

## CURRICULUM VITAE

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### Education

| Degree | Year | Subject               | Institution                                      |
|--------|------|-----------------------|--|
| Ph.D.  | 2011 | Organic Chemistry     | Univ. of Agriculture, Faisalabad.                |
| M.Sc.  | 2000 | Organic Chemistry     | Univ. of Agriculture, Faisalabad.                |
| B.Sc.  | 1997 | Chem. Geography. Bot. | Govt. College for Women, Madina Town, Faisalabad |
| F.Sc.  | 1995 | Pre-Medical           | Govt. College for Women, Madina Town, Faisalabad |
| Matric | 1992 | Pre Medical           | Lab. Girls High School UAF                       |

### Teaching & Research Experience

| Post held           | Duration              | Where Employed  |
|---------------------|-----------------------|---|
| Lecturer            | 6-5-2003-15-7-2012    | Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad |
| Assistant professor | 16-7-2012- 30-8-2019  | Department of Chemistry, University of Agriculture, Faisalabad                  |
| Associate Professor | 31-8-2019 to 11-10-24 | Department of Chemistry, University of Agriculture, Faisalabad                  |
| Professor           | 11-10-24 to dated     | Department of Chemistry, University of Agriculture, Faisalabad                  |

### **Research Conducted**

| Sr. No. | Degree | Title of Research conducted  |
|---------|--------|--|
| 1       | M.Sc.  | Diuretic activity of <i>Achyranthus aspera</i> (Chirchitta in Goats)                         |
| 2       | Ph.D.  | Correlation of polyphenolic contents of indigenous medicinal plants with their bioactivities |

### **Research Projects:**

1. **Project Title;** “Green Nano-Pesticides: a novel approach for pest control” funded by Endowment Fund Secretariat. **(PI). Total Cost:** 1.981 million (Ongoing)
2. **Project Title;** “Improving nitrogen use efficiency in agriculture using urease enzyme inhibitors” **Funded by** PARB, **PI of one Component. Total cost:** 17.016/- Million. (Ongoing)<sup>1</sup>
3. **Project Title;** “Formulation and Characterization of Phytosomes and Nanosuspensions of Phytotherapeutics with Better ACE Inhibition and Antioxidant Potential” **Funded by** HEC, **(PI). Total cost:** 2.05 million (Ongoing)
4. **Project Title;** “Discovery of Innovative Gemmomodified Herbal Combination for Management of Cardiac Diseases” **Funded by** HEC. **(PI). Total cost** 0.4991 million (Completed).
5. **Project Title;** “Demonstration of Technology of Silymarin Extraction from Milk Thistle” **Funded by** Endowment Fund Secretariat, University of Agriculture Faisalabad. **(Co-PI). Total cost:** 1.827 million (Completed).
6. **Project Title;** “Green combination: blockade for hypertension and cardiac dysrhythmia” **Funded by** Pakistan Academy of Sciences. **(Co-PI). Total cost:** 3.496 million (Completed).
7. **Project Title;** “Raising Hepatitis Awareness among School and College children for Healthier Future”, under Social integration outreach program. **Funded by** HEC and UAF. **(Co-PI). Total cost:** 1.00 million (Completed).

### **Salient Research Achievements:**

#### **1. Formulation of Ecofriendly nanobiopesticides**

In my current research project I am working on formulation of ecofriendly green nanobiopesticides. The method for the green synthesis of metal nanoparticles like silver, ZnO and FeO<sub>3</sub> were optimized through response surface methodology. **Indigenously developed Nano pesticides have some highly desirable characters, such as enhanced saturation solubility, wettability, penetration, adhesion to the surface of crop leaves and targeted insects, and biological activity due to the effect of their small size and high surface area.** The various plants indigenous plants possessing pesticidal potential were selected for the formulation of nanobiopesticides in the form of nanosuspensions. Nano-silver and ZnO acts as an effective agent in pest management that is nontoxic, safe and an improved tool to fight against pests. Results of particle size confirmed that all biopesticides and metal formulated successfully with nano meter size with in range of 35-200nm.

After the formulation of nanopesticides, these formulations were tested against phytopathogenic bacterial (*Clavibacter michiganensis* and *Pseudomonas syringae*) and fungal strains such as *Aspergillus niger*, *Aspergillus flavus*, and *Aspergillus sojae*, *Fusarium oxysporum*, and *Rhizopus stolonifera*. Nanobiopesticides proved effective against the tested strains. These strains are responsible for many diseases in fruits, vegetables and plants. **So these innovative green nano biopesticides may be used more effectively against problems caused by tested strains. Nanosization of plant extract and preparation of their formulations is an innovative approach for ecofriendly pest management which significantly enhanced the potential of conventional biopesticides.**

## **2. Formation of Slow-Release Urea Fertilizer**

The second project is formation of slow-release urea fertilizer. We blended the fertilizer with nitrate and urea inhibitors. A major portion of urea applied for enhancing crop yield and quality is lost every year in the form of NH<sub>3</sub>, N<sub>2</sub>O and NO<sub>3</sub> and contaminating air and water. These losses increase the economic burdens on farmers. The reduction in N losses in the form of ammonia volatilization into the air and NO<sub>3</sub> leaching in water are necessary for the safety of the environment throughout the world. **Out of such multiple strategies, the urease and nitrate inhibitor technology seems to be potent, safe and economical to improve the N use efficiency and keep the environment clean.** Urease and nitrification inhibitors are the chemicals that inhibit the conversion of urea into ammonia and decrease the efficiency of nitrifying bacteria and provide N as NH<sub>3</sub> and NH<sub>4</sub><sup>+</sup> to the soil for a longer time for the consumption of plant only. **After completing**

field trial with AARI, Soil Science department and Fatima Industries we get very good results. We finalize two urease and nitrate inhibitors and report to PARB for further commercialization.

### **3. Formulation of Cardio Protective and Hypotensive Nanosuspensions**

The Inhibition of ACE enzyme is important therapeutic target for making new drugs to treat hypertension and other associated diseases. Synthetic ACE inhibitors have been used to control high blood pressure. However, these synthetic drugs have undesirable side effects with high rate. Therefore, green ACE inhibitors derived from natural sources may be safer and more reliable for the regulation of high blood pressure than synthetic drugs. I identified many bioactive compounds present in Medicinal plants and foods responsible for the treatment of hypertension with known mechanism of action as angiotensin-converting enzyme (ACE) inhibitors. **Notwithstanding the undenied pharmaceutical potential of medicinal plants, their therapeutic potential can be strengthened through nanotechnology. I took the initiative to formulate nanosuspensions as novel drug delivery system of medicinal plants with better cardio protective and hypotensive potential.**

### **4: Technology Development**

*Silybum maritimum* is an important medicinal plant which is a source of silymarin, a hepatoprotective flavonoid. Neither the said plant is grown with business point of view nor is indigenously extracted silymarin available in the market. Agronomic aspects of the plant have been studied and indigenous technology for extraction of silymarin has also been developed. This technology as a chapter has been included in 101 Innovative Catalog, Technologies for Commercialization (2016) published by UAF.

### **5: Formulation of Cardio and Hepato Protective Herbal Products**

Cardiac and hepatic disorders have become a real threat and menace for population of Pakistan. Concurrently the availability of medicinal plants, being an alternative source of green medicines, is a hope for such sufferers. I have exploited the fortitude of this green source and formulated novel combinations for the management of cardiac and hepatic disorders.

