, **68** o2112 (2012). USA
61. **Yousuf S***, Younas S. M., Ambreen N., Khaild K. M., Miana G. A., "8-[(2-Hydroxyphenyl)imino]-3,5a,9-trimethyl-a,4,5,5a,8,9bhexahydronaphtho[1,2-*b*]furan-2(3*H*)-one", *Acta Cryst. E*, **68** o2158 (2012). USA
62. Warad I., Aldwayyan, A. S., Al-Jekhedab F. M. Choudhary M. I., **Yousuf S.**, "[1,2-Bis(diphenylphosphanyl)ethane-k2P,P']dichloridopalladium(II) dimethyl sulfoxide monosolvate", *Acta Cryst. E*, **68** m984-m985 (2012). USA
63. Ashiq U., Jamal R. A., Ismail H., Khaild K. M., **Yousuf S***, "3-(2-Ethyl-2-phenylhydrazin-1-ylidene)indoline-2-one", *Acta Cryst. E*, **68** o3473 (2012). USA
64. **Yousuf S.**, Iqbal S., Ambreen N., Khaild K. M., "1-(3-Methoxyphenyl)-2-(phenylsulfonyl)ethan-1-one", *Acta Cryst. E*, **68** o2562 (2012). USA
65. Syukri M., Baharudin., Taha M., Ismail N. H., Ali Shah S. A., **Yousuf S***, "N'-(*E*)-2-Hydroxy-5-methoxybenzyl-idene]-2-methoxybenzohydrazide", *Acta Cryst. E*, **68** o3255 (2012). USA
66. **Yousuf S***, Siddiqui H., Farooq R., Choudhary M. I., "2-[3-(1,3-Benzothiazol-2-yl)-2,2-dimethylpropyl-2-methyl-2,3)-dihydro-1,3-benzothiazole", *Acta Cryst. E*, **68** o2349 (2012). USA
67. Taha M., Syukri M., Baharudin., Ismail N. H., Ali Shah S. A., **Yousuf S***, "N'-[(*E*)-2,3-Dihydroxybenzylidene]-2-methoxybenzohydrazide", *Acta Cryst. E*, **68** o3256 (2012). USA
68. Taha M., Naz H., Rahman A.A., Ismail N. H., **Yousuf S***, "(*E*)-4-methoxy-N-(3,4,5-trihydroxybenzyl-idene)benzohydrazide methanol monosolvate", *Acta Cryst. E*, **68** o2846 (2012). USA
69. Taha M., Naz H., Rahman A. A., Ismail N. H., **Yousuf S***, "(*E*)-N-Dimethoxybenzylidene)-4-methoxy-benzohydrazide", *Acta Cryst. E*, **68** o2780 (2012). USA
70. Taha M., Naz H., Rahman A. A., Ismail N. H., **Yousuf S***, "(*E*)-4-methoxy-N-[(pyridin-4-yl)methylidene]benzohydrazide monohydrate", *Acta Cryst. E*, **68** o2778 (2012). USA
71. Naz H., Taha M., Rahman A. A., Ismail N. H., **Yousuf S***, "Methyl(*E*)-3,5-dimethoxy-2-[[2-(4-methoxybenzo-yl)hydrazin-1-ylidene]methyl]benzoate", *Acta Cryst. E*, **68** o2671 (2012). USA
72. Saad S. M., Ftima Itrat., Perveen S., Khaild K. M., **Yousuf S***, "N-(3-Chlorobenzylidene)-4-hydroxybenzohydrazide", *Acta Cryst. E*, **68** o3499 (2012). USA
73. **Yousuf S***, Shah S., Ambreen N., Khaild K. M., Ahmed S., "2-(5-Chloro-1,3-benzothiazol-2-yl)-4-methoxyphenol", *Acta Cryst. E*, **68** o2877 (2012). USA
74. **Yousuf S***, Shah S., Ambreen N., Khaild K. M., Ahmed S., "5-Chloro-2-(3,4,5-trimethoxyphenyl)-1,3-benzothiazol", *Acta Cryst. E*, **68** o3057 (2012). USA
75. **Yousuf S.**, Shah S., Ambreen N., Khaild K. M., Ahmed S., "5-Chloro-2-phenyl-1,3-benzothiazol", *Acta Cryst. E*, **68** o2799 (2012). USA
76. Sharif H. M. A., Alvi D. A., **Yousuf S***, "2-[(*E*)-(Nephthalen-2-yl) iminomethyl] phenol", *Acta Cryst. E*, **68** o2629 (2012). USA
77. **Yousuf S***, Zeb. A., Batool F., Basha, F. Z., "2-(2-Methyl-5-nitro-1*H*-imidazol-1-yl)ethyl methanesulfonate", *Acta Cryst. E*, **68** o2781 (2012). USA
78. **Yousuf S***, Mukhtar A., Ambreen N., Saad S. M., Khaild K. M., "Ethyl(*E*)-3-(6-methyl-4-oxo-4*H*-chromen-3-yl)prop-2-enoate", *Acta Cryst. E*, **68** o2948 (2012). USA
79. Arshad M., **Yousuf S***, Saeed S., Basha, F. Z., "4-Methoxy-N-(4-methoxy-2-nitrophenyl)benzamide", *Acta Cryst. E*, **68** o3028 (2012). USA

80. **Yousuf S***, Mukhtar A., Ambreen N., Saad S. M., Khaild K. M., "6-Methyl-4-oxo-4H-chromene-3-carbaldehyde", *Acta Cryst. E*, **68** o2920 (2012). USA
81. Zafar S., Bibi M., **Yousuf S***, Choudhary M. I., "New metabolites from fungal biotransformation of an oral contraceptive agent: methyloestrenolone, *Steroids*, **78** 418-425 (2013). USA
82. Choudhary M. I., Khan N., Ahmad, M., **Yousuf S.**, Fun Hoong-Kun, Soomro S., Asif M., Mesaik M. A., Shaheen F., "New inhibitors of ROS generation and T cell proliferation from *Myrtus communis*, *Org. Lett.*, **15 (8)** 1862–1865 (2013). USA
83. Khan B., Nadeem S., Shah M.R., Hoda S., "Novel 1,2,3-triazole-bisphenol-based macrocycle synthesized through click chemistry", *Lett. Org. Chem.*, **10 (10)** 752–757 (2013). The Netherlands
84. Hoog-kun Fun., Wan-Sin Loh., Johnson A., **Yousuf S.**, Ededet Eno., "Bis(3,5-diamino-4 H-1,2,4-triazol-1-ium)3,4-dioxycyclobutane-1,2-diolate" *Acta Cryst. E*, **69** o353- o354 (2013). USA
85. Syukri M., Baharudin., Taha M., Ismail N. H., Ali Shah S. A., **Yousuf S***, "(E)-N'-(4-Cholorobenzylidene)-2-methoxybenzohydrazide" *Acta Cryst. E*, **69** o276 (2013). USA
86. Taha M., Syukri M., Baharudin., Ismail N. H., Ali Shah S. A., **Yousuf S***, "(E)-2-Methoxy-N'-(2,4,6-trihydroxybenzyl-idene)benzohydrazide" *Acta Cryst. E*, **69** o277 (2013). USA
87. Mabkhot N Y., Barakat A., Alatibi F., Choudhary M. I., **Yousuf S***, "(E)-Ethyl2-anilino-5-[3-(dimethylamino)acryloyl]-4-phenyl-thiophene-3-carboxylate" *Acta Cryst. E*, **69** o351 (2013). USA
88. **Yousuf S***, Shah S., Ambreen N., Khaild K. M., Ahmed S., "5-Chloro-2-(4-phenyl-1,3-benzothiazol)", *Acta Cryst. E*, **69** o360 (2013). USA
89. Khaild K. M ., Khan T., Ambreen N., **Yousuf S.**, Morales A G., "An expeditious solvent free approach towards the synthesis of smaller ring sized aromatic exocyclic amin's Schiff bases" *J. Chem. Soc. Pak*, **1(35)** 188-191 (2013). Pakistan
90. Taha M., Ismail N. H., Jaafar F.M., Khaild K. M., **Yousuf S***, "(E)-2,4-Dimethyl-N'-(2-methylbenzylidene)benzohydrazide" *Acta Cryst. E*, **69** o400 (2013). USA
91. Taha M., Ismail N. H., Aziz A. N., Shah S. A. A., **Yousuf S***, 3-[2-(Triphenylphosphanylidene) acetyl]-2H-chromen-2-one" *Acta Cryst. E*, **69** o245 (2013). USA
92. Barakat A., Al-Majid A. M., Mabkhot N. Y., Choudhary M. I., **Yousuf S***, "Dimethyl 2-(4-methylbenzylidene)malonate", *Acta Cryst. E*, **69** o919 (2013). USA
93. Saad S.M., Khan I., Haider S.M., Perveen S., Khaild K. M., **Yousuf S***, "2-[[Dimethylamino)methylidene]-amino}-5-nitrobenzonitrile", *Acta Cryst. E*, **69** o75 (2013). USA
94. Saad S. M., Khan I., Perveen S., Khaild K. M., **Yousuf S***, "N-(2,5-Dimethoxyphenyl)-6-nitro-quinazolin-4-amin", *Acta Cryst. E*, **69** o8 (2013). USA
95. **Yousuf S***, Khaild K. M., Naz F., Parveen S., Miana G. A., "1-(2-Methyl-5-nitro-1 H –imidazol-1-yl) acetone" *Acta Cryst. E*, **69** o552 (2013). USA
96. Aslam M., Anis I., Afza N., Hussain A., Iqbal L., Lateef M., Noreen Z., Hussain M. T., **Yousuf S.**, "Synthesis, single crystal X-ray and biological evaluation of amino-phenol based Schiff bases", *Journal of the Chilean Chemical Society*, **58(3)** 1867-1871 (2013). USA
97. Khan W.S., Zaidi H.J., **Yousuf S.**, Khaild K. M., Ambreen N., Khan Momin., Parveen S., Miana G A., "Synthesis X-Ray Crystallography and Antimicrobial Activity of Protected and Deprotected Amides" *J. Chem. Soc. Pak, J. Chem. Soc. Pak*, **35(3)** 875-885 (2013). Pakistan
98. Taha M., Ismail N. H., Jamil W., **Yousuf S.**, Jaffar F. M., Ali M. I., Kashif S. M., Hussain E., "Synthesis, evaluation of antioxidant activity and crystal structure of 2,4-dimethylbenzoylhydrazones". *Molecules*, **18** 10912-10929 (2013). Switzerland
99. Mabkhot, Y. N., Barakat, A., Al-MAjid A. M., Alshahrani, S., **Yousuf S.**, Choudhary M. I. "Synthesis, reactions and biological activity of some new bis-heterocyclicring compounds containing sulphur atom. *Chemistry Central Journal*, **7(112)** (2013). USA
100. Hussain Z., Hussain E., Siddiqui H., Choudhary M. I., **Yousuf S***, "2,6-Dibromo-N-(prop-2-ynyl)benzamide". *Acta Cryst. E*, **69** o1140 (2013). USA
101. Mabkhot Y. N., Al-Showlman S. S., Barakat A., Choudhary M. I., **Yousuf S***. "3,4-Dimethylthieno[2,3-b]thiophene-2,5-dicarbonitrile". *Acta Cryst. E*, **69** o1272 (2013). USA
102. Mabkhot Y. N., Altaibi F., Barakat A., Choudhary M. I., **Yousuf S***. "Ethyl 4-acetyl-5-anilino-3-methyl-thiophene-2-carboxylate". *Acta Cryst. E*, **69** o1049 (2013). USA
103. Taha M., Ismail N. H., Jaafer F. M., Aziz A. N., **Yousuf S***, Choudhary M. I., "(E)-N'-(3,4-Dihydroxybenzylidene)2,4-dimethylbenzohydrazide monohydrate", *Acta Cryst. E*, **69** o490 (2013). USA
104. Taha M., Naz H., Rasheed S., Ismail N. H., Rahman A. A., **Yousuf, S.**, Choudhary M. I., "Synthesis of 4-methoxybenzoylhydrazones and evaluation of their antiglycation activity", *Molecules*, **19(1)** 1286-1301 (2014). Switzerland

