

*CV and List of Publications*

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## **EDUCATION**

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

**Thesis Title:** “Isolation, Structure Elucidation and Biotransformation Studies on Secondary Metabolites from *Withania Somnifera* and Related Plants”

**M.Sc. (Organic Chemistry)** 2000  
University of Karachi, Karachi-75270, Pakistan

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

## **AWARDS &** **HONORS** **(INTERNATIONAL)**

- TWAS (The World Academy of Sciences for the advancement of science in developing countries) Young Affiliate 2013 2013
  - Appointed as Visiting Scientist at Atta-ur-Rahman Institute for Natural Product Discovery (RiND), University Technology Mara (UiTM), Malaysia.
  - TWAS Regional Prize for Young Scientist from the Third World Academy of Sciences (TWAS) 2011
  - Elected as Joint Secretary of the Pakistan Crytsallographic Association 2011
  - Merit Scholarship for Ph. D. Students from HEC (Higher Education Commission, Pakistan), 2003
  - Ist class 1st position in M. Sc. (Chemistry) 2001
  - AlHaj Molvi-Riazudin Gold Medal for Securing 1st Position in M.Sc. (Chemistry) 2001

## **AWARDS &** **HONORS** **(NATIONAL)**

- Associate Professor**  
I.E.J. Research Institute of Chemistry  
International Center for Chemical and Biological Sciences  
University of Karachi  
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Present

## **Assistant Professor**

- Assistant Professor** July 2010  
H.E.J. Research Institute of Chemistry Dec. 2016  
International Center for Chemical and Biological Sciences  
University of Karachi

**Research Officer** July. 2008 -  
H.E.J. Research Institute of Chemistry May 2010  
International Center for Chemical and Biological Sciences  
University of Karachi

**Post Doctoral Research Associate** Nov. 2007 -  
Single X-Ray Crystallography Laboratory, School of Chemical April 2008  
Sciences and Food Technology, Faculty of Science and Technology,  
Universiti Kebangsaan, Malaysia

**Senior Research Fellow** April. 2001-  
H.E.J. Research Institute of Chemistry April. 2007  
University of Karachi, Karachi-75270, Pakistan  
“Isolation, Structure Elucidation and Biotransformation Studies  
on Secondary Metabolites from *Withania somnifera* and related  
Plants”

**OTHER  
SERVICES**

- Coordinator, PABIC (Pakistan Biotechnology Information Center) Since 2008 to date
- Coordinator, XRD Techniques User Group of Pakistan (XRD-PAK) Since 2013 to date
- Actively involved as team member for organizing scientific events, such as workshops and conferences for both ICCBS and PABIC.

**A. CHAPTERS IN BOOKS****Published in**

1. "Separation 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), *The Humana Press*, 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 Activities", **Yousuf S.**, Choudhary M. I. and Atta-ur-Rahman, Studies in Natural Product Chemistry, published by Elsevier 3465 (2014). USA

**B. RESEARCH PUBLICATIONS****Published in**

1. Choudhary M. I., **Yousuf S.**, Nawaz S. A., Ahmed S., Atta-ur-Rahman, "Cholinesterase Inhibiting Withanolides from *Withania somnifera*", *Chem. Pharm. Bull.*, **58(11)** 1358 (2004). Japan
2. Choudhary M. I., **Yousuf S.**, Ahmed S., Samreen , Yasmeen K., Atta-ur-Rahman, "Antileishmanial physalins from *Physalis minima*", *Chemistry and Biodiversity*, **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 class 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., "5a-Chloro-16,24-cyclo-13,14-secoergost-2-ene-18,26-dioic acid-14:17,14:27-diepoxy-6a,13,20,22-tetrahydroxy-1,15-dioxo- $\gamma$ -lactone  $\delta$ -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-dimethylphenylcarbamothioyl)-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)carbamothioyl)benzamide", *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-tolylthiourea", *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 $\beta$ -Hydroxy-17 $\alpha$ -(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., “(20*S*)-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 $\alpha$ -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 $\alpha$ -Hydroxytricucalla-8,24-diene-21-oic acid and 3 $\beta$ -flurotricucalla-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-4*H*-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-o1”, *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-N<sub>2</sub>-(2-oxo-2,3-dihydro-1H-indol-3-ylidine)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., “3α-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). Netherland
36. Aslam M., Anis I., **Yousuf S\***., Afza N., Nelofar A., “5-Chloro-2-(4-nitrobenzylideneamino)phenyl)(phenyl)methanone”, *Acta Cryst. E*, **67** o3215-o3216 (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., **Youauf 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 eichwaldii*", *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 ( $\alpha$ -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-dioxa-17-azatetracyclo[7.7.1.0<sup>2,7</sup>.0<sup>10,15</sup>]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-Choloro-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 $\alpha$ -Acetoxy-11 $\beta$ -hydroxy-6 $\alpha$ -methylpregn-4-4ene-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-3aH,8H-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-1H-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-4H-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-dioxycylobutane-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 amine'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. 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