## 6): Formulation of antiglycemic and Cardio-Protective Phytosomes

Diabetes Mellitus is one of the most prevalent non-communicable diseases worldwide with continuously increasing incidence. It has emerged as a great socioeconomic burden for the developing world and is a major contributor to the escalating healthcare cost worldwide. **I have successfully formulated Phytosomes and Nanosuspensions of recently introduced medicinal plant, Banaba, which have shown an excellent *in vitro* and *in vivo* antiglycemic potential.**

### List of Publication

1. Tanawish1 · **Nazish Jahan**1 · Kousar Rasheed1 · Maria Iqbal · Muhammad Atif. Exploring the Advanced Synthesis Strategies and Biomedical Applications of Iron Oxide-Based Nanozymes:2024. A Comprehensive Review. Journal of Cluster Science <https://doi.org/10.1007/s10876-024-02690-1>
2. Fareeha Kousar1, **Nazish Jahan**, Khalil-Ur-Rahman2 and Bushra Sultana.2024. Optimization of parameters for the formulation of *Moringa oleifera* nanosuspension with enhanced hepatoprotective potential. *Pak. J. Agri. Sci., Vol. 61(1),116-127; 2024*
3. Atizaz Rasool a, Shumaila Kiran , Shazia Abrar a, Sarosh Iqbal a, Tahir Farooq , **Nazish Jahan**, Bushra Munir c, Mohd Yusuf d, Naila Mukhtar.2024. Synthesis and characterization of bio-fabricated silver nanoparticles as green catalysts for mitigation of synthetic dyes: A sustainable environmental remedial approach. Journal of Molecular Liquids 396 (2024) 124061.
4. **Nazish Jahan**, Nida Hussain 1, Syeeda Iram Touqeer 1, Khalil-Ur-Rahman 2, Huma Shamshad and Naseem Abbas. Formulation of Mentha piperita-Based Nanobiopesticides and Assessment of the Pesticidal and Antimicrobial Potential. Life **2024**, 14, 144. <https://doi.org/10.3390/life14010144>.
5. Usama Saeed a, R. Bousbih b, Ahmed Mahal c, Hasan Majdi d, **Nazish Jahan** \*\*, Majid S. Jabir e, Mohamed S. Soliman f, Ali Raza Ayub, Nadia H. Elsayed h, Sajjad Ali a, Rasheed Ahmad Khera, Muhammad Waqas.2024. Engineering of asymmetric A1-D1-A2-D2-A1 type non-fullerene acceptors of 4T2CSi–4F derivatives to enhance photovoltaic properties: A DFT study. Journal of Physics and Chemistry of Solids 192 (2024) 112094

6. Fakhar Abbas · R. Bousbih · Ali Raza Ayub · Saba Zahid · Mohammed Aljohani<sup>4</sup> · Mohammed A. Amin. Muhammad Waqas<sup>1</sup> · Mohamed S. Soliman · Rasheed Ahmad Khera · **Nazish Jahan**.2024. A Theoretical Investigation for Exploring the Potential Performance of Non-Fullerene Organic Solar Cells Through Side-Chain Engineering Having Diphenylamino Groups to Enhance Photovoltaic Properties. Journal of Fluorescence <https://doi.org/10.1007/s10895-024-03805-7>
7. Iqbal H. N. Jahan, S. Ali · A. Shahzad · R. Iqbal. 2023. Formulation of Moringa oleifera nanobiopesticides and their evaluation against Tribolium castaneum and Rhyzopertha dominica. Journal of Plant Diseases and Protection <https://doi.org/10.1007/s41348-023-00802-z>. (Impact factor 2.0)
1. Jamil, S., S. R. Khan, S. Bibi, N. Jahan, N. Mushtaq, F. Rafaqat, R.A. Khan, W. A. Gill and M. R. S. A. Janjua.2023. Recent advances in synthesis and characterization of iron–nickel bimetallic nanoparticles and their applications as photo-catalyst and fuel additive, RSC Advances, 13, 29632 DOI: 10.1039/d3ra04293f (Impact factor 3.9)
2. Janan. N., F. Kousar, Khalil Ur Rahman, S. I. Touqeer and N. Abbas. 2023. Development of Nanosuspension of Artemisia absinthium Extract as Novel Drug Delivery System to Enhance Its Bioavailability and Hepatoprotective Potential. J. Funct. Biomater. 2023, 14(8), 433; <https://doi.org/10.3390/jfb14080433>(Impact factor 4.8)
3. Jahan N., K. Rasheed, Khalil-Ur- Rahman , A. Hazafa , A. Saleem, S. Alamri , M. Omer Iqbal and M A. Rahman.2023. Green inspired synthesis of zinc oxide nanoparticles using Silybum marianum (milk thistle) extract and evaluation of their potential pesticidal and phytopathogens activities. PeerJ 11:e15743 DOI 10.7717/peerj.15743.( impact factor 3.06)
4. Liaqat, N., N. Jahan, Rahman, K., I. Tahseen., T Anwar and H. Quershi. 2023. Investigation of phytotherapeutic potential of herbal mixtures and their effects on salbutamol induced cardiotoxicity and hyperlipidemia in rabbits. Bot Stud 64: 23. <https://doi.org/10.1186/s40529-023-00394-9> ( Impact Factor 2.67)
5. Irshad, I. R. Munir, G. Albasher, A. Muneer, M. Yaseen, M. Zahid, R. Nadeem, N. Jahan, M. I. Jilani, F. Younas and S. Noreen. (2023). Synthesis of metal doped nano-ferrites Co<sub>0.5</sub>Zn<sub>0.25</sub>M<sub>0.25</sub>Fe<sub>2</sub>O<sub>4</sub> by co-precipitation method and application as adsorbent and photocatalyst for removal of direct orange-108 acid dye: equilibrium, kinetic and

- thermodynamic studies, *Journal of Dispersion Science and Technology*, DOI: 10.1080/01932691.2023.2269229. (Impact factor 2.25)
6. Maqsood, A., R. Munir, G. Albasher, M. Sayed, R. Nadeem, N. Jahan, A. Muneer, M. Yaseen, M. Zahid, F. Younas and Saima Noreen .2023. Synthesis of hybrid layered double hydroxides (HLDH) and application as adsorbent for removal of direct sky-blue dye, *Chemical Engineering Communications*, DOI: 10.1080/00986445.2023.2276140. (Impact factor 2.5).
  7. Jamil, S., A. Rahat A., S. Bibi, N. Jahan, S. A. Raza Naqvi, S. R. Khan, K. M. Zia, M.R.S. A. Janjua. 2023. Synthesis, characterization, and applications of cobalt bismuth layered double hydroxide nanoparticles: Physical insights towards a potential material as fuel additive and photocatalyst. *Journal of Physical Organic Chemistry*, 6, (7) e4500, <https://doi.org/10.1002/poc.4500> (Impact factor 1.8).
  8. Mujtaba, F., N. Jahan, A. Jamal, S. Abrar, S. Kiran, A. Rasool, Md B. Hossain, F. S. Bahwerth, I. Nomani, K. Javed Iqbal, 2022."Biologically Synthesized Peptides Show Remarkable Inhibition Activity against Angiotensin-Converting Enzyme: A Promising Approach for Peptide Development against Autoimmune Diseases", *BioMed Research International*, vol. 2022, Article ID 2396192. <https://doi.org/10.1155/2022/2396192> (Impact Factor 3.2)
  9. Cheema, H., I. A. Bhatti· R.R. Srivastava · N. Jahan · M. A. Zia.2022. Dissolution of molybdenite roasting fue dust in sulfuric acid: kinetics and mechanism for molybdenum and rhenium leaching Humma. *Chemical Papers* <https://doi.org/10.1007/s11696-022-02145-9> (Impact factor 2.14)
  10. Jahan N., F. Hussian, A. R. Ayub, M. Ilyas, M. A. Khan, R. Manzoor. W.A. Khan.2022 Isolation and characterization of flavonoids from roots of *Rauvolfia serpentina* and evaluation of their hypotensive potential through angiotensin converting enzyme (ACE) inhibition mode of action. *Chemical Papers* <https://doi.org/10.1007/s11696-022-02238-5> (Impact factor 2.14)
  11. Touqeer S. I., N. Jahan, N. Abbas, and A. Ali. 2022. Formulation and Process Optimization of *Rauvolfia serpentina* Nanosuspension by HPMC and In Vitro Evaluation of ACE Inhibitory Potential. *J. Funct. Biomater.* 13(4), 268; <https://doi.org/10.3390/jfb13040268> (Impact factor 4.96)