105. Al-Noaimi M. , Choudhary M. I., Awwadi F. F., Talib W. H., Hadda T. B., **Yousuf S.**, Sawafta A., Warad I. "Characterization and biological activities of two copper(II) complexes with dipropylene triamine and diamine as ligands", *Spectrochimica Acta Part A-Molecular and Biomolecular Spectroscopy*, **5(127)** 225-30 (2014). USA
106. El Ashry H. E. S., **Yousuf, S.**, Hassan H. H., Zahran M. K., Habishy A. S., "Synthesis and single-crystal X-ray diffraction studies of an arylidene-thiosemicarbazone and hydrazonyl-phenylthiazole", *Lett. Org. Chem.*, **11** 101-108 101 (2014). The Netherlands
107. Bashir S., Alam M., Adhikari A., Shresta R. L., **Yousuf S.**, Ahmed B., Perveen S., Aman A., Choudhary M. I., "New antileishmanial sesquiterpene coumarins from *Ferula narthex* Boiss", *Phytochem. Lett.*, **9(1)** 46-50 (2014). USA
108. Yahia M., Barakt A., Al-Majid A. M., Barakat A., Choudhary M. I., **Yousuf S.**, "Crystal structure of 1-(5-Acetyl-3,4-dimethyl-thieno[2,3-b]thiophen-2-yl)-ethanone", *Z. Crystallographie-NCS.* **229** 39 (2014). Germany
109. Mabkhot Y. N., Fahd Aldosari, Al-Showiman S. S., Barakat A., Choudhary M. I., **Yousuf S.**, "Synthesis, characterization and X-ray crystal structure of 1,1'-(3,4-diphenylthieno[2,3-b]thiophene-2,5-diyl)diethanone", *Journal of Chemistry*, 2014 (2014), DOI: 10.1155/2014/504860 UK
110. Barakt A., Al-Majid A. M., Al-Najjar H. J., Yahia M., Javaid S. **Yousuf S.**, Choudhary M. I., "The zwitterionic pyrimidinium adducts as antioxidants with therapeutic potential as nitric oxide scavenger", *Eur. J. Chem.*, **84(12)** 146 (2014). UK
111. Al-Majid A. M., Islam M. S., Barakat A., Al-Qahtani N. J., **Yousuf S.**, Choudhary M. I., "Tandem Knoevenagel–Michael reactions in aqueous diethylamine medium: A greener and efficient approach toward bis-dimedone derivatives", *Arab. J. Chem.*, 2014 <http://www.sciencedirect.com/science/article/pii/S1878535214000768> USA
112. Mabkhot Y. N., Barakat A., **Yousuf S.**, Choudhary M. I., Frey W., Hadda T. B., Mubarak S. M., "Substituted thieno[2,3-b]thiophenes and related congeners: synthesis, β -glucuronidase inhibition activity, crystal structure, and POM analyses", *Bioorg. Med. Chem.*, **22(23)** 6715-6725 (2014) USA
113. Shahid H. A., Hussain E., Jahangir S., **Yousuf S***, "1-(2-Methyl-5-nitro-1H-imidazol-1-yl)-propane-2-yl acetate", *Acta Cryst. E*, **70** o294 (2014). USA
114. Aziz A. N., Taha M., Ismail N. H., Anour E. H., **Yousuf S.**, Jamil W., Awang K., Ahmet N., Khan K. M., Kashif S. M., "Synthesis, crystal structure, DFT studies and evaluation of the antioxidant activity of 3,4-dimethoxybenzenamine Schiff bases", *Molecules*, **19** 8414-8433 (2014). Switzerland
115. Taha M., Shah S. A. A., Sultan S., Ismail N. H., **Yousuf S***, "2-([2-(2-Hydroxy-5-methoxybenzyl-iden)hydrazine-1-ylidene]methyl)-4-methoxyphenol, *Acta Cryst. E*, **70** o131 (2014). USA
116. Khan K. M., Hussain S., Perveen S., Rahim F., **Yousuf S.**, Hussain E., "Sodium bromate/sodium hydrogen sulfites: a new catalyst for the synthesis of quinoxaline derivatives", *Lett. Org. Chem.*, **11** 426-431 (2014). The Netherlands
117. Baydon E., Bano S., Atia-tul-Wahab, Jabeen A., **Yousuf S.**, Mesaik A., Smith C., Choudhary M. I., "Fungal transformation and T-cell proliferation inhibitory activity of melengstrol acetate and Its metabolites", *Steroids*, **86**, 56-61 (2014). USA
118. Barakt A., Al-Majid A. M., Al-Najjar H. J., Choudhary M. I., **Yousuf S.**, "Crystal structure of 1,3-dimethyl-5-(2,4,6-trimethylbenzylidene)pyrimidine-2,4,6-1H,3H,5H)-trione, C₁₆H₁₈N₂O₃", *Z. Kristallogr., NCS.*, **229**, 269 (2014). Switzerland
119. Assem B., Al-Majid A. M., Gehad L., Fiza A., **Yousuf S.**, Choudhary M.I., Sajda A., Zaheer-Ul Haq., "Synthesis and dynamics studies of barbituric acid derivatives as urease inhibitors", *Chemistry Central Journal*, **9**, (2015) USA
120. Bano H., **Yousuf S***. "Crystal structure of 5-hydroxy-2-nitrobenzaldehyde". *Acta Cryst. E*, **71** o328 (2015). USA
121. Taha M., Ismail N. H., Baharudin M. S., Lalani S., Mahboob S., Khan K. M., **Yousuf S.**, Siddiqui S., Rahim F., Choudhary M. I., "Synthesis and crystal structure of 2-methoxybenzoylhydrazones and evaluation of their α -glucosidase and urease inhibition potential", *Med. Chem. Res.*, **24**, 1310-1324 (2015). Germany
122. Assem B., Mohammad Shahidul I., Al-Majid A. M., Ghabbour H. A., Fun H. K., Javed K., Imad R., **Yousuf S.**, Choudhary M. I., Wadood A., "Synthesis, *in vitro* biological activities and *in silico* study of dihydropyrimidines derivatives", *Bioorg. Med. Chem.*, **23**, 6740-6748 (2015). USA

123. Barakat A., Soliman S. M., Al-Majid A. M., Lotfy G., Ghabbour H. A., Fun H. K., **Yousuf S.**, Choudhary M. I., Wadood A., "Synthesis and structure investigation of novel pyrimidine-2,4,6-trione derivatives of highly potential biological activity as anti-diabetic agent", *J. Mol. Struc.*, **1098**, 365-376 (2015). The Netherlands
124. Siddiqui S., Erharuyi O., Falodun A., Choudhary M.I., **Yousuf S***, "Crystal structure of (3S*,4S*,4aS*,5R* 6R*,6aS*,7R*,11aS*,11 bR*)-5,6-bis(benzoyloxy)-3,4a-dihydroxy-4,7,11b-trimethyl-1,2,3,4,4a,5,6,6a,7,11,11a,-11b-dodecahydrophenanthro[3,2-Mfuran-4-carboxylic acid methanol monosolvate", *Acta Cryst E. Crystallographic Comm.*, **71** O739 (2015). USA
125. Yousuf S., Bano H., Muhammad M. T., Khan K. M., Crystal structure of 6-amino-4-(3-bromo-4-methoxyphenyl)-3-methyl-2,4-dihydropyrano[2,3-c]pyrazole-5-carbonitrile dimethyl sulfoxide monosolvate, *Acta Cryst E. Crystallographic Comm.*, **71** O453 (2015). USA
126. Mabkhot Y. N., Al-Showiman S. S., Barakat A., **Yousuf S.**, Choudhary M. I., "Regioselective synthesis and crystal structure of ethyl-4-acetyl-5-((2-ethoxy-2-oxoethyl)thio)-3-hydroxythiophene-2-carboxylate, C₁₃H₁₆O₆S₂", *Z. Naturforsch.-NCS.*, **230** 241-242 (2015). UK
127. Mabkhot Y. N., Al-Showiman S. S., Barakat A., **Yousuf S.**, Choudhary M. I., "Crystal structure of 1-acetylimidazolidine-2,4-dione monohydrate, C₅H₈N₂O₄", *Z. Naturforsch.-NCS.*, **230**, 255-256 (2015). UK
128. **Yousuf S***, Bano H., Muhammad M. T., Khan K. M., "Crystal structure of 2-[2-(benzyloxy)benzylidene]malononitrile", *Acta Cryst E. Crystallographic Comm.*, **71**, o560 (2015). USA
129. Khan B., Minhaz A., Ali I., Nadeem S., **Yousuf S.**, Ishaq M., Shah MR., "Fluorescent supramolecular tweezers for selective recognition of cephadrine", *Tett. Lett.*, **56**, 581-585 (2015). The Netherlands
130. Khan M. A., Fazal ur Rehman S., Hameed A., Kousar S., Dalvandi K., **Yousuf S.**, Choudhary M. I., Bashra F. Z., "Regioselective synthesis of novel 2,3,4,4a-tetrahydro-1H-carbazoles and their cholinesterase inhibitory activities", *RSC Adv.*, **5** 59240-59250 (2015). UK
131. Mabkhot Y. N., Aldawsari F. D., Showiman S. S., Barakat A., Soliman S. M., Choudhary M. I., **Yousuf S.**, Mubarak M. S., Benm Hadda T., "Novel enamione derived from thieno [2,3-b] thiene: Synthesis, x-ray crystal structure, HOMO, LUMO, NBO analyses and biological activity", *Chemistry Central Journal*, **9** 24 (2015). USA
132. **Yousuf S***, Hussain S., Khan K. M., Choudhary M. I. "Crystal structure of methyl 2-(7-hydroxy-2-oxo-2H-chromen-4-yl)acetate, *Acta Cryst E. Crystallographic Comm.*, **71**, o677-o678 (2015). USA
133. Bano S., **Yousuf S***, "Crystal structure of *p*-toulenesulfonylmethyl isocyanide", *Acta Cryst E. Crystallographic Comm.*, **71**, o412 (2015). USA
134. Barakat A., Al-Majid A. M., Islam M. S., Warad I., Masand V. H., **Yousuf S.**, Choudhary, M. I., "Molecular structure investigation and biological evaluation of Michael adducts derived from dimedone", *Res. Chem. Intermed.*, **42**, 4041-4053 (2016). USA
135. Al-Majid A. M., Yousuf S., Choudhary M. I., Nolin P., "Gold-NHC complexes as potent bioactive compounds", *Chemistry Select*, **1(1)**, 76 (2016). USA
136. Mabkhot Y. N., Kheder N. A., Barakat A., Choudhary M. I., Yousuf S., Frey W., "Antimicrobial, anti-cancer and molecular docking of two novel hitherto unreported thiophenes", *RSC. Advanc.*, **6(68)**, 63724 (2016). UK
137. Islam M. S., Barakat A., Al-Majid A. M., Ghabbour H. A., Rahman A. F. M. M., Javaid K., Imad R., **Yousuf S.**, Choudhary M. I., "A concise synthesis and evaluation of new malonamide derivatives as potential alpha-glucosidase inhibitors", *Bioorg. Med. Chem.*, **24**, 1675-1682 (2016). USA
138. Khan S. W., Zaidi J. H., Naseer N., Al-Syed E., Khan K. M., Yousuf S., Khan M., Nadhman A., Umer M. N., Perveen S., Miana G. A. "Synthesis, characterization, antimicrobial and antileishmanial activities of amide derivatives of *L*-tartaric acid", *J. Chem. Soc. Pak.*, **38(1)**, 70 (2016). Pakistan
139. Mabkhot Y. N., Aldawsari F. D., Al-Showiman S. S., Barakat A., Soliman S. M., Choudhary M. I., **Yousuf S.**, Ben Hadda T., Mubarak M. S., "Synthesis, molecular structure optimization, and cytotoxicity assay of a novel 2-acetyl-3-amino-5[(2-oxopropyl)sulfanyl]-4-cyanothiophene", *Molecules.*, **21(2)**, (2016) (In press). Doi: 10.3390/molecules21020214. Switzerland
140. Siddiqui H., Bashir M. A., Javaid K., Nizamani A., Bano H., **Yousuf S.**, Rahman A. U., Choudhary M. I., "Ultrasonic synthesis of tyramine derivatives as novel inhibitors of α -glucosidase *in vitro*", *J. Enzyme Inhib. Med. Chem.*, **25**, 1-12. (2016). UK

141. Faroque M. U., **Yousuf S***, Zafar S., Choudhary M. I., Ahmed M., "Transferred multipolar atom model for 10 β ,17 β -dihydroxy-17 α -methylestr-4-en-3-one dihydrate obtained from the biotransformation of methyloestrenolone", *Acta Crystallogr C Struct. Chem.*, **72**(5), 398-404 (2016). doi: 10.1107/S2053229616005441. USA
142. Ahmad M. S., Zafar S., **Yousuf S.**, Atia-Tul-Wahab, Atta-ur-Rahman, Choudhary M. I., "Biotransformation of 6-dehydropregesterone with *Aspergillus niger* and *Gibberella fujikuroi*", *Steroids*, **112**: 12-67 (2016). The Netherlands
143. Bano S., Atia-tul-Wahab, **Yousuf S.**, Jabeen A., Mesaik M. A., Rahman A. U., Choudhary M. I., "New anti-inflammatory metabolites by microbial transformation of medrysone.", *PLoS One*. 22, **11**(4): e0153951. (2016). USA
144. Barakat A., Al-Majid A. M., Soliman S. M., Islam M. S., Ghawas H. M., **Yousuf S.**, Choudhary M. I., Wadood A., "Monoalkylated barbiturate derivatives: X-ray crystal structure, theoretical studies, and biological activities", *Journal of Molecular Structure*, **1141**, 624-633 (2016). The Netherlands
145. Barakat A., Islam M. S., Al-Majid A. M., Ghabbeour H. A., **Yousuf S.**, Ashraf M., Shaikh N. N., Choudhary M. I., Khalil R., Ul-Haq Z., "Synthesis of pyrimidine-2,4,6-trione derivatives: Anti-oxidant, anti-cancer, α -glucosidase, β -glucuronidase inhibition and their molecular docking studies", *Bioorg. Chem.*, **68**, 72, (2016). The Netherlands
146. Shahid H A., Jahangir S., **Yousuf S.**, Hanif M., Khan S., "Synthesis, crystal structure, structural characterization and in vitro antimicrobial activities of 1-methyl-4-nitro-1H-imidazole, *Aarabian Jouenal of Chemistry*, **9**(5), 668, (2016).
147. Siddiqui M., Ahmad M. S., Atia-tul-Wahab, **Yousuf S.**, Fatima N., Shaikh N. N., Atta-ur-Rahman, Choudhary M. I., "Biotransformation of a Potent Anabolic Steroid, Mibolerone, with *Cunninghamella blakesleeana*, *C. Echinulata*, and *Macrophomina phaseolina*, and Biological Activity Evaluation of its Metabolites". *PLoS One*. 22, **12**(2): e0171476. (2017). USA
148. Shahid A., Noureen S., Choudhary M. I., Yousuf S., Ahmed M. "Crystal structure and electrostatic properties of prednisolone acetate studied using a transferred multipolar atom model", *Acta Crystallogr C Struct. Chem.*, **73**, 430-436 (2017). USA
149. Kezetas J. J. B., Madjouk, S. D., Kumar, R., Ali, M. S., Njakou, B. L., Yousuf, S. Crystal structure and Hirshfeld surface analysis of 3-oxours-12-ene-27a,28-dioic acid (quafrinoic acid), *Acta Crystallographica Section E: Crystallographic Communications*, **73**, 763-766 (2017). USA
150. Kumar R., Hussain S., Khan K. M., Perveen S., **Yousuf S***. "Crystal structure and Hirshfeld surface analysis of 1-(4-chlorophenyl)-2-[5-(4-chlorophenyl)-1,3,4-oxadiazol-2-yl]sulfanylethanone", *Acta Crystallographica Section E: Crystallographic Communications*, **73**, 524-527 (2017). USA
151. Bano H., Hussain S., Khan K. M., Perveen S., **Yousuf S***. "Crystal structure and Hirshfeld surface analysis of 1-(4-bromophenyl)-2-[5-(pyridin-3-yl)-1,3,4-oxadiazol-2-yl]sulfanylethan-1-one", *Acta Crystallographica Section E: Crystallographic Communications*, **73**, 623-626 (2017). USA
152. Al-Majid A. M., Islam M. S., Barakat A., **Yousuf S.**, Choudhary M. I., "Tandem Knoevenagel–Michael reactions in aqueous diethylamine medium: A greener and efficient approach toward bis-dimedone derivatives", *Arabian Journal of Chemistry*, **10**(2), 185-193 (2017). The Netherlands
153. Bhatti H. A., Khatoon M., Al-Rashida M., Bano H., Iqbal N., Zaib-un-Nisa, **Yousuf S.**, Khan K. M., Hameed A., "Facile dimethyl amino group triggered cyclic sulfonamides synthesis and evaluation as alkaline phosphatase inhibitors", *Bioorganic Chemistry*, **71**, 10-18 (2017). USA
154. Barakat A., Islam M. S., Al-Majid A. M., Soliman S. M., Ghaboour H. A., **Yousuf S.**, Choudhary M. I., Ul-Haq Z., "Synthesis, molecular structure, spectral analysis, and biological activity of new malonamide derivatives as α -glucosidase inhibitors", *Journal of Molecular Structure*, **1134**, 253-264 (2017). The Netherlands
155. Barakat A., Al-Majid A. M., Soliman S. M., Islam M. S., Ghawas H. M., **Yousuf S.**, Choudhary M. I., Wadood A., "Monoalkylated barbiturate derivatives: X-ray crystal structure, theoretical studies, and biological activities", *Journal of Molecular Structure*, **1141**, 624-633 (2017). The Netherlands
156. Barakat A., Ali M., Al-Majid A. M., **Yousuf S.**, Choudhary M. I., Khalil R., Zaheer Ul-Haq, "Synthesis of thiobarbituric acid derivatives: *In vitro* α -glucosidase inhibition and molecular docking studies", *Bioorganic Chemistry*, **75**, 99-105 (2017). USA
157. Choudhary M. I., Siddiqui M., **Yousuf S.**, Ahmad M. S., Choudhry H., "Bio-catalytic structural transformation of anti-cancer steroid, drostanolone enanthate with *Cephalosporium aphidicola* and *Fusarium lini*, and cytotoxic potential evaluation of its metabolites against certain cancer cell lines, *Frontiers in Pharmacology*, **8**(DEC), 900 (2017). Switzerland