92. 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
93. 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
94. **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
95. 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
96. 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
97. 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
98. 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-heterocyclic compounds containing sulphur atom. *Chemistry Central Journal*, **7(112)** (2013). USA
99. 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
100. 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
101. 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
102. 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
103. 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

104. 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 dipropylenetriamine and diamine as ligands", *Spectrochimica Acta Part A-Molecular and Biomolecular Spectroscopy*, **5(127)** 225-30 (2014). USA
105. 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 hydrazone-phenylthiazole", *Lett. Org. Chem.*, **11** 101-108 101 (2014). The Netherlands
106. 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
107. 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
108. 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
109. 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
110. 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
111. 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,  $\beta$ -glucuronidase inhibition activity, crystal structure, and POM analyses", *Bioorg. Med. Chem.*, **22(23)** 6715-6725 (2014) USA
112. 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
113. 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
114. Taha M., Shah S. A. A., Sultan S., Ismail N. H., **Yousuf S\***., "2-[2-(2-Hydroxy-5-methoxybenzylidene)hydrazine-1-ylidene]methyl}-4-methoxyphehol, *Acta Cryst. E*, **70** o131 (2014). USA

115. 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
116. 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
117. 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
118. 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  $\alpha$ -glucosidase and urease inhibition potential", *Med. Chem. Res.*, **24**, 1310-1324 (2015). Germany
119. 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
120. 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
121. 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
122. 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,  $C_{13}H_{16}O_6S_2$ ", *Z. Naturforsch.-NCS.*, **230** 241-242 (2015). UK
123. Mabkhot Y. N., Al-Showiman S. S., Barakat A., **Yousuf S.**, Choudhary M. I., "Crystal structure of 1-acetylimidazolidine-2,4-dione monohydrate,  $C_5H_8N_2O_4$ ", *Z. Naturforsch.-NCS*, **230**, 255-256 (2015). UK
124. **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

125. Khan B., Minhaz A., Ali I., Nadeem S., **Yousuf S.**, Ishaq M., Shah MR., "Fluorescent supramolecular tweezers for selective recognition of cephradine", *Tett. Lett.*, **56**, 581-585 (2015). The Netherland
126. 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
127. 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 enaminone 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
128. **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
129. Bano S., **Yousuf S\***. "Crystal structure of *p*-toluenesulfonylmethyl isocyanide", *Acta Cryst E. Crystallographic Comm.*, **71**, o412 (2015). USA
130. 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
131. 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
132. 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
133. 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  $\alpha$ -glucosidase *in vitro*", *J. Enzyme Inhib. Med. Chem.*, **25**, 1-12. (2016). UK
134. Faroque M. U., **Yousuf S\***., Zafar S., Choudhary M. I., Ahmed M., "Transferred multipolar atom model for 10 $\beta$ ,17 $\beta$ -dihydroxy-17 $\alpha$ -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

135. Ahmad M. S., Zafar S., **Yousuf S.**, Atia-Tul-Wahab, Atta-ur-Rahman, Choudhary M. I., "Biotransformation of 6-dehydroprogesterone with *Aspergillus niger* and *Gibberella fujikuroi*", *Steroids*, **112**: 12-67 (2016). The Netherlands
136. 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
137. 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 blakesleean*a, *C. Echinulata*, and *Macrophomina phaseolina*, and Biological Activity Evaluation of its Metabolites". *PLoS One*. **22**, 12(2): e0171476. (2017). USA
138. Ammara Shahid, Sajida Noureen, Muhammad Iqbal Choudhary, Sammer Yousuf, and Maqsood Ahmed, "Crystal structure and electrostatic properties of prednisolone acetate studied using a transferred multipolar atom model", *Acta Crystallogr C Struct. Chem.*, **73**, 430-436 (2017).

### **C. INTERNATIONAL PATENTS**

1. 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
2. Quinazolines as  $\beta$ -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
3. New 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
4. Alpha-glucosidase Inhibitors, Al-Majid A. M., Islam M. S., Barakat A., Choudahry M. I., Yousuf S., US Patent Application Number 14868994, Application Docket Number 32693.16, Filing Date September 29, 2015. USA
5. "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

### **D. Lectures in International Conferences / Workshops**

- 1<sup>st</sup> 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".

- 5<sup>th</sup> 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?".
- 14<sup>th</sup> 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".
- 4<sup>th</sup> International Symposium-cum-Training Course on Molecular Medicine and Drug Research, January 7-10, 2013, Organized by the Dr. Panjwani Cnetr for Molecular Medicine and Drug Research, University of Karachi, entitled, "New Formulation Based on *Physalis minima* to treat Cutaneous Leishmaniasis".
- 13<sup>th</sup> 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, "Expending 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 17<sup>TH</sup> 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-leishmainial 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".

- 3<sup>rd</sup> 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".
- 12<sup>th</sup> 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".
- 11<sup>th</sup> 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*".

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#### H. Workshop Organized / attended as Resource Person

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- 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, April 28 May 09 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.
- Resource person of the National workshop on crystallography, single crystal X-Ray determination held at G. C. University Lahore, Pakistan, in August 2008.