12. Iqbal, H., N. Jahan, Khalil-ur-Rahman & S. Jamil .2022.Formulation and characterization of Azadirachta indica nano biopesticides for ecofriendly control of wheat pest Tribolium castaneum and Rhyzopertha dominica, Journal of Microencapsulation, DOI: 10.1080/02652048.2022.2149870 (Impact factor 4.23)
13. Liaqat N, Jahan N, Khalil-ur-Rahman, Anwar T and Qureshi H (2022), Green synthesized silver nanoparticles: Optimization, characterization, antimicrobial activity, and cytotoxicity study by hemolysis assay. Front. Chem. 10:952006. doi: 10.3389/fchem.2022.952006 (impact Factor 5.45)
14. Zafar F. N. Jahan, S. Ali, S. Jamil, R. Hussain , S. Aslam . 2022. Enhancing pharmaceutical potential and oral bioavailability of Allium cepa nanosuspension in male albino rats using response surface methodology. Asian Pacific Journal of Tropical Biomedicine 2022; 12(1): 26-38 DOI: 10.4103/2221-1691.331792 (Impact factor 1.5).
15. Mujtaba1 N., N. Jahan, S. A.R. Naqvi, S. K. , B. Sultana and M. A. Zia.2022. Isolation and characterization of novel antihypertensive bioactive peptides from brassica napus and angiotensin-converting enzyme (ACE) inhibition potential doi.org/10.36721/PJPS.2022.35.2.P.627-632.1 Pak. J. Pharm. Sci., 35(2):627-632 627 (Impact factor 0.68)
16. Kousar, F., N. Jahan, B. Sultana1, Khalil-Ur-Rahman. 2022.Optimization of process parameters by response surface methodology to develop a more bioefficacious nanosuspension of Silybum marianum seed extract. Tropical Journal of Pharmaceutical Research; 21 (7): 1365-1375. DOI: 10.4314/tjpr.v21i7.2 (Impact factor 0.553)
17. AbuHazaifa, **N. Jahan** M. A. Zia. Khalil-Ur-Rahman, M. Sagheer, M. Naeem. 2022 Evaluation and optimization of nanosuspensions of Chrysanthemum coronarium and Azadirachta indica using Response Surface Methodology for pest management. Chemosphere Volume 292, , 133411 ( Impact Factor 7)
18. Zafar F. **N. Jahan** , S. Ali , S. Jamil, R. Hussain , S. Aslam . 2022. Enhancing pharmaceutical potential and oral bioavailability of Allium cepa nanosuspension in male albino rats using response surface methodology. Asian Pacific Journal of Tropical Biomedicine 2022; 12(1): 26-38 ( Impact Factor 3).
19. Nosheen M., **N.Jahan** , B. Sultana , M. A. Zia2. 2021.Isolation and characterization of antihypertensive peptides from soy bean protein. Braz. J. Pharm. Sci. 2021;57: e19061



20. Asim Hussain , **N. Jahan** · Zara Jabeen · Khalil Ur Rehman · Hamza Rafeeq · Muhammad Bilal · Hafz M. N. Iqbal 2021. Synergistic Effect of Urease and Nitrification Inhibitors in the Reduction of Ammonia Volatilization. *Water Air Soil Pollut* (2021) 232:303
21. Rakha<sup>1</sup>, A., K. Rehman<sup>2</sup>, M. Shahid<sup>2</sup>, **N. Jahan**, M. Babar Imran<sup>4</sup>. 2021 Salivary flow rate and radioactivity in saliva, blood and serum of benign and malignant thyroid patients after <sup>131</sup>I therapy. *Int. J. Radiat. Res.*,; 19(1): 197-203
22. Bibi S., M. Khan, Shafiq ur-Rehman, Muhammad Yaseen, Shabbir Muhammad, Raziya Nadeem, **N. Jahan**, Saima Bashir. 2021. Misbah Investigation analysis of optoelectronic and structural properties of cis- and trans-structures of azo dyes: density functional theory study. *J Phys Org Chem*. 2021;e4183
23. Aamna Ashfaq , Razyia Nadeem , Shamsa Bibi , Umer Rashid , Asif Hanif , **N. Jahan** , Zeeshan Ashfaq , Zubair Ahmed , Muhammad Adil and Maleeha Naz. 2021 Efficient Adsorption of Lead Ions from Synthetic Wastewater Using Agrowaste-Based Mixed Biomass (Potato Peels and Banana Peels. *Water* 2021, 13, 3344. <https://doi.org/10.3390/w13233344>
24. Aslam, S., N. Jahan, Khalil-Ur-Rehman, and S. Alia. 2020. Development of sodium lauryl sulphate stabilized nanosuspension of *Coriandrum sativum* to enhance its oral bioavailability. *Journal of Drug Delivery Science and Technology* 60 ,101957. (Impact factor 2.73)
25. Hazafa A., Khalil ur-Rahmana, I-ul- Haqa, N. Jahan, M. Mumtazb ,M. Farman, H. Naeemd, F. Abbasb, M. Naeeme ,S. Sadiqab and S. Banob. 2020. The broad-spectrum antiviral recommendations for drug discovery against COVID-19. *Drug Metabolism Reviews*. (Impact factor 3.95)
26. Zahra J., Khalil-ur-Rahman, M.A. Zia and N. Jahan. 2020. Effect of explants and growth hormones on direct regeneration of *Silybum marianum* In vitro. *Journal of Biological Regulators and Homeostatic*. 34(1), 163 – 166 (Impact factor 1.5)
27. Zafar, F., N. Jahan, Khalil-Ur-Rahman, M. R. Asi and W.U.I. Zafar. 2020. Nanosuspension enhances dissolution rate and oral bioavailability of *Terminalia arjuna* bark extract in vivo and in vitro. *Asian Pacific Journal of Tropical Biomedicine*. 10(4): 164-171 (Impact factor 1.5)

28. Bibi, Z., N. Jahan, Khalil-ur-Rehman and Zill-e-Huma.2020. Synthesis and biological evaluation of Ellettaria cardamomum (Cardamom) Phytosomes. Pak. J. Pharm. Sci., 33(.5):2121-2129. (Impact factor 0.596)
29. Aslam, S., N. Jahan, Khalil-Ur-Rehman, and S. Alia.2019. Formulation, optimisation and in-vitro, in-vivo evaluation of surfactant stabilised nanosuspension of Ginkgo biloba. Journal of Microencapsulation 36(6), 576–590. (Impact factor 2.287)
30. Hazafa, A., Khalil-Ur- Rehman, N. Jahan, and Z. Jabeen. 2019. The Role of Polyphenol (Flavonoids) Compounds in the Treatment of Cancer Cells. Nutrition and Cancer (Impact factor 2.02)
31. Habiba U., Khalil-ur-Rahman, N. Jahan, and M. Shahid. 2019. Starring role of acetylcholinesterase from medicinal plants on Lactate dehydrogenase production in cytotoxic hepatic cells. Journal of Biological Regulators and Homeostatic Agents.33(6);1797-1801. (Impact factor 1.5).
32. Afsheen N., Khalil-ur-Rahman, N. Jahan K. M. Khan and M.A Zia. 2019. Optimization of Cardioprotective Potential of Various Concentration of Medicinal Plants by using Response Surface Methodology. Pak Vet J. 39(1):13-18. (Impact factor 1.1).
33. Zafar, F., N. Jahan, Khalil-Ur-Rahman, M.R. Asi and S. Ali, 2019. Comparative evaluation of biological activities of native and nanosuspension of Terminalia arjuna. Intl. J. Agric. Biol., 21: 775–785 (Impact Factor 2019 0.82)
34. Zafar F., **N. Jahan**, Khalil-ur-Rahman and H. N. Bahtti. 2018. Increased bioavailability of piperine from optimized *Piper nigrum* nanosuspension. Planta Medica Doi10.1055/a-0759-2208 (**Impact factor 2.48**)
35. Sahar, A. S. Ali, T. Hussain, **N. Jahan**, M.A. Zia. 2018. Efficient Optimization and Mineralization of UV Absorbers: A comparative Investigation with Fenton and UV/H<sub>2</sub>O<sub>2</sub>. Open Chem., 2018; 16: 702–708. (**Impact factor 1.41**).
36. Afsheen, N., Khalil-ur-Rehman, **N. Jahan**, M. Ijaz, A. Manzoor, K. Mahmood Khan, and S. Hina. 2018. Cardioprotective and Metabolomic Profiling of Selected Medicinal Plants against Oxidative Stress. <https://doi.org/10.1155/2018/9819360>. (**Impact factor 4.936**)
37. Janjua, M. R. S. A, S. Jamil, **N. Jahan**, S. Rauf Khan and S. Mirza. 2017. Morphologically controlled synthesis of ferric oxide nano/micro particles and their catalytic application in