158. Shahid H. A., Jahangir S., Hanif M., **Yousuf S.**, Qureshi N., “Frontiers in Pharmacology, 8(DEC),900, Open Access Synthesis, spectroscopic and electrochemical characterization of secnidazole esters”, *Journal of Molecular Structure*, **1149**, 792-802 (2017). The Netherlands
159. Ahmad M. S., **Yousuf S.**, Atia-tul-Wahab, Atta-ur-Rahman, Choudhary, M. I. Biotransformation of anabolic compound methasterone with *Macrophomina phaseolina*, *Cunninghamella blakesleeana*, and *Fusarium lini*, and TNF- α inhibitory effect of transformed products, *Steroids*, **128**, 75-84 (2017). The Netherlands
160. Barakat A., Al-Majid, A. M., Soliman S. Yousuf, S.Choudhary M. I.,Wadood A., “Monoalkylated barbiturate derivatives: X-ray crystal structure, theoretical studies, and biologicalactivities”, *Journal of Molecular Structure*, **1141**, 624-633 (2017). The Netherlands
161. Madjouka S. D., Kumar R., Njakou B. L., Yousuf S., Kezetas, J. J. B., “Crystal structure and Hirshfeld surface analysis of 3-oxours-12-ene-27a,28-dioic acid (quafrinoic acid), *Acta Crystallographica Section E: Crystallographic Communications*, **73**, 763-766 (2017). USA
162. Farooq R., Hussain N., **Yousuf S.**, Atta-Ur-Rahman, Choudhary M. I., “Microbial transformation of mestanolone by: *Macrophomina phaseolina* and *Cunninghamella blakesleeana* and anticancer activities of the transformed products”, *RSC Advances*, **8(39)**, 21985-21992 (2018). UK
163. Kumar K. O, Rehman M. U., Choudhary M. I., **Yousuf S***, “Crystal structure and Hirshfeld surface analysis of the naturally occurring cassane-type diterpenoid, 6 β -cinnamoyl-7 β -hydroxyvouacapen-5 α -ol, Ogbeide”, *Acta Crystallographica Section E: Crystallographic Communications*, **74**, 385-389 (2018). USA
164. Rashid H. U., Khan S. W., Khan M.,Tariq M., Yousuf S., “Synthesis, Characterization, X-Ray Crystallography, and Antileishmanial Activities of N-Linked and O-Linked Glycopyranosides”, *Journal of Chemistry*, 9648710 (2018). USA
165. Shahid A., Aziz A., Noureen S., **Yousuf S***, Choudhary, M. I., “Biotransformation, spectroscopic investigation, crystal structure and electrostatic properties of 3, 7 α -dihydroxyestra-1, 3, 5(10)-trien-17-one monohydrate studied using transferred electron-density parameters”, *Acta Crystallographica Section C: Structural Chemistry*, **74(5)**, 534-541 (2018). USA
166. Ali I., Shaha M. R., Yousuf S., Ahmed S., Shah K., Javed I., “Hemolytic and cellular toxicology of a sulfanilamide-based nonionic surfactant: a niosomal carrier for hydrophobic drugs”, *Toxicolog. Res. (Camb.)*, **13:7(5)**, 771 (2018).
167. Siddiqui R., Iqbal U., Saify Z. S., Akhter S.,**Yousuf, S.**, "Crystal structure and Hirshfeld surface analysis of 3-octyl-4-oxo-2, 6-bis(3, 4, 5-trimethoxyphenyl)piperidinium chloride”, *Acta Crystallographica Section E: Crystallographic Communications*, **74**, pp. 931-934 (2018). USA
168. Rasheed S., Sánchez S. S., **Yousuf S.**, Honoré S. M., Choudhary M. I., “Drug repurposing: *In-vitro* anti-glycation properties of 18 common drugs”, *PLoS ONE*, **13(1)**, 019050 (2018). USA
169. Gondal H. Y., Cheema Z. M., Zaidi J. H., **Yousuf S.**, Choudhary, M. I., “Facile synthesis of α -alkoxymethyltriphenylphosphonium iodides: new application of PPh₃/I₂”, *Chemistry Central Journal*, **12(1)**, 62 (2018). USA
170. Islam, M. S., Barakat, A., Al-Majid, A. M., Khalil, R., Ul-Haq, Z., **Yousuf, S.**, “Catalytic asymmetric synthesis of indole derivatives as novel α -glucosidase inhibitors *in-vitro*”, *Bioorganic Chemistry*, **79**, 350-354 (2018). USA
171. Sema D. K., Meli Lannang A., Tatsimo S. J. N., Sewald N., Choudhary M. I., “New indane and naphthalene derivatives from the rhizomes of *Kniphofia reflexa* Hutchinson ex Codd”, *Phytochemistry Letters*, **26**, 78-82 (2018). UK
172. Arbain D., Nofrizal S. N., **Yousuf S.**, Choudhary M. I., “Bicyclo[3.2.1]octanoid neolignans from Indonesian red beetle leaves (*Piper crocatum* Ruiz & Pav.)”, *Phytochemistry Letters*, **24**, 163-166 (2018). UK
173. Bankeu J. J. K., Madjouka S., Feuya G. R. T., Ngouela A. S., Ali M. S., **Yousuf, S.**, “Pobeginine: A monoterpene indole alkaloid and other bioactive constituents from the stem bark of *Nauclea pobeginii*”, *Zeitschrift fur Naturforschung*, *Section C Journal of Biosciences*, **73(9-10)**, 335-344 (2018). Berlin
174. Hussain E., Kumar R., Choudhary M. I., **Yousuf S***, “Crystal Engineering of Naturally Occurring Seselin to Obtain a Co-crystal with Enhanced Antileishmanial Activity, Hirshfeld Surface Analysis and Computational Insight”, *Crystal Growth and Design*, **18(8)**, 4628-4636 (2018). USA
175. Hussain N., Hameed, A., Ahmad, M. S., **Yousuf, S.**, Ali, Z., Rahman, M. H., Choudhary, M. I. “New iridoids from *Lyonia ovalifolia* and their anti-hyperglycemic effects in mice pancreatic islets” *Fitoterapia*, **131**, 168-173 (2018). The Netherlands

176. Gondal H. Y., Cheema Z. M., Zaidi J. H., **Yousuf S.**, Choudhary M. I. "Facile synthesis of α -alkoxymethyltriphenylphosphonium iodides: new application of PPh_3/I_2 ". *Chemistry Central Journal*, **12(1)**, 62, (2018). USA
177. El-khateeb M., Harb M., Mansour A., **Yousuf S.**, "Photochemical Substitution of a Single CO Ligand of $\text{CpFe}(\text{CO})_2\text{SeC}(\text{Y})\text{Y'Ar}[(\text{Y})\text{Y}'=(\text{O})\text{O}, (\text{S})\text{O} \text{ and } (\text{S})\text{S}]$ by EPh_3 ($\text{E} = \text{P}, \text{As}, \text{Sb}$)". *Inorganica Chimica Acta*, Article in Press, 24 February, Pages 694-697, (2019). The Netherlands
178. Dongmo O. L. M., Epoh N. J., Tadjoua H. T., **Yousuf S.**, Telefo P. B., Tapondjou L. A., Choudhary M. I. "Acute and sub-acute toxicity of the aqueous extract from the stem bark of *Tetrapleura tetrapleura* Taub. (Fabaceae) in mice and rats". *Journal of Ethnopharmacology*, **(236)**, 42-49, (2019). The Netherlands
179. Muhammad A. J., Ahmed D., **Yousuf S.**, Tabassum N., Qamar M. T. "Synthesis, crystal structures, Hirshfeld surface analysis and spectroscopic studies of two Schiff bases of anisaldehyde and their urease and acetylcholinesterase inhibitory and antioxidant properties". *Heliyon*, **5(5)**, e01758, (2019). USA
180. Wajid A., Ahmad M. S., **Yousuf S.**, Simjee S.U., Nisar U., Rahman A.-U., "Macrophomina phaseolina mediated intramolecular trans-esterification of picrotoxinin and study of convulsant activity of transformed product", *Journal of Molecular Structure*, **1180**, Pages 499-504, (2019). The Netherlands
181. Wajid A., Ahmad M.S., **Yousuf S.**, Atia-tul-Wahab, Jabeen, A., Rahman A.-U., Choudhary M.I., "Biotransformation of progestonic hormone dydrogesterone with *Macrophomina phaseolina*, and study of the effect of biotransformed products on phagocytes oxidative burst". *Steroids*, 67-72, (2019). The Netherlands
182. Kumar R., Ogbeide, K. O., Rehman M-U., Owolabi B., Falodun A., Choudhary M. I., **Yousuf S***, "Crystal structure, Hirshfeld surface analysis and electrostatic potential study of naturally occurring cassane-type diterpenoid Pulcherrimin C monohydrate at 100 K" *Acta Crystallographica Section E: Crystallographic Communications*, **75**, 119-123, (2019). UK
183. Fadu, E., Nizaman, A., Rashee, S., Adhikar, A., **Yousuf S.**, Parveen S., Gören N., Alhazmi H. A., Choudhary M. I., Khalid A. "Anti-glycating and anti-oxidant compounds from traditionally used anti-diabetic plant *Geigeria alata* (DC) Oliv. & Hiern" Article in Press, *Natural Product Research*, (2019). The Netherlands
184. Qamar S., Akhter Z., **Yousuf S.**, Bano H., Perveen F., "Synthesis, structural characterization, DNA binding and antioxidant studies of 4,4'-Nitrophenoxyaniline derived azo dyes", *Journal of Molecular Structure*, **1197**, 345-353, (2019). The Netherlands
185. Akhter S., Choudhary M. I., Siddiqui S. **Yousuf S***, "Crystal structure and Hirshfeld surface analysis of N-(2-chlorophenylcarbamothioyl)-4-fluorobenzamide and N-(4-bromophenylcarbamothioyl)-4-fluorobenzamide", *Acta Crystallographica Section E: Crystallographic Communications*, **75**, 1026-1029, (2019). US
186. Munir N., Masood S., Liaqat F., Tahir M. N., **Yousuf S***, Kalsoom S., Mughal E. U., Summra S. H., Maalik A., Zafar M. N., "Synthesis of new Pro-PYE ligands as co-catalysts toward Pd-catalyzed Heck-Mizoroki cross coupling reactions", *RSC Advances*, **9(65)**, 37986-38000, (2019). UK
187. Lotfy G., Aziz Y. M. A., Said M. M., Ashry E. S. H. El., Barakat E. S. H. A., Ghabbour H.A., **Yousuf S.**, Ul-Haq. Z., Choudhary, M. I., "Synthesis of Oxindole Analogues, Biological Activity, and *In Silico* Studies", *Chemistry Select*, **4(35)**, 10510-10516, (2019). USA
188. Barakat A., Soliman S. M., El-Faham, A., Ali, M., Al-Majid, A. M., Yousuf, S., Choudhary, M. I., "Three Multi-Components Reaction: Synthesis and X-Ray Single-Crystal of Hydroacridinone-Based Hydrazino-S-Triazine Derivative as a New Class of Urease Inhibitor", *Crystals*, **10(1)**, 14, (2020). Switzerland
189. Fatima S. S., Kumar R., Choudhary M. I., **Yousuf S***, "Crystal engineering of exemestane to obtain a co-crystal with enhanced urease inhibition activity", *IUCrJ*, **7**, 105-112, (2020). USA
190. Boraie A. T. A., Sarhan A. A. M., **Yousuf S.**, Barakat, A., "Synthesis of a new series of nitrogen/sulfur heterocycles by linking four rings: Indole; 1,2,4-triazole; pyridazine; and quinoxaline", *Molecules*, **25(3)**, 450, (2020). Switzerland
191. Altowyan M. S., Ali M., Soliman S. M., Al-Majid A. M., Islam M. S., Yousuf S., Choudhary M. I., Ghabbour H. A., Barakat A., "Synthesis, computational studies and biological activity of oxamohydrazide derivatives bearing isatin and ferrocene scaffolds", *Journal of Molecular Structure*, **1202**, 127372. (2020). The Netherlands
192. Tabassum N., Varras P. C., Arshad F., Choudhary M. I., **Yousuf S***, "Biological activity tuning of antibacterial urotropine via co-crystallization: synthesis, biological activity evaluation and computational insight", *CrystEngComm*, **22**, 3439 – 3450, (2020). <https://doi.org/10.1039/D0CE00226G> UK