- dry and wet media: a new approach. Chemistry Central Journal. 11:49, DOI 10.1186/s13065-017-0278-0. (Impact factor 2.442)
38. Aslam, S., **N. Jahan**, Khalil-Ur-Rahman, F. Zafar and M. Y. Ashraf. 2017. Synergistic interactions of polyphenols and their effect on antiradical potential. Pak. J. Pharm. Sci., 30, (4): 1297-1304 (**Impact factor 0.649**)
  39. Hina, S., Khalil-ur-Rehman, M. Shahid and **N. Jahan**. 2017. *In vitro* Antioxidant, hepatoprotective potential and chemical profiling of *Syzygium aromaticum* using HPLC and GC-MS. Pak. J. Pharm. Sci., 30,(3(Suppl), :1031-1039 (**Impact factor 0.649**)
  40. Afsheen, N., Khalil-ur-Rehman, **N. Jahan**, K. M. Khan and M. A. Zia. 2017. Salbutamol: A Substituent of Isoproterenol to Establish an Experimental Animal Model to Induce Myocardial Infarction. The Journal of Animal & Plant Sciences, 27(4): 1202-1208 (**Impact factor 0.381**).
  41. Jamil, S., M. R. S. A. Janjua, S. R. Khan and **N. Jahan**. 2017. Synthesis, Characterization and Catalytic Application of Polyhedron Zinc Oxide Microparticles. Mater. Res. Express 4. doi:10.1088 (**Impact factor 1.068**)
  42. Ijaz S., I. Arshad, **N. Jahan**, and Imran-ul-Haq. 2017. Assessing the Effect of Naphthalene Acetic Acid and 6-Benzylaminopurine on In Vitro Micropropagation of Potato (*Solanum tuberosum* L.) and Estimation of Secondary Metabolites in In Vitro Micropropagated Shoots. International Journal of Horticulture, 7(18): 146-153 (International peer reviewed journal).
  43. **Jahan N.**, Khalil-ur-Rahamn, S. Rahman and F. Kousar .2017. Immunomodulatory Potential of Gemmomodified Extract of *Terminalia arjuna*. Journal of Pharmacy and Biological Sciences 12(02):18-22
  44. H. Riaz, S. Nosheen, S. Kiran, **N. Jahan**, S. Abrar, S. Riaz 2016. Investigation of Free Radical Scavenging and Immunomodulatory Activity of *Anethum graveolens* (Sowa). Oxidation Communications 39, (4-I):3012–3026 (**Impact factor 2016, 0.489**).
  45. **Jahan, N.**, K.U. Rahman, S.M.A. Basra and S. Sajid, 2016. Seed Enhancement of *Silybum marianum* and Optimization of Silymarin Extraction. Int. J. Agric. Biol., 18: 464–470 (**Impact factor 0.758**)

46. Ali, Abid., Khalil-ur-Rahman, N. Jahan, A. Jamil, A. Rashid and S. M. Ali Shah. 2016. Protection of DNA during Oxidative Stress and Cytotoxic Potential of *Artemisia absinthium*. Pak. J. Pharm. Sci., 29 (1):295-299 (Impact factor 0.682).
47. Rehman, N., N. Jahan, Khalil-ur-Rahman, K.M. Khan and F. Zafar. 2016. Anti-Arrhythmic Potential of Coriandrum sativum Seeds in Salt Induced Arrhythmic Rats. Pak Vet J. 36(4):465-471 (Impact factor 0.822)
48. Hassan, M.H., B. Sultana, N. Jahan, I. Iqbal. 2016. Evaluation of Phenolic Profile and Antioxidant Potential of Medicinal Plants. Oxidation Communication, 39, No 3-I, 2222–2236 (Impact factor 0.489).
49. Zafar F., N. Jahan, Khalil-ur-Rahman. 2016. Synergetic Free Radical Scavenging Potential of Polyphenolic Phytotherapeutics in Various Plant Combinations. Oxidation Communication, 39: 39, No 3-I, 2213–2221 (Impact factor 0.489).
50. **Jahan N.**, S. Aslam, K. Rahman. T. Fazal, F. Anwara and R. Saher. 2015. Formulation and characterization of nanosuspension of herbal extracts for enhanced antiradical potential. Journal of Experimental Nanoscience., DOI:10.1080/17458080.2015.1025303 **impact factor 1.03**
51. Zafar, F., **N. Jahan**, K. Rahman, A. Khan, and W. Akram, 2015. “Cardioprotective Potential of Polyphenolic Rich Green Combination in Catecholamine Induced Myocardial Necrosis in Rabbits,” Evidence-Based Complementary and Alternative Medicine, Article ID 734903, **impact factor 1.88**
52. Aslam S., **N. Jahan**, K. Rahman and K.M. Khan. 2015. Efficacy of herbal mixture for the treatment of salbutamol induced myocardial necrosis in rabbits. Pak Vet J, 35(3): 355-359. **(Impact factor 0.822)**
53. Iqbal, S., K. Rehman, M. H. Yousuf, **N. Jahan**. 2015. Hepatitis c; early prediction of therapy response in patients and the benefits of treatment extension in non responders. The Professional Med J. 22(4):432-438. (HEC Recognized, category X)
54. Ajmal, A.D., **N. Jahan**, S. Aslam, K. Rahman and F. Zafar. 2015. Effect of extraction techniques on the extractability of Antioxidant polyphenolics from *C. colocynthis*. International Journal of pharmaceutical, Biological, and Chemical Sciences (IJP B CS). 4(2): 20-29. (International, Peer reviewed)

55. Ali, A., K. Rahman, **N. Jahan**, M. Iqbal and M. Abbas. 2015. Clinical epidemiological study of Hepatitis B and C. *Current Science Perspectives*. 1(3): 91
56. Zafar, F., **N. Jahan**, Khalil-Ur-Rahman, W. Zafar and S. Aslam. 2014. Comparative Evaluation of Phytochemical, Mineral And Vitamin Contents of Gemmomodified Extracts And Leaves of Two Indigenous Medicinal Plants. *Int. J. Agric. Biol.*, 16: 911–916. (**Impact factor 0.902**)
57. Fatima, S., **N. Jahan**, Khalil-ur-Rahman, S. Nosheen and S. Aslam. 2014. Comparative Antioxidant Potential and Total Polyphenolic Contents Of Different Parts Of *Datura Stramonium*.. *Pak J. Agri. Sci.*, Vol. 51(2). ( **Impact factor 1.054**)
58. **Jahan, N.**, Khalil-Ur-Rahman, S. Ali and M. R. Asi. 2013. Phenolic Acid And Flavonol Contents Of Gemmo-Modified And Native Extracts of Some Indigenous Medicinal Plants. *Pak. J. Bot.*, 45(3): 1515-1519. ( **Impact factor 1.207** )
59. Ayesha, **N. Jahan**, Khalil-ur-Rahman and S. Nosheen. 2013 Gemmomodification: An emerging source of natural antioxidants from *Silybum marianum*. *Pak. J. Pharm. Sci.*, 26(3):585-591 (**Impact factor 0.947**)
60. Afsheen N, Khalil-ur-Rahman and **N. Jahan**, 2013. Attenuation of Chemically Induced Diabetes in Rabbits with Herbal Mixture (*Citrullus colocynthis* and *Cicer arietinum*). *Pak. Vet. J.*, 33(1): 41-44. ( **Impact factor 1.365**)
61. Anwar, S. **N. Jahan**, Khalil-ur-Rahman, S. Ali and S. Aslam. 2013. Microwave-Assisted Extraction and Nitric oxide and Superoxide Attenuation Potential of Polyphenolics from *Bauhinia variegata*. *Asian J. Chem.*, 25(13) 7125-7130 (**Impact factor 0.253**)
62. Kousar, F., S. Nosheen, S. N. Zahra, S. Kousar and **N. Jahan**. 2013. Synthesis and Biological Activity of Important Phenolic Mannich Bases. *Asian J. Chem.*, 25 (1):59-62. (**Impact factor 0.253**)
63. **Jahan, N.**, Khalil-ur-Rahman, S. Ali and M. Rafiq Asi. 2013. Phenolic Acid And Flavonol Contents Of Gemmo-Modified And Native Extracts of Some Indigenous Medicinal Plants. *Pak .J. Bot.* 45(3): 1515-1519, (**Impact factor 0.872**)
64. Hamid, M., Khalil-ur-Rahman and **N. Jahan**. 2013. Cardioprotective and Antilipidemic Effect of Gemmotherapeutically Treated *Glycyrrhiza glabra* against Isoproterenol Induced Myocardial Injury. *Europ J. Med. Plants*, 3(3): 405-421

65. **Jahan, N.**, K. Rahman, S. Ali, M. R. Asi, and A. Akhtar. 2012 Cardioprotective potential of gemmomodified extract of *Terminalia arjuna* against chemically induced myocardial injury in rabbits. Pak Vet J., 32(2): 255-259. **(Impact factor 1.25)**.
66. **Jahan, N.**, K. Rehman, S. Ali and I. A. Bhatti. 2012. Cardioprotective and Antilipidemic Potential of *Cyperus rotundus* in Chemically Induced Cardiotoxicity. Int. J. Agric. Biol., 14: 989–992 **(Impact factor 0.948)**
67. Aslam, S., **N. Jahan**, S. Ali and Khalil-ur-Rahman. 2012. An Innovative Microwave Assisted Extraction and Antioxidant Potential of Polyphenol from Different Parts of *Ocimum sanctum*. J Med Plant Res., 6(11); 2150-2159
68. Kousar, F., **N. Jahan**, K. Rehman and S. Nosheen. 2012. Cardioprotective Potential of *Coriandrum sativum*. Bioscience Research, 1(1): 1-6.
69. M. Meraj1, Khalil-ur-Rahman, A. Jamil, M. Ashraf, M. I. Rajoka, S. Javed and **N. Jahan**. 2012. *Bacillus subtilis* Improvement through Uv and Chemical Mutagenesis for Indigenously Hyper produced Urate Oxidase. Pak. J. life soc. Sci., 10(2): 123-129. (HEC Recognize)
70. **N. Jahan**, K. Rehman, S. Ali and I. A. Bhatti. 2011. Antioxidant activity of gemmotherapeutically treated indigenous medicinal plants. Asian Journal of Chemistry, 23(8);3461-3470.**(Impact Factor 0.23)**
71. **Jahan, N.**, K. Rehman, S. Ali and I. A. Bhatti. 2011. Antimicrobial activity of gemmomodified extracts of *Terminalia arjuna* and *Euphorbia tirucalli*. Int. J. Agric. Biol., 13(6): 1001–1005. **(Impact factor 0.948)**.
72. Hina S, K Rehman, Z. H Dogar, **N. Jahan**, M. Hameed, Z. I Khan, K. Ahmad, K. Mukhtar and E. E Valeem. 2010. Cardioprotective effect of gemmotherapeutically treated *withania somnifera* against chemically induced myocardial injury. Pak. J. Bot., 42(2): 1487-1499. **(Impact Factor 0.947)**
73. Aslam K., M, K, Khosa, **N. Jahan** and S. Nosheen. 2010. Synthesis and applications of coumarin. Pak. J. Pharm. Sci., 23, (4); 449-454 **(Impact Factor 1.13)**
74. N. Zahra, **N. Jahan**, S. Nosheen and K. Rehman. 2011. Antimicrobial activity of aqueous, ethanolic extracts and crude extracted phytoconstituents of *Nigella sativa* seeds. 8(1): 19-25; Bioscience Research,8(1): 19-25

75. Kousar, S., N. **Jahan**, K. Rehman and S. Nosheen. 2011. Antilipidemic activity of *Coriandrum Sativum*. Bioscience Research, 8(1): 8-14.
76. Kiran, S. N. **Jahan**, S. Nosheen, and K. Rehman. 2005. Mineral profile of *Fennel vulgare* and *Eugenia caryophyllus*. Indus J. of Biol. Sci. 2(2):246-349
77. Akhtar, S., N. **Jahan**, R. Nadeem. 2005. Mineral composition of Coriander and cardamom. Indus J. of Biol. Sci. 1(2):69-73
78. Amjad, A. N. **Jahan** and S. Nosheen. 2004. Determination of Mineral Composition (Na, K, Ca Mg, N S, Cl) of Zira, Sonth And Kalwangi. Indus J. of Biol. Sci. 1 (2):93-96.
79. Majeed, H., N. **Jahan**, F. Hussain, and M. Usman. 2004. Diuretic activity of *Fumairia Officinalis* (Shahtara) and *Foeniculum Vulgare* in goats. Indus J. of Biol. Sci. 1(2):89-95
80. Rehman, K. N. **Jahan**, M. A. Zia and N. Farah. 2002. Physiochemical Characteristics of drinking water of Faisalabad. Indus journal plant Sci. 1(4):364-366
81. **Jahan N.**, R. Ahmad and F. Hussain. 2002. Evaluation of diuretic activity of *Achyranthes aspera* in goats. Pakistan Vet. J. 23(3): 124-127.

### **Book Chapters**

1. Nazish Jahan and Khalil-ur-Rahman. 2020. Cold Pressed Oils Green Technology, Bioactive Compounds, Functionality, and Applications. Cold pressed capia pepper (*Capsicum annuum* L.) seed oil. ISBN 978-0-12-818188-1 Pages 439-447. Elsevier Inc
2. Nazish Jahan. 2023. Handbook of Coriander (*Coriandrum sativum*), Chemistry, Functionality and Applications. Pharmaceutical Application of Coriander. ISBN 97810032069333. DOI. 10.1201/9781003204626. Pages 187-191. CRC Press Taylor and Francis group.
3. Nazish Jahan. Applied Chemistry, pp. 126-148. 2017. The Caravan Book House, Lahore, Pakistan. Editor, Dr. Haq Nawaz Bhatti
4. Nazish Jahan. Advanced Organic Chemistry, pp. 167-263. 2014. The Caravan Book House, Lahore, Pakistan. Editor, Dr. Haq Nawaz Bhatti.
5. Khalil-ur-Rahman and Nazish Jahan. Development of Silymarin Extraction Technology, from Milk Thistle. pp. 357-360. 2014. 101 Innovative Catalog, Technologies for Commercialization (2016). University of Agriculture, Faisalabad. Editor; Prof. Dr. Iqbal Ahmad Khan. ISBN: 978-969-7705-16-0.