- 193 Qamar S., Akhter Z., **Yousuf S.**, Perveen, F., “pH-sensitive 4,(4-Nitrophenoxy)benzeneamine) derived azo dye: X-ray crystallographic, DFT and electrochemical studies”, *Journal of Molecular Structure*, 1220, art. no. 128667, (2020). DOI: 10.1016/j.molstruc.2020.128667 The Netherlands
- 194 Zia M., Hameed S., Ahmad I., Tabassum N., **Yousuf S.**, “Regio-isomeric isoxazole sulfonates: Synthesis, characterization, electrochemical studies and DNA binding activity”, *Journal of Molecular Structure*, 1220, art. no. 128635, (2020). DOI: 10.1016/j.molstruc.2020.128635 The Netherlands
- 195 Alshahrani S., Soliman S. M., Alamarly A. S., Al-Majid A. M., Haukka M., **Yousuf S.**, Barakat, A., “Synthesis of enaminones-based benzo[d]imidazole scaffold: Characterization and molecular insight structure”, *Crystals*, 10 (10), 1-14, (2020). DOI: 10.3390/cryst10100955 Switzerland
- 196 Naz S., Uddin N., Ullah K., Haider A., Gul A., Faisal S., Nadhman A., Bibi M., **Yousuf S.**, Ali S., “Homo- and heteroleptic Zinc(II) carboxylates: Synthesis, structural characterization, and assessment of their biological significance in *in vitro* models”, *Inorganica Chimica Acta*, 511, (2020). DOI: 10.1016/j.ica.2020.119849 The Netherlands
- 197 Fadul E., Nizamani A., Rasheed S., Adhikari A., **Yousuf S.**, Parveen S., Gören N., Alhazmi H. A., Choudhary M. I., Khalid A., “Anti-glycating and anti-oxidant compounds from traditionally used anti-diabetic plant *Geigeria alata* (DC) Oliv. & amp; Hiern”, *Natural Product Research*, 34 (17), 2456-2464, (2020). DOI: 10.1080/14786419.2018.1542388 The Netherlands
- 198 Boraei A. T. A., Soliman S. M., **Yousuf S.**, Barakat A., “Synthesis single crystal X-ray structure DFT studies and hirshfeld analysis of new benzylsulfanyl- triazolyl-indole scaffold”, *Crystals*, 10(8), 1-14, (2020). DOI: 10.3390/cryst10080685 Switzerland
- 199 El-khateeb M., Kumar R., Yousuf S., “Half sandwich iron S-alkyl dithiocarbonato complexes: Synthesis, characterization and reactivity”, *Journal of Molecular Structure*, 1211, (2020). DOI: 10.1016/j.molstruc.2020.128092 The Netherlands
- 200 Boraei A. T. A., Soliman S. M., **Yousuf S.**, Bibi M., Barakat A., “N-acetyl indole linked to a fused triazolo/thiadiazole scaffold: Synthesis, single crystal x-ray structure, and molecular insight”, *Crystals*, 10 (7), 1-17., (2020). DOI: 10.3390/cryst10070600 The Netherlands
- 201 Gadallah A. S., Mujeeb-Ur-Rehman, Atta-Ur-Rahman, **Yousuf S.**, Atia-Tul-Waha, Jabeen A., Swilam M. M., Khalifa S. A. M., El-Seedi H. R., Choudhary M. I., “Anti-inflammatory principles from *Tamarix aphylla* L.: A bioassay-guided fractionation study”, *Molecules*, 25(13), (2020). DOI: 10.3390/molecules25132994 Switzerland
- 202 Sharma A., Barakat A., Al-Rasheed H. H., Al-Majid A. M., **Yousuf S.**, Choudhary M. I., El-Faham A., de la Torre B. G., Albericio F., “Crystal structure and theoretical investigation of thiobarbituric acid derivatives as nonlinear optical (NLO) materials”, *Crystals*, 10(6), (2020). DOI: 10.3390/cryst10060442 Switzerland
- 203 Ali M., Barakat A., El-Faham A., Al-Majid A. M., **Yousuf S.**, Ashraf S., Ul-Haq, Z., Choudhary M. I., de la Torre B. G., Albericio F., “Enamine barbiturates and thiobarbiturates as a new class of bacterial urease inhibitors”, *Applied Sciences*, 10(10), (2020). DOI: 10.3390/app10103523 Switzerland
- 204 Barakat A., Soliman S. M., Ali M., Elmarghany A., Al-Majid A. M., **Yousuf S.**, Ul-Haq Z., Choudhary M. I., El-Faham A. “Synthesis, crystal structure, evaluation of urease inhibition potential and the docking studies of cobalt(III) complex based on barbituric acid Schiff base ligand”, *Inorganica Chimica Acta*, 503, (2020). DOI: 10.1016/j.ica.2019.119405 The Netherlands
- 205 Naz S., Sirajuddin M., Hussain I., Haider A., Nadhman A., Gul A., Faisal S., Ullah S., **Yousuf S.**, Ali S., “2-Phenylbutyric acid based organotin(IV) carboxylates; synthesis, spectroscopic characterization, antibacterial action against plant pathogens and *in vitro* hemolysis”, *Journal of Molecular Structure*, 1203, (2020) The Netherlands
- 206 Bibi M., Choudhary M. I., **Yousuf S.**, “Crystal structure and Hirshfeld surface analysis of the methanol solvate of sclareol, a labdane-type diterpenoid”, *Acta Crystallographica Section E: Crystallographic Communications*, 76, 294-297 (2020). DOI: 10.1107/S2056989020001474 UK
- 207 Zulfiqar A., Ahmed D., Fatima R., **Yousuf S.**, “Green synthesis, urease inhibitory activity and antioxidant potential of 4-bromo-2-(((2'-chloro-4'-nitrophenyl)imino)methyl)phenol Schiff base”, *Journal of Molecular Structure*, 1202, (2020). DOI: 10.1016/j.molstruc.2019.127263 The Netherlands
- 208 Barakat A., Soliman S. M., Alshahrani S., Islam M. S., Ali M., Al-Majid A. M., **Yousuf S.**, “Synthesis, X-ray single crystal, conformational analysis and cholinesterase inhibitory activity of a new spiropyrrrolidine scaffold tethered benzo[b]thiophene analogue”, *Crystals*, 10(2), (2020). DOI: 10.3390/cryst10020120 Switzerland

- | | | |
|-----|---|-----------------|
| 209 | Ali M., Barakat A., El-Faham A., Al-Rasheed H. H., Dahlous K., Al-Majid A. M., Sharma A., Yousuf S. , Sanam M., Ul-Haq Z., Choudhary M. I., de la Torre B. G., Albericio F., "Synthesis and characterisation of thiobarbituric acid enamine derivatives, and evaluation of their α -glucosidase inhibitory and anti-glycation activity", <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 35(1) , 692-701, (2020). DOI: 10.1080/14756366.2020.1737045 | UK |
| 210 | Kausar N., Ullah S., Khan M. A., Choudhary M. I., Yousuf, S* , "Celebrex derivatives: Synthesis, α -glucosidase inhibition, crystal structures and molecular docking studies", <i>Bioorganic Chemistry</i> , 104499, (2021). | USA |
| 211 | Iqbal U., Choudhary M. I., Yousuf S* , "Synthesis of co-crystals of anti-cancer nandrolone as a potential leads towards treatment of cancer", <i>Journal of Molecular Structure</i> , 1224 , 128981 (2021). | The Netherlands |
| 212 | Abbas S., Rashid F., Ulker E., Zaib S., Ayub K., Ullah S., Nadeem M. A., Yousuf S., Ludwig R., Ali S., Iqbal J., "Anticancer evaluation of a manganese complex on HeLa and MCF-7 cancer cells: design, deterministic solvothermal synthesis approach, Hirshfeld analysis, DNA binding, intracellular reactive oxygen species production, electrochemical characterization and density functional theory", <i>Journal of Biomolecular Structure and Dynamics</i> , 39(3) , 1068–1081 (2021) | UK |
| 213 | Akhter S., Ullah S., Yousuf S., Atia-tul-Wahab, Siddiqui H., Choudhary M. I., "Synthesis, crystal structure and Hirshfeld Surface analysis of benzamide derivatives of thiourea as potent inhibitors of α -glucosidase <i>in-vitro</i> ", <i>Bioorganic Chemistry</i> , 107 , (2021), Article number 104531 | USA |
| 214 | Shaheen A., Ashiq U., Jamal R. A., Khan K. M., Gul S., Yousuf S., Ali S. T., "Design and synthesis of fluoroquinolone derivatives as Potent α -Glucosidase inhibitors: in vitro inhibitory screening with <i>In Silico</i> docking studies", <i>Chemistry Select</i> , 6(10) , 2483 - 249112 (2021). | USA |
| 215 | Islam M. S., Ali M., Al-Majid A. M., Alamary A. S., Alshahrani S., Yousuf S., Choudhary M. I., Barakat A., Bimetallic iron–palladium catalyst system as a lewis-acid for the synthesis of novel pharmacophores based indole scaffold as anticancer agents, <i>Molecules</i> , 26(82) , (2021) Article number 2212 | Switzerland |
| 216 | Al-Majid A. M., Ali M., Islam M. S., Alshahrani S., Alamary A. S., Yousuf S. , Choudhary M. I., Barakat A., Stereoselective Synthesis of the Di-Spirooxindole Analogs based Oxindole and Cyclohexanone Moieties as Potential Anticancer Agents, <i>Molecules</i> , 26(20) , 6305 (2021). | Switzerland |
| 217 | Altowyan M. S., Sultan M. A., Soliman S. M., Yousuf S., Ali I., Shawish I., Barakat A., Synthesis, Single Crystal x-ray, Hirshfeld and DFT Studies of 1,8-Dichloro-9,10-Dihydro-9,10-Ethanoanthracene-11Carboxylic acid, <i>Crystals</i> , 11(10) , 1161 (2021). | Switzerland |
| 218 | Barakat A., Islam M. S., Ali M., Al-Majid A. M., Alshahrani S., Alamary A. S., Yousuf S., Choudhary M. I., Regio-and Stereoselective Synthesis of a new Series of Spirooxindolepyrrolidine Grafted Thiochromene Scaffolds as Potential Anticancer Agents, <i>Symmetry</i> , 13(8) , 1426 (2021). | Switzerland |
| 219 | Malik N. P., Naz M., Ashiq U., Jamal R. A., Gul S., Saleem F., Khan K. M., Yousuf S., Oxamide Derivatives as Potent α -Glucosidase Inhibitors: Design, Synthesis, In Vitro Inhibitory Screening and InSilico Docking Studies, <i>Chemistry Select</i> , 6(28) , 7188–7201 (2021). | Germany |
| 220 | Aamer M., Iqbal S., Jabeen A., Ahmad M. S., Asrar M., Yousuf S., Atia-tul-Wahab, Choudhary M. I., Wang Y., Bioassay-Guided Isolation of Anti-Inflammatory Constituents from Erigeron Canadensis, <i>Chemistry of Natural Compounds</i> , 57(4) , 749–751(2021). | USA |
| 221 | Shaheen, A., Ashiq, U., Jamal, R. A., Khan, K. M., Gul, S., Yousuf, S., Ali, S. T., Design and synthesis of fluoroquinolone derivatives as potent α -glucosidase inhibitors: <i>in vitro</i> inhibitory screening with in silico docking studies, <i>ChemistrySelect</i> , 6(10) , 2483-2491, (2022). | USA |
| 222 | Khatoon, B., Zikr Ur Rehman, S., Yousuf, S., Lateef, M., Essombo, M. F. A., Kamdem Waffo, A. F., Ali, M. S., New bioactive monoterpene indole alkaloid from Rinorea yaundensis Engl, <i>Natural Product Research</i> , 36(4) , 942-951, (2022). | The Netherlands |
| 223 | Choudhary, M. I., Rizvi, F., Siddiqui, H., Yousuf, S., Zafar, H., Shaikh, M., Microwave assisted Biology-Oriented Drug Synthesis (BIODS) of new N, N'-disubstituted benzylamine analogous of 4-aminoantipyrine against leishmaniasis– <i>In vitro</i> assay and in silico-predicted molecular interactions with key metabolic targets, <i>Bioorganic Chemistry</i> , 120 , 105621, (2022). | The Netherlands |
| 224 | Shahbaz, M., Khan, U. A., Chaudhary, M. I., Yousuf, S., A new bioactive cocrystal of coumarin-3-carboxylic acid and thiourea: detailed structural features and biological activity studies, <i>Acta Crystallographica Section C: Structural Chemistry</i> , 78(3) , (2022). | UK |