### **Other Scholarly Activities**

#### **i): Reviewer of Research Papers:**

- i. Journal of Alternative and Complementary Medicines
- ii. Pharmaceutical Biology
- iii. Natural Product Research
- iv. International Journal of Agricultural Policy and Research
- v. British Journal of Pharmaceutical Research
- vi. Molecule

#### **ii): Outreach Activity:**

Actively involved in the Capacity Building Program of Complementary and Alternative Medical Practitioners.

#### **iii): Demonstration:**

Demonstration of production technology of milk thistle to farmers and complementary and alternative medical practitioners and extraction of silymarin from milk thistle seed to herbal pharmaceutical manufacturer through seminars/ workshop at spot was made many times.

#### **iv): Award**

Received an “Innovation award, 2015 for Natural Product for Hepatitis”

#### **v): Short Course:**

Taught classes to the participants of Lab. Technicians and Lab. Attendants short courses, offered by department of Chemistry and Biochemistry

### **Advisory and Administrative Services**

1. Coordinator; evening program of the Department (2014-2018)
2. Secretary; staff meeting of the Department (2016-2018)
3. Member; Faculty board, faculty of Sciences (2014-2017)
4. Student Advisor of the Department of Chemistry (2015-2017)
5. Member; Chemical Society of Pakistan



6. Time table incharge of the Department

**Workshops/Training Courses Organized**

1. Participated as Member organizing Committee Two days symposium on “Writing Science and Leveraging Scientific research” held on 2-3 March 2022, at Department of Chemistry, University of Agriculture Faisalabad.
2. Participated as Member organizing Committee “Frontier in Computational Chemistry” held on 4-5 July 2022, at Department of Chemistry, University of Agriculture Faisalabad.
3. Member organizing committee of awareness seminar about Dengue held on 10th November 2022. Ripah International university Faisalabad
4. Organized as Organizing secretary International Conference of “Chemistry, Materials & Technology” (CMT-2023) held on 15-16 March 2023 at Department of Chemistry University of Agriculture, Faisalabad, Pakistan
5. Organized 11th National Seminar for Capacity Building of CAM Practitioners entitled “Green Combination: blockade for Hypertension & Cardiac dysrhythmia” held on 10<sup>th</sup> October, 2017 at Department of Biochemistry, University of Agriculture, Faisalabad.
6. Organizing team in “Space Education & Awareness Program” held under World Space Week 2017, organized by SUPARCO with collaboration of University of Agriculture, Faisalabad.
7. Member organizing committee in 2<sup>nd</sup> Workshop on “Advanced chemical techniques in Natural and Applied Sciences” held on 18-20 September, 2017 organized by Department of Chemistry, University of Agriculture Faisalabad.
8. Member organizing committee of Two day’s workshop on “Advanced spectroscopic techniques for characterization of organic compounds” held on 15-16<sup>th</sup> August 2017 at Department of Chemistry & Central Hi-Tech Laboratory, University of Agriculture, Faisalabad-Pakistan.
9. Member, organizing committee of seminar on “Tibb Nature & Sciences” held on 21st August, 2016 at University of Agriculture, Faisalabad
10. Member organizing committee in “International Conference of Biochemistry, Biotechnology and Biomaterials.” held on 22-24th February 2016 at Department of Biochemistry, University of Agriculture, Faisalabad.

11. Organized one day Seminar “Importance and cultivation of medicinal plants” on 23th November 2015 at University of Agriculture Faisalabad.
12. Member organizing committee in “Training Workshop on Advanced chemical techniques in natural and applied Sciences” on 10-12th September 2015. Organized by Department of Chemistry, University of Agriculture Faisalabad
13. Organized one day National Seminar on “Capacity Building of Complementary and Alternative Medical Practitioners and Demonstration Activity of Silymarin Extraction” on 27 February, 2015 at University of Agriculture, Faisalabad.
14. Member organizing committee for holding “International conference of biochemical and Chemical Sciences (ICBCS)” held on 24-26, February, 2014 at Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad.
15. Organized as coordinator “5<sup>th</sup> One day national seminar on Capacity Building of Alternative and Medical Practitioners” in Dept. of Chemistry and Biochemistry, University of Agriculture, Faisalabad on 29 December, 2012.
16. Member, organizing committee in the Workshop on “Imparting Practical Training in Molecular and Biochemical Techniques”. Organized by Department of Chemistry and Biochemistry, University of Agriculture Faisalabad. 27 November to 1 December 2012.
17. Organized one-day National Seminar on Capacity building of Alternative Medical Practitioners. 11 June 2011.

#### **Participation in Seminars/ Conferences/ Workshops**

1. Participated as Guest Speaker “Role of Biochemical techniques in applied and Allied Sciences” held on 30 August -15 September 2021, at Riffah International University Faisalabad Campus
2. Participated as Keynote speaker in Workshop on “Discovering the innovative progressions in catalysis” Held on 20th December 2021, at Department of Chemistry, University of Agriculture Faisalabad.
3. Poster presentation in “Innovation in Chemistry and Physics” held on 14-15 March 2022. Department of Chemistry University of Education Faisalabad.
4. Poster presentation in “International conference on interdisciplinary Research innovation” held on 26-28-October. 2022. at UAF community College PARS.

5. Participated in training on “effective pedagogical strategies for lecturers and assistant professor” being organized by QEC UAF From 17-1-23to18-1-23.
6. Participated as Speaker “21st International 1st Inter-Islamic 23rd National Chemistry Conference on Chemical Sciences Technology, Innovation, and Sustainability” held on 23-25, October 2023, at Department of Chemistry Quid I-Azam University Islamabad Pakistan.
7. Participated in Nano-Tech Meeting on waste water treatment held on May 3<sup>rd</sup> 2019 at University of Agriculture, Faisalabad.
8. Participated one day Symposium on “Nanomedicine Current Scenario and Future perspective. “August 6, 2019 at University of Agriculture, Faisalabad.
9. Participated in international Symposium on “New Frontiers of Physics” October, 19 2018 at University of Agriculture, Faisalabad.
10. Participated in 2<sup>nd</sup> <sup>t</sup> national conference on bioactivity of phytochemicals (NCBP) held on 13-15<sup>th</sup> November 2018, IMBB/CRiMM, UoL, Lahore
11. Participated in International conference on natural sciences at the interface of climate Change, Food security and Sustainability (NSICFSS) held on 24-26<sup>th</sup> October, 2018 in Uok AJ&K Pakistan
12. Participated in 29<sup>th</sup> National and 17<sup>th</sup> International Chemistry Conference held on 6-8 September 2018 in University of Peshawar
13. Attended international Symposium on “New frontiers of Physics” held on 19<sup>th</sup> October 2018 in Department of physics University of Agriculture Faisalaabad.
14. Participated in 2<sup>nd</sup> international Conference of Biochemistry, Biotechnology and Biomaterial held on 9-11 december 2018 in Department of Biochemistry, University of Agriculture Faisalabad
15. Participated, in National Workshop entitled “Value added food products: issues and opportunities for entrepreneurs” held on 19 January 2018 at University of Agriculture, Faisalabad
16. Member, organizing committee and Resource person in National Workshop entitled “Advanced chemical techniques in natural and applied sciences” held on 18-20 September 2017 at University of Agriculture, Faisalabad.

17. Participated, in National Conference for poster presentation on “Formulation and Biological Evaluation of *Silymarin marianum* Phytosome as novel drug delivery system” in “Bioactivity of Phytochemicals (NCBP)” held on 4-6 October, 2017, organized by The University of Lahore, Lahore.
18. Participated, in National Workshop entitled “Statistical methods for researchers using R” held on 9-11th August 2017 at University of Agriculture, Faisalabad.
19. Member, organizing committee in “International Conference of Biochemistry, Biotechnology and Biomaterials.” held on 22-24<sup>th</sup> February 2016 at Department of Biochemistry, University of Agriculture, Faisalabad
20. Participated in National Workshop entitled “Organic Food and Health” held on 29 August, 2016 at University of Management Lahore.
21. Attended course “Crystal Structure Determination by X-Ray Crystallography” Organized by Department of Chemistry, University of Agriculture, Faisalabad, held on 6 November to 2 December 2016.
22. Member, organizing committee in “Training Workshop on Advanced Chemical Techniques in Natural and Applied Sciences” on 10-12<sup>th</sup> September 2015. Organized by Department of Chemistry, University of Agriculture, Faisalabad
23. Participated in “International conference of Biochemical and Chemical Sciences (ICBCS)” held on 24-26, February 2014 at Department of Chemistry and Biochemistry, University of Agriculture Faisalabad
24. Attended two days’ work Shop on “Lead to Success” held on 7<sup>th</sup> to 8<sup>th</sup> March, 2014 at University of Agriculture Faisalabad
25. Attended one week Training on “Writing Technical Proposal for Grants under ALP” on 2<sup>nd</sup> to 6<sup>th</sup> June 2014 at University of Agriculture Faisalabad.
26. Attended one day workshop on “developing industry driven technologies” held on 27<sup>th</sup> September, 2014 at University of Agriculture Faisalabad.
27. Attended international workshop on “Renewable energy technologies in Pakistan” held on 16-18 December, 2014 at University of Agriculture Faisalabad
28. Participated in 12<sup>th</sup> International and 24<sup>th</sup> Nation Chemistry conference held on 28-30 October 2013 in Institute of Chemical sciences Bahaudin Zakariya University Multan.

29. Attended one day international seminar on “Polyamines in Cell Proliferation and Its Use as Possible Marker in The Diagnosis of Cancer” held on 30<sup>th</sup> March 2013 in new senate hall University of Agriculture Faisalabad
30. Participated as Resource Person in 10- Days Farmer Training on Agriculture &Live stock at University of Agriculture Faisalabad. June 5-14, 2012.
31. Participated as Resource Person in 5<sup>th</sup> One day National Seminar on Capacity Building of Complementary and Alternative Medical Practitioners, Dept. Of Chemistry and Biochemistry, University of Agriculture Faisalabad. 29 Dec 2012.
32. One day workshop on Self-Assessment. Organized by Quality Enhancement Cell, University of Agriculture Faisalabad. 8 Dec 2012
33. Participated in two day Workshop on Biodiesel Technology Organized by Dept. Of Chemistry, Sargodha University. Nov 5-6 2012.
34. 8<sup>th</sup> international and 20<sup>th</sup> National Chemistry conference held on Feb 15-12, 2010 in Department of Chemistry and Biochemistry Quaid –i-Azam University Islamabad
35. 2<sup>nd</sup> International Seminar on Medicinal plants. January 14-16, 2010 in Lahore College for women Lahore
36. Recent trends in Chemistry held on January, 14-16 2010 in Lahore College for women Lahore
37. Workshop on implementation of biosafety products, held on May 14, 2011 in CABB, University of Agriculture Faisalabad
38. A six Day workshop on Molecular and Biochemical Techniques held on June 8-14, 2011 in Dept. of Chem and Biochem, University of Agriculture Faisalabad
39. One day National Seminar on Capacity Building of Complementary and Alternative Medical Practitioners held on June, 11 in 2011 Dept. of Chem and Biochem, University of Agriculture Faisalabad
40. One day seminar on Chemistry for the wellbeing of Mankind held on June 15, 2011 in Dept. of Chem and Biochem, University of Agriculture Faisalabad
41. One day Seminar on Abuse of Narcotics among Young Generation held on April 20, 2011 in PARS Sub Campus University of Agriculture Faisalabad
42. 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on Nov 21-23 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad

43. 1<sup>st</sup> International Chemistry Conference on Recent Challenges in Chemistry. Held on 1-3 November 2006 in Department of Chemistry, Government College University Faisalabad
44. International Chemistry conference on Recent Advances in Chemistry. 2-3Nov 2007. Lahore College for women Lahore.
45. International Seminar on Medicinal plants Isolation and Application. May 21-23 2008. Lahore College for women Lahore.
46. International seminar on integrated medicines. August 6 2008. University of Agriculture Faisalabad.

### **Participation in Trainings**

1. Participated and Qualified in research orientation program on “Research Methodologies and Analytical Techniques” held on 15-6-2004 to 30-6-2004 in University of Agriculture Faisalabad.”
2. Participated and Qualified in 33<sup>rd</sup> Postgraduate Training Course on Nuclear and other Advanced Techniques in Agriculture and Biology”, held on 5-12-2005 to16-12-2005 in Nuclear Institute of Agriculture and Biology, Faisalabad.
3. Participated and Qualified the Staff development Course under National Academy of Higher Education commission held on 9-5-2005 to 4-6-2005 in University of Agriculture Faisalabad.

### **Abstract/Paper in the scientific Proceedings and Seminars**

1. Nazish Jahan, Kousar Rasheed, and Riffat Fatima. Lantana camara mediated synthesis of zinc oxide nanoparticles and assessment of its pesticidal and antibacterial activity. International conference on interdisciplinary Research innovation” held on 26-28-October. 2022. at UAF community College PARS
2. Kousar Rasheed, Nazish Jahan. Environmentally Friendly Green Approach for The Synthesis of Zinc Oxide Nanoparticles Using Seeds Extract of Silybum marianum and Evaluation of Its Biological Activities. International Conference of “Chemistry, Materials & Technology”

(CMT-2023) held on 15-16 March 2023 at Department of Chemistry University of Agriculture, Faisalabad, Pakistan

3. Nazish Jahan, Huma shamshad, Arooj Fatima. Formulation and Characterization of Nanosuspension of *Mentha piperita* (mint) and Evaluation of its Pesticidal potential. International Conference of “Chemistry, Materials & Technology” (CMT-2023) held on 15-16 March 2023 at Department of Chemistry University of Agriculture, Faisalabad, Pakistan.
4. Nazish Jahan. Nano formulation of *capsicum frutescens* extract with enhanced anti-microbial and pesticidal potential. 21st International 1st Inter-Islamic 23rd National Chemistry Conference on Chemical Sciences Technology, Innovation, and Sustainability” held on 23-25, October 2023, at Department of Chemistry Quid I-Azam University Islamabad Pakistan.
5. Sultana B., S. Yaqoob, **N. Jahan**, S. Jamil and S. Khan. 29<sup>th</sup> National and 17<sup>th</sup> International Chemistry Conference “Chemical Sciences for Sustainable Development” held on 6-8 September 2018 in Institute of Chemical Sciences University of Peshawar, Pakistan.
6. Touqeer ,I. S, **N. Jahan**, Khalil-ur-Rahaman and S. Jamil 2018 Formulation characterization and invitro biological evaluation of *Rauwolfia serpentina* Nano suspension. 2<sup>nd</sup> <sup>t</sup> national conference on bioactivity of phytochemicals (NCBP) held on 13-15<sup>th</sup> November 2018, IMBB/CRiMM, UoL, Lahore.
7. Asif, M., **N. Jahan**, Khalil-Ur-Rahman, Zill-e-Huma and Z. Khadim.2018. Evaluation of nitrification inhibition potential of Thiourea, 1,2,4-triazole and acetohydroxamic acid in wheat and rice crop. Abstracts Book ICBBB-2018, December 09-11, 2018, University of Agriculture, Faisalabad, Pakistan.
8. Munaza, **N. Jahan**. 2018 Formulation of *Amomum subulatum* Nanosuspension and Evaluation of Angiotensin Converting Enzyme (ACE) Inhibition Potential. Abstracts Book ICBBB-2018, December 09-11, 2018, University of Agriculture, Faisalabad, Pakistan.
9. Sajid, S., **N. Jahan**, Khalil-Ur-Rahman, R. Ahmad and Zill-e-Huma. Synthesis, characterization and biological evaluation of quercetin-copper (ii) complex. 1<sup>st</sup> National conference on bioactivity of phytochemicals (NCBP) 4-6 October, 2017 at Institute of

Molecular Biology and Biotechnology (IMBB)/ Center for Research in Molecular Medicine (CRiMM), The University of Lahore, Lahore.