- 225 Rasool, F., Hussain, A., Ayub, K., Tariq, M., Mahmood, K., Yousuf, S., Malik, A., Experimental and Theoretical investigations on (E)-3-(4-ethoxyphenyl)-1-(2-(trifluoromethyl) phenyl) prop-2-en-1-one and (E)-3-(naphthalen-2-yl)-1-(2-(trifluoromethyl) phenyl) prop-2-en-1-one: DNA binding, Urease inhibition and Promising NLO response, *Journal of Molecular Structure*, **1253**, 132194, (2022). The Netherlands
- 226 Qamar, S., Perveen, F., Akhter, Z., Yousuf, S., Sultan, M., Ela, S. E., Nazir, U., Synthesis of 4-((4-(4-nitrophenoxy) phenyl) diazenyl) benzene-1, 3-benzoate: Experimental, DFT and, DNA binding investigation through spectral and molecular docking studies, *Journal of Molecular Structure*, **1253**, 132250, (2022). The Netherlands
- 227 Omoregie, H. O., Yusuf, T. L., Oladipo, S. D., Olofinisan, K. A., Kassim, M. B., Yousuf, S., Antidiabetes, antimicrobial and antioxidant studies of mixed β -diketone and diimine copper (II) complexes, *Polyhedron*, **217**, 11573, (2022). The Netherlands
- 228 Khan, M. K., Siddiqui, H., Sharif, R., Guzel, M., Wahab, A. T., Yousuf, S., Choudhary, M. I., Lamotrigine Derivatives-Synthesis, Anti-Cancer, and Anti-MDR-Bacterial Activities, *Journal of Molecular Structure*, **133277**, (2022). The Netherlands
- 229 Khan, B. A., ur Rehman, O., Alsouk, A. A., Ejaz, S. A., Channar, P. A., Saeed, A., Hökelek, T., Substituted Piperidine as a Novel Lead Molecule for the treatment of Parkinson's disease: Synthesis, Crystal Structure, Hirshfeld Surface Analysis, and Molecular Modeling, *Journal of Molecular Structure*, **133350**, (2022). The Netherlands
- 230 El-khateeb, M., Yousuf, S., Kumar, R., Pentamethylcyclopentadienyl iron thiocarboxylato complexes: synthetic and characterization study, *Journal of Sulfur Chemistry*, **1-12**, (2022). UK
- 231 Naz, S., Uddin, N., Rahim, S., Muhammad, N., Bibi, M., Yousuf, S., Ali, S., 4-Phenylbutyric acid based homo-heteroleptic Zn (II) carboxylates: Synthesis, structural elucidation, DNA interaction through spectroscopic and computational methods as well as ALP inhibition study, *Journal of Molecular Liquids*, **356**, 119031, (2022). The Netherlands
- 232 Iqbal, S., Khan, M. A., Jabeen, A., Yousuf, S., Zafar, F., Batool, F., Basha, F. Z., Synthesis, crystal structure, and reactive oxygen species (ROS) inhibition of N- and O-linked triazole analogues of harmine, *Journal of Molecular Structure*, **1261**, 132796, (2022). The Netherlands
- 233 J. A., Yaya, E. E., Choudhary, M. I., Yousuf, S., Gebremedih, T. M., *In vitro* antifungal, anti-inflammatory and cytotoxic activities of Rumex abyssinicus rhizome extract and bioassay-guided isolation of cytotoxic compounds from Rumex abyssinicus, Emam, *Bulletin of the Chemical Society of Ethiopia*, **36(4)**, 879-892, (2022).
- 234 R., Chen, Z. F., Choudhary, M. I., Yousuf, S., Insight into structural features and supramolecular architecture of synthesized quinoxaline derivatives with anti-leishmanial activity, *in vitro*, Kumar, *Journal of Molecular Structure*, **1263**, 133107, (2022). The Netherlands
- 235 Shahidul Islam, M., Mohammed Al-Majid, A., Nageh Sholkamy, E., Yousuf, S., Ayaz, M., Nawaz, A., Barakat, A., Synthesis of Spiro-oxindole Analogs Engrafted Pyrazole Scaffold as Potential Alzheimer's Disease Therapeutics: Anti-oxidant, Enzyme Inhibitory and Molecular Docking Approaches, *ChemistrySelect*, **7(36)**, e202203047, (2022). Germany
- 236 Ali, R., Wajid, S., Khan, M. A., Yousuf, S., Shaikh, M., Laghari, G. H., Choudhary, M. I., Isolation, derivatization, *in-vitro*, and *in-silico* studies of potent butyrylcholinesterase inhibitors from Berberis parkeriana Schneid, *Bioorganic Chemistry*, **127**, 105944, (2022). The Netherlands
- 237 Navidpour, L., Lima, M. L., Milne, R., Wyllie, S., Hadj-Esfandiari, N., Choudhary, M. I., Yousuf, S., Antileishmanial Activities of (Z)-2-(Nitroimidazolylmethylene)-3 (2H)-Benzofuranones: Synthesis, *In Vitro* Assessment, and Bioactivation by NTR 1 and 2, *Antimicrobial Agents and Chemotherapy*, **66(11)**, e00583-22, (2022). USA
- 238 Bano, S., Bibi, M., Farooq, S., Zafar, H., Shaikh, M., Khoso, B. K., Choudhary, M. I., Anti-leishmanial physalins—Phytochemical investigation, *in vitro* evaluation against clinical and MIL-resistant *L. tropica* strains and *in silico* studies, *Plos one*, **17(11)**, e0274543 (2022). USA
- 239 Nazemosadat-Arsanjani, Z., Moein, M., Yousuf, S., Firuzi, O., Choudhary, M. I., Reassessing the molecular structures of some previously isolated abietane diterpenoids with a naphthalene moiety and the structure-activity relationship (SAR) of quinone diterpenoids, *Phytochemistry*, **204**, 113433, (2022). UK
- 240 Islam, M. S., Al-Majid, A. M., Sholkamy, E. N., Yousuf, S., Ayaz, M., Nawaz, A., Barakat, A., Synthesis, molecular docking and enzyme inhibitory approaches of some new chalcones engrafted pyrazole as potential antialzheimer, antidiabetic and antioxidant agents, *Journal of Molecular Structure*, **1269**, 133843, (2022). The Netherlands
- 241 Malik, H., Akhter, Z., Shahbaz, M., Yousuf, S., Munawar, K. S., Muhammad, S., Ahmad, T., Synthesis, spectroscopic characterization, single crystal, theoretical investigation, and biological screenings of azo-based moieties, *Journal of Molecular Structure*, **1270**, 133867, (2022). The Netherlands

- | | | |
|-----|---|-----------------|
| 242 | Naz, S., Ullah, S., Iqbal, U., Yousuf, S., Rahim, S., Muhammad, N., Ali, S., Homo-and heteroleptic 3-methylbenzoates of zinc (II) ion based on N-donor heterocycles; structure, DNA binding and pharmacological evaluation, <i>Journal of Molecular Liquids</i> , 368 , 120792. (2022). | The Netherlands |
| 243 | Ghulam, M., Majid, K., Saba, F., Choudhary, M. I., Yousuf, S., New cocrystals of heterocyclic drugs: structural, antileishmanial, larvicidal and urease inhibition studies, <i>Acta. Crystallogr. C. Struct. Chem.</i> 79 , 237-248 (2023). | UK |
| 244 | Shahidul, I. M., Al-Majid, A. M., Sholkamy, E. N., Barakat, A., Viale, M., Paola, M., Andrea, S., Fabrizio, L., Mohammad, A., Prakash, V. V., Yousuf, S., Mohamed T. Optimized spirooxindole-pyrazole hybrids targeting the p53-MDM2 interplay induce apoptosis and synergize with doxorubicin in A549 cells, <i>Scientific Reports</i> , 13 , 7441 (2023). | USA |
| 245 | Sidrah, Z., Ashraf, S., Iqbal, U., Yousuf, S., Massod, H. S., Faroha, L., Maria, R. H., Zareen, A., Ahmed, El-Shafei, Nadia, Synthesis of new benzimidazole based ruthenium (II) dyes for application in dye-sensitized solar cells with detailed spectroscopic and theoretical evaluation, <i>S. Journal of Molecular Structure</i> , 12895 , 135860-138572 (2023). | The Netherlands |
| 246 | Alayyaf, A. A.; Aseem, A.; Al-Majid, A. A.; Yousuf, S.; Matti, H.; El-Faham, A.; Soliman, S. M.; Nafie, M. S. Cytotoxicity and Apoptosis-Induction in MCF-7 Cells for New Pd(II) Complex Based on s-Triazine Ligand: Synthesis, Single Crystal X-ray Diffraction Analysis and Structural Investigations, <i>Crystals</i> , 13 , 1472-1484 (2023). | Switzerland |
| 247 | Alshahrani, S., Al-Majid, A. M., Alamary, A. S., Ali, M., Altowyan, M. S., Ríos-Gutiérrez, M., Yousuf, S., Barakat, A. Synthesis and Characterization of New Spirooxindoles Including Triazole and Benzimidazole Pharmacophores via [3+2] Cycloaddition Reaction: An MEDT Study of the Mechanism and Selectivity, <i>Molecules</i> , 28(19) , 6976-7002 (2023). | Switzerland |
| 248 | Anham, Z., Ud-Din, I., Batool, S., Palgrave, R. G., Yousuf, S. Deep extractive and catalytic oxidative desulfurization of liquid fuels by using iron(iii) based dication ionic liquids, <i>New Journal of Chemistry</i> , 47(33) , 15731-15741 (2023). | UK |
| 249 | Shaheen, S., Liaqat, F., Qamar, S., Iram, M., Ammarah, R., Yousuf, S., Ishtiaq, A., Ahkter, Z. Single crystal structure of nitro terminated Azo Schiff base: DNA binding, antioxidant, enzyme inhibitory and photo-isomerization investigation, <i>Journal of Molecular Structure</i> , 128415 , 135376 (2023). | The Netherlands |
| 250 | Mahmood, K., Akhter, Z., Perveen, F., Aisha, N., Bibi, M., Ismail, H., Tabassum, N., Yousuf, S., Asharf, A. R., Qayyum, M. A., Synthesis, DNA binding and biological evaluation of benzimidazole Schiff base ligands and their metal(ii) complexes, <i>RSC Adv.</i> 13(18) , 11982-11999 (2023). | UK |
| 251 | Anham, Z., Imtiaz-ud-Din, Palgrave, R. G., Muhammad, H., Yousuf, S., Evan, T. Physico-Chemical Properties of Magnetic Dicationic Ionic Liquids with Tetrahaloferrate Anions, <i>Chemistry Open</i> , 12 , 1-12, (2023). | USA |
| 252 | Fatima, R., Yousuf, S. Choudhary, M. I. Cocrystallization of methyltestosterone with salicylic acid and 2,2'-disulfanediyldibenzoic acid - Effect on solubility of methyltestosterone and growth of leishmania parasite (amastigotes and promastigotes), <i>Journal of Molecular Structure</i> , 1295 , 136741-136750 (2024). | The Netherlands |
| 253 | Ali, I., Yousuf, S., Ullah, S., Ali, I., Siddiqui, M., Choudhary, M. I., Shah, M. R. P-Toluenesulfonylchloride-based niosomes for Amphotericin-B against Leishmaniasis, <i>Journal of Surfactants and Detergents</i> , 27 , 445-458 (2024). | USA |
| 254 | Sajid, M., Siddiqui, H., Sharif, R., Zafar, H., Yousuf, S., Choudhary, M. I. Multi-targeting derivatives of (±)-aminogluthethimide: Synthesis, anti-leishmanial, cytotoxicity against cancerous cells and molecular docking studies, <i>Journal of Molecular Structure</i> , 1305 , 137696 (2024). | The Netherlands |
| 255 | Asia, Yousuf, S., Vendier, L., Massiot, G. Structure and Synthesis of Vindolicine and Derivatives, <i>Chem. Biodiversity</i> , e202301928 , 1- 9, (2024). | USA |
| 256 | Khan, O., Latif, S., Khan, B. A., Yousuf, S., Ashfaq, M., Munawar, K. S., Rashid, Z., Sayed, S. R. M., Sidhom, P. A., Hegazy, Mohamed-Elamir F., Ibrahim, M. A. A. Synthesis, single crystal XRD, <i>in vitro</i> , and <i>in silico</i> studies of polysubstituted tetrahydropyridine as α -amylase inhibitor, <i>Journal of Molecular Structure</i> , 1305 , 137770 (2024). | The Netherlands |
| 257 | Shabaz, M., Farooq, S., Choudhary, M. I., Yousuf, S. Cocrystals of a coumarin derivative: an efficient approach towards anti-leishmanial cocrystals against MIL-resistant <i>Leishmania tropica</i> , <i>IUCrJ</i> , 11 , 224-236 (2024)' | UK |
| 258 | Khan, U. A., Choudhary, M. I., Yousuf S. Synthesis of halogenated benzimidazolyl-C-nucleosides against <i>Leishmania major</i> and <i>Leishmania tropica</i> , <i>New Journal of Chemistry</i> , 48 , 5605-5612, (2024). | UK |

- 259 Mukhtar A., Hussain, A., Younas F., Yousuf S., Saeed M., Facile synthesis of substituted 2-
aroylbenzo[b]thiophen-3-ols to form novel triazole hybrids using click chemistry, *RSC
Advances*, **14(5)**, 10270 (2024). UK
- 260 Abdo, B. M., Asfaw, B. T., Choudhary, M. I., Yousuf, S., Mengesha, W. A., Mekonnen, S.
A., Bioassay-guided isolation of dehydrocostus lactone from *Echinops kebericho* as a
leishmanicidal drug, *Heliyon*, **10(17)**, e36818 (2024). USA
- 261 Siddiqui, R., Shamim, S., Akhter, S., Kausar, S., Yousuf, S., Saeed Saify, Z., Ameen, F.
Synthesis and molecular structure exploration of novel piperidin-4-one imine derivatives
combined with DFT and X-ray: A new class of antioxidant and anti-inflammatory agents
Heliyon, **10(15)**, e35122 (2024). USA
- 262 Iftikhar, S., Hussain, S., Murtaza, S., Danis, A., Yousuf, S. Ali, M. A., Shahid, M.,
Alsuhaibani, A. M., Refat, M. S. Synthetic route for O,S-coordinated organotin (IV)
aldehydes: Spectroscopic, computational, XRD, and antibacterial studies, *Applied
Organometallic Chemistry*, **38(8)**, e7581 (2024). USA
- 263 Odinga, T.-B., Leutcha, P.B., Ndukwe, G.I., Yousuf, S., Choudhary, M.I., Efekemo, E.,
Otobo, M., Enebeli, S., Lemii, B. C., Edward, U.F., Glucogallin and Conjugated Linoleic
Acids Isolated from *Ricinodendron heudelotii* (Bail.) Seeds, *Tropical Journal of Natural
Product Research*, **8(6)**, 7530–7534 (2024). UK
- 264 Sajid, M., Siddiqui, H., Zafar, H., Yousuf, S., Threadgill, M. D., Choudhary, M. I., Thiourea-
functionalized aminoglutethimide derivatives as anti-leishmanial agents, *Future Medicinal
Chemistry*, **16(15)**, 1485–1497 (2024). UK
- 265 Islam, M. S., Al-Majid, A. M., El-Senduny, F. F., Badria, F. A., Parveen, Z., Ravaiz, N.,
Wadood, A., Ajmal, A., Yousuf, S., Murtaza, G., Ramadan, S., Ashour, H. M. A., Barakat,
A. Pharmacokinetics, MDS, and ADME of Spirooxindole-Pyrrolidines Embedded with
Pyrazole Heterocycle as Alpha-amylase Inhibitor and Potential Cytotoxic Compounds.
JBRHA, **38(2)**, 935-956 (2024).
- 266 Ganita, K., Njateng, G. S. S., Yousuf, S. Impact of Type 1 Diabetes on Renal Parameters in
Children Aged One to 17 at the Mother and Child University Hospital in N'Djamena, Chad.
Cureus, **16(4)**, e58082, (2024).
- 267 Magnibou, L. M., Bernard, D., Leutcha, P. B., Njateng, G. S., Chimi, L. Y., Tagatsing, M. F.,
Yousuf, S., Wahab, Atia-ul., Choudhary, M. I., Talla, E. Phytochemical Constituents,
Antimicrobial Activity of *Daniellia oliveri*, and X-ray Crystal Structure of Polyalthic Acid.
Nat. Prod. Commun., **19(9)**, 1-8 (2024). USA
- 268 Ramirez, W., Cesarano, C., Wani, S. A., Yousuf, S., Bedoya, D., About properties and the
monomiality principle of Bell-based Apostol-Bernoulli-type polynomials. *Karpats'ki
Matematicni Publikacii.*, **16(2)**, 379-390, (2024).
- 269 Yousuf, M., Zafar, H., Yousuf, S., Rahman, N., Ghoran, S. H., Ahmed, A., Choudhary, M. I.,
Identification of new potential inhibitors of pteridine reductase-1 (PTR1) via biophysical and
biochemical mechanism-based approaches: Step towards the treatment of Leishmaniasis. *Int.
J. Biol. Macromol.* **282(4)**, 137198, (2024). The Netherlands
- 270 Sarfraz, A., Naz, S., Haider, A., Munawar, K. S., Fatima, R., Yousuf, S., Tahir, M. N., Wasti,
Y., Haq, I. U. Ali, S., Synthesis, Characterization, and in vitro pharmacological evaluation of
Zinc (II) complexes of cycloalkanes and bioactive nitrogen donor heterocycles. *Journal of
Molecular Liquids*, **418**, 126713, (2024). The Netherlands
- 271 Qurat-ul-Ain, Yousuf, S., Bibi, S., Hamid, I., Shah, S., Khurshid, S., A multilayered
supramolecular chelate of diclofenac-appended Ag I-hydrazide as an efficient anti-
inflammatory, anticancer, and nanometal dispersing material, in comparison to analogous
ZnII-hydrazide. *Materials Advances*. **6 (12)**, 4070-4095, (2025). UK
- 272 Sarfraz, A., Naz, S., Haider, A., Munawar, K. S., Fatima, R., Yousuf, S., Tahir, M. N., Wasti,
Y., Ul Haq, I., Ali, S., Synthesis, Characterization, and in vitro pharmacological evaluation of
Zinc (II) complexes of cycloalkanes and bioactive nitrogen donor heterocycles. *Journal of
Molecular Liquids*. **418**, 126713, (2025). The Netherlands
- 273 Ullah K., Ali, S., Haider, A., Naz, S., Yousuf, S., Munawar, K. S., Jan, M. S., Zafar, R.,
Kumar, R., Investigation of pivalic acid-derived organotin (IV) carboxylates: Synthesis,
structural insights, interaction with biomolecules, and computational studies. *Journal of
Molecular Structure*. **1322**, 140444, (2025). The Netherlands
- 274 Mukhtar, A., Iftikhar, A., Maqbool, M., Faisal, A., Ayub, K., Yousuf, S., Saeed, M.,
Synthesis, mechanistic insights, and anticancer evaluation of novel 2-*aroylbenzo [b]*
thiophen-3-ols: A DFT and Hirshfeld surface analysis. *Journal of Molecular Structure*. **1324**,
140802, (2025). The Netherlands

- 275 Fatima, R., Farooq, S., Moin, S. T., Choudhary, M. I., Yousuf, S., Creatingo Cocystal salts: Synthesis, crystal structure, hirshfeld surface analysis and quantum chemical calculations of pyrimethamine and their potential anti-SARS-Cov-2 activity. *Journal of Molecular Structure*. **1325**, 140982, (2025). The Netherlands
- 276 Muzaffar, S., Naz, S., Mazhar, F., Rashid, Z., Bibi, M., Yousuf, S., Ali, S., Haider, A., Munawar, K. S., Heteroleptic Zn (II) complexes; synthesis, spectral characterization, DNA interaction, enzyme inhibition and docking studies. *Journal of Molecular Structure*. **1326**, 141078, (2025). The Netherlands
- 277 Ali, I., Khan, N., Yousuf, S., Behlil, F., Akbar, A., Malik, M. I., Synthesis, spectroscopic characterization, X-ray structure elucidation, and *in-vitro* biological screening of new organotin (IV) derivatives of N-methyl-4-(chloromethyl. *Journal of Molecular Structure*. 142648, (2025). The Netherlands
- 278 Mazhar, F., Naz, S., Muzaffar, S., Fatima, R., Yousuf, S., Ali, S., Haider, A., Munawar, K. S., **Mixed ligand triorganotin (IV) complexes based on oxygen and nitrogen heterocycles; exploration of the geometry and DNA binding potential.** *Journal of Molecular Structure*. 143004, (2025). The Netherlands
- 279 Hafez-Ghoran, S., Gerothanassis, I. P., Siskos, M. G., Ayatollahi, S. A., Yousuf, S., Naderian, M., Choudhary, M. I., Kijjoa, A., Hyperhelianthemones AD: Polycyclic polyprenylated benzoylphloroglucinols from *Hypericum helianthemoides*. *Phytochemistry*. **235**, 114473, (2025). UK
- 280 Naz, M., Ashiq, U., Jamal, R. A., Yousuf, S., Gul, S., Lateef, M., Molecular docking insights and bioactivity of Schiff base-copper (II) complexes: exploring enzymatic and non-enzymatic antioxidant properties and α -chymotrypsin inhibition. *Journal of Molecular Structure*. 143168, (2025). The Netherlands
- 281 Shaukat, A., Shaheen, F., Munawar, K. S., Mehmood, S., Fatima, R., Yousuf, S., Imran, M., Manganese-doped zinc sulfide nanoparticles: Synthesis, single crystal, and optical properties for ciprofloxacin sensing. *Journal of Molecular Structure*. **1335**, 141957, (2025). The Netherlands
- 282 Noreen, S., Ahmad, Z., Sirajuddin, M., Ahmed, A., Haider, A., Mahmood, S., Ayub, K., Yousuf, S., Nisar, S., Ismail, M. A., Ahmad, N., Tariq, M., Synthesis, Physicochemical Characterization, Exploration of Biological Potential and DFT Study of Di- and Tri-organotin (IV) Carboxylate Derivatives. *Journal of Organometallic Chemistry*. 123802, (2025). The Netherlands
- 283 Ngankeu, Z. K., Njateng, G. S. S., Yousuf, S., Abnormal Biochemical Parameters of Macro- and Microvascular Complications in Diabetic Patients at the Bafoussam Regional Hospital of the West Region, Cameroon. *Cureus*. **17** (9), (2025).
- 284 Batool, S., Zafar, A., Rashid, Z., Yousuf, S., Naz, S., Fatima, R., Haq, I., Waseem, A., Copper (II) derivatives of substituted benzimidazoles: Synthesis, structural, computational, and biological studies. *Journal of Molecular Structure*. 144048, (2025). The Netherlands
- 285 Latif, S., Khan, B. A., El Sayed, M. T., Ahmad, B., Khushal, A., Yousuf, S., Ashfaq, M., Khan, S., Munawar, K. S., Farooq, U., Ragab, A. H., Gumaah, N. F., Synthesis, crystal structure, hirshfeld surface analysis, and inhibition of urease and carbonic anhydrase by azomethine compounds. *Journal of Molecular Structure*. **1344**, 143014, (2025). The Netherlands
- 286 Abdo, B. M., Asfaw, B. T., Choudhary, M. I., Yousuf, S., Mekonnen, S. A., Mengesha, W. A., The chemotypes of Ethiopian *Echinops kebericho* accessions. *Biochemical Systematics and Ecology*. **123**, 105111, (2025). The Netherlands
- 287 Atia, A., Hafez-Ghoran S., Douanla P., Ghani, S., Yousuf, S. Bioactivity and phytochemistry of *guiera senegalensis* J. F. GMEL (Cambretaceae), *Journal of Experimental and Molecular Biology*, **26** (3), 175-186, (2025). UK
- 288 Qurrat-ul-Ain, S. Yousuf, S. Bibi, I. Hamid, S. Shah, and S. Khurshid, A Multilayered Supramolecular Chelate of Diclofenac-Appended Ag I-Hydrazide as an Efficient Anti-Inflammatory, Anticancer, and Nanometal Dispersing Material, in Comparison to Analogous Zn(II)-Hydrazide, *Materials Advances*, **6** (12), 4070-4095, (2025). UK
- 289 Aziz, A., Farooq, G., Shaikh, N.N., Yousuf, S., Zafar, H., Ahmed, Z., Choudhary M. I., Microbial catalyzed derivatization of canrenone with *Glomerella fusarioides*, and *Cunninghamella blakesleana*, and evaluation of aromatase inhibitory activity of the resulting metabolites, *Steroids*, **225**, 109704, (2026). USA
- 290 Batool, S., Imtiaz-ud-Din, Zafar A., Rashid Z., Yousuf S., Naz S., Fatima R., Haq I. U., Waseem A., Copper(II) derivatives of substituted benzimidazoles: Synthesis, structural, computational, and biological studies, *Journal of Molecular Structure*, **1350**(2), 144048, (2026). The Netherlands

- 291 Iqbal, U., Choudhary, M. I., Yousuf, S., Crystal Engineering of Amphotericin B to Obtain New Co-Crystals with Improved Solubility, Cytotoxicity, and Anti-Leishmanial Activity (Amastigotes and Promastigotes), *Journal of Pharmaceutical Innovation*, 21(4), 396 (2026). USA

D. INTERNATIONAL PATENTS GRANTED / FILED

- Potent Aromatase Inhibitors Through Fungal Transformation of Anti-Cancer Drug Testolactone: An Approach Towards the Treatment of Breast Cancer; M. Iqbal Choudhary, Atia-tul-Wahab, Mahwish Siddiqui, Nimra Naveed Shaikh, **Sammer Yousuf**, and Atta-ur-Rahman; US Patent Number 11939352 B2, Date of Patent, March 26, **2024** USA
- Bio-catalyzed Synthesis of Potent Anti-Inflammatory Agents from Medroxyprogesterone Acetate, M. Iqbal Choudhary, Saira Bano, Atia-tul-Wahab, Zaheer-ul-Haq, **Sammer Yousuf**, Almas Jabeen, and Atta-ur-Rahman; Application No. US20220145335 A1, Date of publication: 12/05/**2022** USA
- Obesity Treatment, M. Iqbal Choudhary, **Yousf S.**, Misha Siddiqui, and Madiha Mukhtar, US Patent Number 10,765,716 B2, Application No. 15/671,191, Date of Patent, September 08, **2020** USA
- Anti-obesity Effect of medicinal Plants (*Boroga Officinalis* Linn.) Extracts- A Strategy to Control the Epidemic of Metabolic Disorders, M. Iqbal Choudhary, **Yousf S.**, Misha Siddiqui, and Madiha Mukhtar, US-Patent No. 10,426,806 B1, Application No. 16/007,130, Patent Date: 10/01/**2019**. USA
- Alpha-glucosidase Inhibitors, Al-Majid A. M., Islam M. S., Barakat A., Choudahry M. I., **Yousuf S.**, US Patent Application Number 9802894B2, Date of Patent Oct. 31, **2017**. USA
- Formulations Against Cutaneous Leishmaniasis, Atta-ur-Rahman, M. Choudhary M. I., **Yousuf S.**, Samreen, Soomro F. R., Perveen S., US Patent 8,287,921 B1, Date of Patent Oct. 16, **2012**. USA
- The Reversal of Insulin Resistance and Dyslipidemia in High-fat Diet-Induced Obese Rat Models by *Physalis minima* L. Extract., **Yousf S.**, Noshin R., and M. Iqbal Choudhary, US Patent Application Number 16/02202626 A1, Pub. Date of Patent August 04, **2016**. USA
- Quinazolines as β -Glucuronidase Novel Inhibitors, M. I. Choudhary, K. M. Khan, N. N. Shaikh, S. M. Saad, **S. Yousuf**, and Atta-ur-Rahman, US Patent No. US 2014/0256754 A1. Pub. Date of Patent September 11, **2014**. USA
- " Diethyl Ammonium Salts of Phenyl-Substituted Thiobarbituric Acid as Anti-Diabetic Agents ", Al-Majid A. M., Islam M. S., Barakat A., Choudahry M. I., **Yousuf S.**, US Patent Application Number 15147878, Application Docket Number 32693.79, Date of filing: 05 May, **2016**. USA

E. NATIONAL PATENTS GRANTED / FILED

- Anti-Alzheimer's Butyrylcholinesterase Inhibitors and Anti-Leishmanial New Derivatives of 4-Aminoantipyrine; Hina Siddiqui, Fazila Rizvi, SheebaWajid, Atia-tul-Wahab, **SammerYousuf**, Atta-ur-Rahman, and M. Iqbal Choudhary; Pakistan Patent Application No. 244/2021, Filing Date: 26/03/**2021** Pakistan
- 1-Dehydro-11 α -hydroxy-canrenone for Treating ER+ Breast Cancers; Atia-tul-Wahab, M. Iqbal Choudhary, Ambreen Aziz, Nimra Naveed Shaikh, **Sammer Yousuf**, and Atta-ur-Rahman; Pakistan Patent Application No. 608/2021, Filing Date: 20/08/**2021** Pakistan
- New Urease Inhibiting Co-Crystals of Coumarine-3-carboxylic acid, **Sammer Yousuf**, M. Shahbaz, M. Amjad, M. Iqbal Choudhary; Pakistan Patent Application No. 268/2022, Filing Date: 21/04/**2022**. Pakistan

E. Lectures in International Conferences / Workshops

- Lecture as Invited Speaker in 6th International Conference on the Science and Engineering of Materials (ICoSEM 2025), held at the Kuala Lumpur, Malaysia, November 26-27, 2025, entitled, “Antileishmanial Leads - Examples of Our Work”.
- Lecture as Guest Speaker in Faculty of Natural Sciences, University Sumatera Utara, Medan, Indonesia, July 29, 2025, entitled, “Medicinal Plants Based Anti-leishmanial Lead”.
- Lecture as Guest Speaker in Faculty of Pharmacy, University Sumatera Utara, Medan, Indonesia, July 29, 2025, entitled, “Crystal engineering- A promising approach to modify biological activities”.
- Lecture as resource person in international Workshop entitled, “Natural Product Isolation, Purification and X-ray Diffraction Techniques”, University Sumatera Utara, Medan, Indonesia, July 30-31, 2025, entitled, “An overview of natural products isolation and purification techniques” and “Basic principles and applications of X-ray diffraction techniques”.
- Lecture as resource person in international Workshop entitled, “ICESCO’s 1st International Health Conference: Transforming Global Health – Tackling Neglected Tropical Diseases (NTDs)”, at ICESCO Headquarter, Rabbat, Morocco, February 17-19, 2025, entitled, “Co-crystallization an effective tool to manipulate the anti-leishmanial potential”.
- Lecture as resource person in international Workshop entitled, “NTD and CDT Africa, AAU Training Workshop on Leishmaniasis held at Addis Abbaba, Ethiopia, May 28-30, 2024, entitled, “Co-crystallization an effective tool to manipulate the anti-leishmanial potential of Amphotericin B and other bioactive compounds”.
- Lecture as resource person in “International Workshop entitled, “Identification of New Lead Compounds and Diagnostic Tools for Leishmaniasis: Concepts, Approaches, and Capacity Building”, held at the University of Nairobi, Kenya, February 22-24, 2023, entitled, “Co-crystallization to accelerate our discovery and understanding of anti-leishmaniasis”.
- Lecture in one-day workshop Role of Co-crystallization to improve biological activities, School of Chemical Sciences and Food Technology, Faculty of Science and Technology, Universiti Kebangsaan, Malaysia 28th July, to 30th July 2022, entitled, “Role of Crystal Engineering Approach to Manipulate Biological and Physical Properties of Active Pharmaceutical Agents”.
- Lecture in Chemistry Department, Durham University, UK, 6th July, 2022, entitled, “An Overview of Recent Outbreak of Cutaneous Leishmaniasis in Pakistan and use of *Physalis minima* based topical formulation”.
- Lecture delivered in 1st international Conference on Applied Physics and Engineering 2021 (ICAPE2021), NED University of Engineering and Technology, Karachi, Pakistan, September 16-17, 2021, entitled, “Women in Physical Sciences”.
- Invited Lecture in Virtual Conference on Zoom CEFMC-2020, Crystal Engineering: From Molecule to Crystal, June 19-20, 2020, “Biological Activities Tuning of Active Pharmaceutical Ingredients via Co-crystallization”.
- Lecture in 16th Conference of the Asian Crystallographic Association (AsCA 2019), UTown, National University Singapore, December 17- 20, 2019, “Crystal Engineering of Natural Products– An Efficient Approach Towards Enhanced Biological Activities”.
- Lecture in Chemistry Department, Durham University, UK, 15th August, 2019, entitled, “Role of Crystal Engineering Approach To Manipulate Anti-leishmanial Activities of Natural Products”.
- Lecture in 5th Science Technology Exchange Program on Challenges of Communicable- and Non-Communicable Diseases (STEP-5), International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan, February 27 to March 02, 2019, entitled, “Crystal Engineering Approach To obtain Co-crystals with Improved Anti-leishmanial Activities”.
- Asian Symposium on medicinal Plants, Spices and Other Natural Products XVI, December 12-14, 2018, organized by the Ministry of Science, Technology and Research, and Department of Chemistry, University of

- Sri Jayewardenepura, Colombo, Sri Lanka, lecture entitled, "Crystal Engineering of Natural products– An Efficient Approach Towards Enhanced Biological Activities".
- 2nd South East Asian Conference on Crystal Engineering (SEACCE-2), August 6-9, 2018, organized by Research Centre for Crystalline Materials (RCCM), School of Science and Technology, Sunway University, invited lecture entitled, "Crystallization as Crystal Engineering Approach To obtain Co-crystals with Improved Biological Activities".
 - SKLEOC-ICCBS Chemistry Forum meeting, January 2-6, 2018, organized by the State Key Laboratory of Elemento-organic Chemistry (SKLEOC), Nankai University, Tianjin, China lecture entitled, "Introduction of Ongoing Research Activities at the Crystallography Laboratory of the ICCBS" was delivered to explore possibilities of collaboration between two institutions.
 - 1st South East Asia Conference on Crystal Engineering (SEACCE), September 5-7, 2016, organized by Department of Chemistry, Sri Jayewardenepura University, Sri Lanka and International Union of Crystallography, invited lecture entitled, "Co-Crystallization- A Crystal Engineering Approach Towards Enhanced Biological Activities".
 - 5th International Symposium-cum- Training Course on Molecular Medicine and Drug Research, January 12-15, 2015, organized by International Center for chemical and Biological sciences, University of Karachi. Session lecture entitled, "Co-crystallization and Biotransformational Studies of Bioactive Natural Products- Strategies towards Enhanced Bioactivities".
 - International Pharmacy Conference on "Emerging Fields of Pharmacy", September 19-21, 2014, organized by Ziauddin Medical University, Department of Pharmacy, Session lecture entitled, "A Nature's Remedy Based Treatment of Cutaneous Leishmaniasis".
 - IYCr South Asia Regional Summit on Vistas in Structural Chemistry, April 28-30, 2014, organized by International Center for chemical and Biological sciences, University of Karachi. Session lecture entitled "Discovery of Anti-Leishmanial Leads from Natural Leads".
 - Two days Workshop related to Single-Crystal X-ray Diffraction Technique, December 19-20, 2013, organized by the Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), lecture entitled, "Fundamental of Single-Crystal X-ray Diffraction Techniques".
 - Two days Workshop related to Single-Crystal X-ray Diffraction Technique, December 19-20, 2013, organized by the Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), lecture entitled, "How to Grow a Good Quality Single-Crystal?".
 - 14th Asian Symposium on Medicinal Plants, Spices and Other Natural Products (ASOMPS-XIV)", 9-12 December, 2013, Organized by the H.E.J. Research Institute of Chemistry, International Center for chemical and Biological sciences, University of Karachi. Lecture entitled, "Biotransformation of Anabolic Steroid Oxymetholone to obtain some Potent Immunomodulatory and Anti-inflammatory Metabolites".
 - 4th International Symposium-cum-Training Course on Molecular Medicine and Drug Research, January 7-10, 2013, Organized by the Dr. Panjwani Center for Molecular Medicine and Drug Research, University of Karachi, entitled, "New Formulation Based on *Physalis minima* to treat Cutaneous Leishmaniasis".
 - 13th International Symposium of Natural Product Chemistry, November 22-25, 2012, Organized by the International Center for Chemical and Biological Sciences, H. E. J. research institute of chemistry, University of Karachi, Pakistan, entitled, "Expanding Chemical Space- Recent Examples of Structure Determination of New and Novel Natural Products by Single-Crystal X-Ray Diffraction Studies".
 - AFRO ASIA Workshop on Advanced Topics in Chemistry, 13 TO 17TH June 2011, Organized by the TWAS Regional Office for Central and South Asia (TWAS-ROCASSA) at: Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur, Bangalore – 560 064, India, entitled, "Isolation, Structure Elucidation, X-ray Diffraction and Anti-leishmanial Studies of Bioactive Compounds".
 - International Chemistry Conference and its Role in Science, 4-7 January, 2011, Organized by the Jinnah University for Women, Karachi, entitled, "Bio-transformational Structure Modification and Single-Crystal X-Ray Diffraction Studies of Bioactive Physalins H".

- 12th International Symposium of Natural Product Chemistry, entitled, November 22-25, 2010, Organized by the International Center for Chemical and Biological Sciences, H. E. J. research institute of chemistry, University of Karachi, Pakistan, entitled, “The Single-Crystal X-Ray Diffraction and Biotransformation Studies of Oxymetholone”.
- 3rd Bi-National Symposium France-Pakistan, Besançon, 15-18 of July, 2010, France, entitled, “Biotransformation and Single-Crystal X-Ray Diffraction Studies on Antileishmanial Physalins H”.
- 11th International Symposium on Natural Product Chemistry, International Center for Chemical and Biological Sciences, H. E. J. Research Institute of Chemistry, University of Karachi, Pakistan, in October 2008, entitled, “Antileishmanial Physalins from *Physalis minima*”.

F. Research Projects (International)

S. No	Project Title	Funding Agency	Amount	Duration / Status	In Capacity
1					
2	Synthesis of diverse libraries of naturally occurring Physalin H and their evaluation against multidrug-resistant strains of <i>Leishmania tropica</i> , and <i>Leishmania major</i>	NTD Global Network- Equipment Fund	£ 27,061	2021-2026 / On-going	P.I.
3	Synthesis and <i>in vitro</i> Study of Therapeutic Potential, and Cytotoxicity of Novel Co-crystals of Natural Products Against Multidrug-resistant Strains of <i>Leishmania</i>	NTD Global Network- Equipment Fund	£ 10,000	2019-2026 / On-going	P.I.
4	Co-crystallization of Amphotericin B- <i>An Approach to Improve Solubility, Safety and Anti-leishmanial Activity</i>	NTD Global Network- Industrial / Business engagement Vouchers	£ 10,000	2021-2026 / On going	P.I.
4	Synthesis and <i>in vitro</i> Study of Therapeutic Potential, and Cytotoxicity of Novel Co-crystals of Anti-leishmanial Natural Products	NTD Global Network- Equipment Fund	£ 9,887	2019-2025 / Completed	P.I.
5	Identification of New and Novel Bioactive Leads of Natural and Synthetic Origin Against <i>Leishmania major</i> and <i>Leishmanin tropica</i> <i>in Vitro</i> and <i>in Vivo</i>	NTD Global Network- Research Grant	£ 30,000	2019-2026 / On going	P.I.
6	Pre-clinical Studies for the Development of <i>Physalis minima</i> Based Topical Formulation - Treatment of Cutaneous Leishmaniasis	NTD Global Network- Industrial / Business engagement Vouchers	£ 10,000	2019-2026 / On-going	Co-P.I.
7	Structural and Biological Studies on New Anabolic Steroids Obtained by Bio-Transformations	OPCW	€ 20,000	2014-2016 / Completed	P.I.

G. Research Projects (National)

S. No	Project Title	Funding Agency	Amount (Rs.)	Duration / Status	In Capacity
1.	Development of Medicinal Plant Based Topical Formulation to Treat Cutaneous Leishmaniasis- A Neglected Tropical Disease and Cause of	HEC	13.5894 million	2025-2027 On going	P.I.

	Major Economic Burden of Pakistan				
2.	Co-crystallization of Naturally Occurring Anti-leishmanial Drug (Amphotericin B) with bioactive Natural Compounds– An Approach Towards Improved Treatment of Cutaneous Leishmaniasis in Pakistan	PAS	0.8 million	July 2024-Jan. 2025 Completed	P.I.
3.	Co-crystallization of Anti-leishmanial Drugs (Amphotericin B and Miltefosine)– An Approach Towards Improved Treatment of Prevalent Neglected Tropical Disease (Leishmaniasis) in Pakistan	HEC	8.160 million	2023-2025 Completed	P.I.
4.	Structural and functional studies on metabolites produced by fungal transformation of anti-inflammatory fluorinated steroidal drugs- An efficient approach towards anti-inflammatory drug discovery	PSF	1.4477 million	2019-2021 Completed	P.I.
5.	Structural Studies of New Inhibitors of Urease Enzyme-An Approach Towards the Treatment of Gastric Ulcer, Urolithiasis and Other Complications.	HEC	0.974439 million	2015-2018 / Completed	P.I.
6.	Structure-Activity Relationship Studies of New Anti-oxidants as Disease Preventing Agents	HEC	4.386 million	2014-2019 / Completed	P.I.
7.	Anti-obesity Effect of Medicinal Plants Extracts-A Strategy to Control the Epidemic of Metabolic Disorders	HEC	6.674753 million	2014-2016 / Completed	Co-P.I.
8.	Identification of Small Molecular Agonists against G-Protein Coupled Receptors (GPCRs): Opportunities for Cancer Prevention and Treatment	PSF	2.00 million	2017-2018 / Completed	Co-P.I.
9.	Study of Molecular Structures and Drugability Potential of New Inhibitors of β -Glucuronidase by Single-crystal X-Ray Diffraction and NMR Spectroscopic Techniques	PAS	1.994 million	Two years / Completed	Co-P.I.
10.	Studies on Reverting Insulin Resistance (IGT and IFG) by Employing Natural Products for the Prevention of the On-set of Metabolic syndrome	HEC	1.702 million	Two years / Completed	Co-P.I.
11.	Development of Nutraceuticals from the Medicinally Important Plants and Herbs of Pakistan	PAS	0.5 million	2013-2016 / Completed	P.I.

H. Workshos / Seminars / Courses / Conferences Organized or attended as a Resource Person

- Resource person in international Workshop entitled, “**Natural Product Isolation, Purification and X-ray Diffraction Techniques**”, organized by University Sumatera Utara, Medan, Indonesia, Indonesia, July 30-31, 2025.
- Organized Two-days workshop entitled, “**Uses and Applications of Atomic Force Microscopy**”, at the International Center for Chemical and Biological Sciences, June 3 – 4, 2025.

- Organized “International Workshop entitled, **“Identification of New Lead Compounds and Diagnostic Tools for Leishmaniasis: Concepts, Approaches, and Capacity Building”**”, held at the University of Nairobi, Kenya, during February 22-24, 2023, jointly organized by Durham University, COMSTECH, ICCBS, and University of Nairobi (In capacity of coordinator both from ICCBS and COMSTECH and resource person).
- Organized **“International Symposium on Excellence in Science (ISES)”**, on **September 22, 2022** to commemorate the 80th birthday of one of the most distinguished scientist of the world, **Prof. Dr. Attaur-Rahman, FRS** (Patron-in-Chief ICCBS, and Ex-Coordinator General COMSTECH) at the ICCBS, Karachi, Pakistan (In capacity of coordinator).
- Organized online course entitled, **“Single Crystal X-Ray Diffraction Techniques- Basic Principles”**, by Prof. Dr. Maria Cristina Nonato. at the International Center for Chemical and Biological Sciences, Feb. 3 – 26, 2021. (In capacity of coordinator / course Facilitator)
- Organized online certificate course entitled, **“Basic Plant Tissue Culture Techniques”**, Jointly Organized by the International Center for Chemical and Biological Sciences, COMSTECH, Secretariat, Islamabad, and Pakistan Biotechnology Information Center (PABIC) (Karachi Chapter), August 25, 2021. (In capacity of coordinator / course. Facilitator)
- Organized online certificate course entitled, **“Micropropagation of Quality Banana Plants for Commercial Purpose”**, Jointly Organized by the International Center for Chemical and Biological Sciences, COMSTECH, Secretariat, Islamabad, and Pakistan Biotechnology Information Center (PABIC) (Karachi Chapter), November 25, 2021. (In capacity of coordinator / course. Facilitator)
- Organizer of online course entitled, **“Symmetry operations for crystallographers”**, by Prof. Dr. Richard C. Garratt, jointly hold by the International Center for Chemical and Biological Sciences, and COMSTECH, Oct. 13 – Dec. 16, 2020.
- Organizer and resource person of the International Workshop entitled, **“New Anti-leishmanial Leads from Natural Sources: Concepts and Approaches”**, Organized by the Dr. Panjwani Center for Molecular Medicine and Drug Research (International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan) in collaboration with NTD, A Global Network for Neglected Tropical Diseases, November 8 - 9, 2019.
- Organizer of **A half-day seminar entitled, “Slow Pace of Agricultural Biotechnology Adaptability: An Analysis and Way Forward”**, Jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and University of Agriculture, Faisalabad, Pakistan, October 10, 2019.
- Organizer of the **“Launching ceremony of ISAAA Brief 56”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan, December 20, 2018.
- Organizer and resource person of the of the **3rd International Workshop on X-Ray Crystallography in Structural Biology**, jointly organized by the Dr. Panjwani Center for Molecular medicine and Drug Research, International Center for Chemical and Biological Sciences (ICCBS), Karachi, International Union of Crystallography, and X-ray Diffraction Users Group of Pakistan (XRD-PAK) under the auspices of National Committee of Crystallography, ICCBS, Karachi, Pakistan, October 8-10, 2018.
- Organizer of the **A half-day seminar entitled, “Significance of Popular Science Writing”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, June 20, 2018.

- Organizer of the **three-day international event entitled, “Advances in Biotechnology and Regulatory Affairs” and the launching ceremony of ISAAA Brief 52**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan Agriculture Research Council (PARC), and Forman Christian College (A Chartered University), Lahore, Pakistan, September 25-27, 2017.
- Organizer of the **A one-day seminar entitled, Science and Society - Science Communication and Public Engagement**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, October 19, 2016.
- Organizer of the **two-day international event entitled, Capacity Building Sessions with the Biosafety Regulators**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan Agriculture Research Council (PARC), Forman Christian College (A Chartered University), Lahore, and the United States Department of Agriculture, Foreign Agricultural Service US Embassy, Islamabad, Pakistan, August 11-12, 2016.
- Organizer of the **“Launching ceremony of ISAAA Brief 51”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan, June 20, 2016.
- Organize **A one day seminar entitled, “The Capacity Enhancement in Biosafety Evaluation of GM Crops” followed by the launching ceremony of ISAAA Brief 49**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, National Institute of Biotechnology (NIBGE), Faisalabad, Pakistan, May 11, 2015.
- Organizer of the **A one-day workshop entitled, “Modern Agriculture Biotechnologies”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Monsanto Pakistan Private Limited, Pakistan, March 26, 2015.
- Organizer of the **A one-day seminar entitled, “The Capacity Enhancement in Biosafety Evaluation of GM Crops” followed by the launching ceremony of ISAAA Brief 49**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan Agriculture Research Council, Islamabad, and Crop Life Pakistan, at PARC Islamabad, Pakistan, January 30, 2015.
- Organize one-day consultative workshop entitled, **“The Reformulation of Biosafety Guidelines”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Forman Christian College (A Chartered University) Lahore, Pakistan, June 25, 2014.
- Organize **press conference / Launch of ISAAA Brief 46** and one-day seminar entitled, **“Application of Modern Biotechnology to sensitize the media on the importance of biotechnology”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Forman Christian College (A Chartered University) Lahore, Pakistan, August 19th, 2014.
- Organize one-day seminar entitled, **“Modern Biotechnology Applications for Progressive Growers/Farmers of Khairpur, Sindh”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Agriculture Extension Department (Cotton Development Program), Khairpur, Government of Sindh, Sindh, Pakistan, June 25, 2014.
- Organize one-day consultative workshop entitled, **“The Reformulation of Biosafety Guidelines”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information

Center, ICCBS, University of Karachi, and Formen Christian College (A Chartered University) Lahore, Pakistan, June 25, 2014.

- Organizer and resource person of the **IUCr-UNESCO Open lab in Pakistan**, jointly organized by International Center for chemical and Biological sciences, University of Karachi, International Union of Crystallography and UNESCO, ICCBS, Karachi, Pakistan, April 28-May 09 2014.
- Organize (in capacity of the main contact person along with the Director) a **major international event entitled, “UNESCO-IYCr South Asia Regional Summit Meeting on Vistas in Structural Chemistry”**, jointly organized by the ICCBS in collaboration with the Pakistan Academy of Sciences, Chinese Academy of Sciences, Indian National Science Academy and COMSATS, under the auspices of UNESCO and International Union of Crystallography (IUCr), at the ICCBS, Karachi, Pakistan, April 28-30 April, 2014. (**This Regional Summit was one of three global activities planned to commemorate the International Year of Crystallography (2014), announced by the United Nations**).
- Organizer and resource person of the **The two-day international workshop entitled, “National Dialogue on Biotechnology & Bio-Safety for Food & Feed Security in Pakistan and Capacity Building Workshop for Representatives of Institutional Bio-Safety Committee (IBC) Members & Media Practitioners”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and COMSTECH Secretariate Islamabad, Pakistan, January 17-18, 2014.
- Resource person of the **Two days workshop related to Single-Crystal X-ray Diffraction Technique**, Organized by the Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), Malaysia, at Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor D. E. Malaysia. December 19-20, 2013.
- Organize **one-day seminar entitled, “Agri-biotech Applications-A solution to Mounting Food Insecurity Issues and Food Price Increase in Pakistan”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Pakistan Academy of Sciences, Islamabad, Pakistan, July 8, 2013.
- Organize **one-day seminar entitled, “BT Cotton in Sindh”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Sindh Horticulture Research Institute MirpurKhas, Sindh, Pakistan, June 26, 2013.
- Organize **“Stake Holders Meeting”** with the Progressive Farmers of Sindh, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Pakistan Central Cotton Research Institute, National High-way, Sakrand, Oct. 12, 2012.
- Organize **“Stake Holders Meeting”** with the Progressive Farmers of Bahawalpure, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Agriculture Research station Bahawalpur, Pakistan, Sept. 13, 2012.
- Organize **press conference / Launch of ISAAA Brief 43** and one-day seminar entitled, **“Application of Modern Biotechnology to sensitize the media on the importance of biotechnology”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Pakistan Academy of Sciences, Islamabad, Pakistan, May 28, 2012.
- Organize one-day seminar entitled, **“Transgenic Crops: New Era of Agriculture Biotechnology Opportunities and Challenges for a Developing Country”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Nuclear Institute of Agriculture (NIA), Tandojam, Sindh, Pakistan, May 17, 2012.

- Organizer and resource person of the **International Workshop entitled, Applications of Modern Biotechnology in Muslim Countries- Specific Issues and Challenges**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and COMSTECH Secretariat Islamabad, Pakistan, February 27-29, 2012.
- Organize **one-day seminar entitled, “Biotech Crops”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, at Central Cotton Research Institute, National Highway, Sakrand on December 13, 2011.
- Organize **press conference / Launch of ISAAA Brief 42** and one-day seminar entitled, **“Application of Modern Biotechnology to sensitize the media on the importance of biotechnology”**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Pakistan Academy of Sciences, Islamabad, Pakistan, May 21, 2011.
- Organizer of the **one-day seminar entitled, “Benefits of biotechnology to boost agriculture produce”**, jointly organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, and Pakistan Journalist Association, Lahore, Pakistan, Nov. 4, 2010.
- Organizer of the **one-day seminar entitled, “Tribute to the father of green revolution noble peace laureate Prof. Dr. Norman Borlaug”** and press conference at the **Launch of ISAAA brief 41**, organized by Pakistan Biotechnology Information Center, Located at LEJ National Science Information Center, ICCBS, University of Karachi, Pakistan, June 10, 2010.
- Resource person of the **National workshop on crystallography**, single crystal X-Ray determination held at G. C. University Lahore, Pakistan, in August 2008.

I. M. Phil. / Ph. D. STUDENTS

S. #.	Student	Degree (Status)	Title of the Thesis
1.	Dr. Huma Bano	Ph. D. (Degree awarded in 2017)	Structural and Conformational Studies on Enzyme Inhibitors by Using Single-Crystal X-Ray Diffraction Techniques
2.	Mr. Rajesh Kumar	Ph. D. (Degree awarded in 2024)	Synthesis, Characterization and Detailed Interaction Studies of Metal Complexes, Based on Single-Crystal X-Ray Diffraction Techniques, and Hirshfeld Surface Analysis
3.	Ms. Rabia Fatima	Ph. D. (Degree awarded in 2025)	Synthesis of metal complexes and co-crystals of anti-parasitic compounds and drugs and study of their structural and biological properties
4.	Mr. Umair Ahmed Khan	Ph. D. Thesis writing	Bio-Catalytical and Chemical Synthesis of Halogenated Compounds and Study of their Biological Activities and Molecular Architecture
5.	Ms. Urooj	Ph. D. Thesis writing	Synthesis of New Anti-leishmanial Leads via Co-crystallization of Anti-parasitic Drugs and Evaluation of their Anti- parasitic Potential
6.	Mr. Yahya Sifan Ahsan Ahsan Wahan	M. Phil. Submitted (2026)	The Study of Effect of Co-crystallization on Solubility and anti-Leishmanial Activity of Amphotericin B
7.	Mr. Ejaz Hussain	M. Phil. (Degree awarded in 2016)	Study of three-dimensional structures of natural and synthetic heterocyclic compounds by using single-crystal X-ray diffraction technique
8.	Ms. Syeda Saima Fatima	M. Phil. (Degree awarded in 2017)	Structural and Functional Studies on Crystals of Biologically Active Natural and Synthetic Compounds
9.	Ms. Sadaf Siddiqui	M. Phil. (Degree awarded in 2017)	Study of crystal structure and intra- and inter-molecular interactions in natural and synthetic compounds using single-crystal X-ray diffraction techniques

10.	Ms. Urooj Gul	M. Phil. (Degree awarded in 2017)	Synthesis of low dimensional carbon nanoparticles from natural and synthetic sources and their analytical applications
11.	Mr. Rajesh Kumar	M. Phil. (Degree awarded in 2018)	Structural Determination on Biologically Active Heterocyclic Compounds by Using Single-Crystal X-ray Diffraction Technique, and Study of Inter- and Intra-Molecular Interactions by Using Hirshfeld Surface Analysis
12.	Ms. Ammara Shahid	M. Phil. (Degree awarded in 2018)	Study of molecular and physical properties of heterocyclic compounds using high resolution X-rays diffraction and NMR spectroscopy
13.	Mr. Sana Ullah	M. Phil. (Degree awarded in 2019)	Study of three dimensional structures and inter- and intra-molecular interactions of steroidal compounds by using single crystal X-ray diffraction techniques, and Hirshfeld surface analysis
14.	Ms. Sidra Akhter	M. Phil. (Degree awarded in 2019)	Synthesis of bioactive heterocyclic compounds and their metal complexes, and elucidation of their structures by single-crystal X-ray diffraction and other spectroscopic techniques
15.	Ms. Urooj	M. Phil. (Degree awarded in 2019)	Conformational and configurational analysis of biologically active compounds and their co-crystals by using Single-Crystal X-Ray Diffraction Techniques
16.	Ms. Rabia Fatima	M. Phil. (Degree awarded in 2019)	Studies of three-dimensional structural features of bioactive small organic molecules by using single-crystal X-ray diffraction techniques, and study of role of inter- and intra- molecular interactions toward crystal stability by using Hirshfeld surface analysis
17.	Ms. Nida Tabbassum	M. Phil. (Degree awarded in 2020)	Study of structural and physical properties of heterocyclic compounds by using single-crystal X-ray diffraction techniques
18.	Ms. Memoona Bibi	M. Phil. degree awarded in 2022	Structural Studies on Bioactive Natural Products by Using single-crystal X-ray diffraction techniques Under Various Crystallization and Temperature Techniques
19.	Mr. Israr Ali	M. Phil. degree awarded in 2022	Study of structures and intra- and inter- molecular interactions of anti-inflammatory compounds by using single-crystal X-ray diffraction techniques
20.	Mr. Muhammad Shahbaz	M. Phil. (Degree awarded in 2022)	Structural, Functional and Co-Crystallization Studies on Anti-Oxidant Natural and Synthetic Compounds
21.	Ms. Nabeela Kauser	M. Phil. (Degree awarded in 2024)	Qualitative And Quantitative Analysis of Contribution Of Inter and Intra Molecular Interaction Towards The Stability of Crystal structure Of Heterocyclic And Aromatic Molecules By Using X-ray Diffraction Data
22.	Mr. Ghulam Murtaza	M. Phil. (Degree awarded in 2024)	Study of three dimensional structures and structure-activity relationship of bioactive heterocyclic compounds and their co-crystals by using single-crystal X-ray diffraction techniques
23.	Ms. Urooj	Ph. D. Work going on	Synthesis of New Anti-leishmanial Leads via Co-crystallization of Anti-parasitic Drugs and Evaluation of their Anti- parasitic Potential

I. Training of Foreign Students, and Scientists

The following foreign scientists and students have successfully completed a part of their trainings on natural products or anti-leishmanial studies:

S. #	Name	Institute/University	Country	Duration	Area of research
1.	Mr. Jibreel Abdulkadir Emam	Addis Ababa University, Addis	Ethiopia	21 Dec. 2019 to 03-10-2020	Natural products

		Ababa ,			
2.	Mr. Douanla Djimeli Pascal	The University of Yaounde	Cameron	7 Oct. 2020 to 21 April 2021	Natural Products Chemistry
3	Ms. Nadine-Phalone Tinguiep Tchaptnda	Department of Organic Chemistry, Faculty of Sciences University of Yaoundé 1 P.O. Box 812 Yaounde	Cameron	9 March 2021 to 27 August 2021	Natural Products Chemistry
4	Mr. Sadiq Ismail A. Shina	The Federal University Dutse	Nigeria	18 October 2021 to 18 March 2022	Natural Products Chemistry
5	Mr. Tauno-Boma Odinga	Department of Biochemistry, Faculty of Science Rivers State University	Nigeria	March, 2022- August, 2022	Natural Products Chemistry
6	Ms. Njateng Guy Sedar Singor	Department of Biochemistry, Université de Dschang	Cameroon	2 May 2022 to 22 October 2022	Natural Products Chemistry
7	Mr. Douanla Djimeli Pascal	The University of Yaounde	Cameron	December 2022 to date	Natural Products Chemistry
8	Ms. Amona Hammad Abdallah Atia	Medicinal and Aromatic Plants and Traditional Medicine Institute (MAPTRI), National Center for Research, Khartoum	Sudan	January 2023 to September 2023	Natural Products Chemistry and Anti-leishmanial cellular assays (promastigotes and amastigotes)
9	Ms. Amona Ali Abdelrahim Alshafi	Medicinal and Aromatic Plants and Traditional Medicine Institute (MAPTRI), National Center for Research, Khartoum	Sudan	January 2023 to September 2023 followed by enrolment at the ICCBS in M. Phil.	Anti-leishmanial cellular assay (amastigotes)
10	Ms. Fouzia Ali Adam	Addis Ababa University	Ethiopia	February 21, 2023 to April 21, 2023	Natural Products Chemistry and Anti-leishmanial cellular assays (promastigotes and amastigotes)
11	Mr. Ahmed Abdelhafiz Alshikh Abdalla	Omdurman Islamic University	Sudan	January 2023 to September 2023	Phytochemistry

12	Ms. Firda Rahmadiani (BS. Student)	Department of Biology, University of Northern Sumatra, Medan	Indonesia	November 2022 to May 2023	Tissue culture
13	Mr. Alvian Khadafi	Department of Biology, University of Northern Sumatra, Medan	Indonesia	November 2022 to April 2023	Tissue culture
14	Dr. Salawu Kayode Muritala	Department of Pharmacognosy and Drug Development, Faculty of Pharmaceutical Sciences, University of Ilorin, Ilorin	Nigeria	18-11- 2025 to 18-04-2026	Phytochemistry