10. Zill-e-Huma, **N. Jahan**, Khalil-Ur-Rahman and F. Kousar. Formulation and Biological Evaluation of *Silymarin marianum* Phytosome as novel drug delivery system. 1<sup>st</sup> National conference on bioactivity of phytochemicals (NCBP) 4-6 October, 2017 at Institute of Molecular Biology and Biotechnology (IMBB)/ Center for Research in Molecular Medicine (CRiMM), The University of Lahore, Lahore.
11. Jabeen, Z., Khalil-Ur-Rehman, B. Sadia, **N. Jahan**, S. Hina and Umm-e-Habiba. Screening of in vitro cultures of *Moringa oleifera* for hyper-production of peroxidase under salt stress. First National Conference on Emerging Trends in Bioinformatics and Biosciences held on July 20-22, 2017 at Department of Bioinformatics, Hazara University, Mansehra KP.
12. Babar, Z., Khalil-Ur-Rehman, H. Zafar and **N. Jahan**. Protective effect of *Silybum marianum* seeds against gentamicin induced nephrotoxicity in rabbits. First National Conference on Emerging Trends in Bioinformatics and Biosciences held on July 20-22, 2017 at Department of Bioinformatics, Hazara University, Mansehra KP.
13. Hina, S., Khalil-Ur-Rehman, **N. Jahan**, N. Afsheen, Z. Jabeen and Umm-e-Habiba. In vitro antioxidant and hepatoprotective potential of *Moringa oleifera* using liver slice culture. First National Conference on Emerging Trends in Bioinformatics and Biosciences held on July 20-22, 2017 at Department of Bioinformatics, Hazara University, Mansehra KP.
14. Afsheen, N., Khalil-Ur- Rehman, **N. Jahan**, Zill-e-Huma and S. Hina. In vitro and in vivo screening of natural angiotensin converting enzyme (ACE) inhibitors for treatment and management of hypertension. First National Conference on Emerging Trends in Bioinformatics and Biosciences held on July 20-22, 2017 at Department of Bioinformatics, Hazara University, Mansehra KP.
15. **Jahan, N.** Umm-e-Habiba and Khalil-ur-Rahman. Protective effect of *Silybum marianum* and Aleo Barbadenin against gentamicin induced nephrotoxicity. 26th National and 14th International Chemistry Conference held on October 5-8, 2015 in Department of Chemistry, Islamia University Bahawalpur.
16. Amna, A, **N. Jahan** and Khalil-Ur Rahman. Formulation and Physical Characterization of Silymarin Emulsions and Suspensions. “International Conference of Biochemistry,



Biotechnology and Biomaterials.” held on 22-24th February 2016 at Department of Biochemistry, University of Agriculture, Faisalabad

17. Sahar. M., **N. Jahan** and. Khalil-ur-Rahman. Comparative Antimicrobial and Antibiofilm Activity of Fresh Rose Petals and their Waste. “International Conference of Biochemistry, Biotechnology and Biomaterials.” held on 22-24th February 2016 at Department of Biochemistry, University of Agriculture, Faisalabad.
18. S. Aslam, **N. Jahan**, Khalil-Ur-Rahman and F. Zafar. Antioxidant activity of fifteen combinations from four medicinal plants. Poster presented in “International conference of biochemical and Chemical Sciences (ICBCS)” held on 24-26, February 2014 at Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad.
19. **N. Jahan**, F. Kousar, Khalil-Ur-Rahman and Nazia. 2014 Cardioprotective potential of *Cassia fistula* against chemically induced cardiac injury. Poster presented in “International conference of biochemical and Chemical Sciences (ICBCS)” held on 24-26, February 2014 at Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad.
20. F. Zafar, **N. Jahan** Khalil-Ur-Rahman and S. Aslam. Cardio-Protective Potential of Herbal Combination on Salbutamol Induced Cardiotoxicity in Rabbits. Presented in “International conference of biochemical and Chemical Sciences (ICBCS)” held on 24-26, February 2014 at Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad.
21. Zafar F., **N. Jahan**, Khalil-ur-Rahman. 2013. Synergetic antioxidant potential of Herbal mixture. 12<sup>th</sup> International and 24<sup>th</sup> Nation Chemistry conference held on 28-30 October 2013 in Institute of Chemical sciences Bahaudin Zakariya University Multan.
22. Aslam S., **N. Jahan**, Khalil-ur-Rahman. Cardioprotective effect of herbal combination against salbutamole induced cardiotoxicity. 12<sup>th</sup> International and 24<sup>th</sup> Nation Chemistry conference, held on 28-30 October 2013 in Institute of Chemical sciences Bahaudin Zakariya University Multan.
23. **Jahan, N.** and K. Rahman. 2012. Gemmotherapy; Emerging Therapy for Immunomodulators and Infectious Diseases. The First International Biology Congress in Kyrgyzstan. 24-26 September 2012. Kyrgyzstan-Turkey Manas University.
24. **Jahan, N.** and Khalil-ur-Rahman. Gemmotherapy: A New Way to Treat Cardiac Disease. 23<sup>rd</sup> national and 11<sup>th</sup> international chemistry conference held on October 15-17, 2012 in National Center of Excellence in Physical Chemistry University of Peshawar.

25. Rasool, M., **N. Jahan**, F. Zafar, K. Rahman and S. Aslam. Investigation of Phytoconstituents and Mineral Contents of Gemmomodified and Native Part of Two Medicinal Plants. 23<sup>rd</sup> National and 11<sup>th</sup> International chemistry conference held on October 15-17, 2012 in National Center of Excellence in Physical Chemistry University of Peshawar
26. Maqbool, S., **N. Jahan**, and S. Aslam, K. Rahman and F. Zafar. 2012. Evaluation of Free Radical Scavenging Potential of Different Extracts of *Lipidium sativum* by Employing Different Solvents and Techniques. 23<sup>rd</sup> National and 11<sup>th</sup> International Chemistry Conference held on October 15-17, 2012 in National Center of Excellence in Physical Chemistry University of Peshawar.
27. **Jahan, N.**, K. Rehman, S. Ali and I. A. Bhatti. 2011. Immunomodulatory and cardioprotective potential of polyphenols rich gemmomodified extract of *Terminalia arjuna*. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on Nov 21-23, 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad
28. Sharif, T., S. Nosheen, **N. Jahan** and K. Rehman. 2011. Antioxidant and free radical scavenging activity of gemmomodified *Mentha arvensis*. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on Nov 21-23 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad
29. Aslam, S., **N. Jahan**, S. Ali and K. Rehman. 2011. Application of improved technique for better extraction of polyphenols and assessment of antioxidant potential. Presented in 22<sup>nd</sup> National and 10<sup>th</sup> International chemistry conference held on Nov 21-23 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad
30. Hina, S., K. Rehman, **N. Jahan** and M. Shahid. 2011. Evaluation of cardioprotective activity of gemmomodified herbal mixture against chemically induced myocardial injury. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on 21-23 Nov 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad

#### **List of Poster Presentations**

- 1 Sajid, S., N. Jahan, Khalil-Ur Rahman, R. Ahmad and Zill-e-Huma. Synthesis, characterization and biological evaluation of Quercetin copper(ii) complex. 1st national conference on bioactivity of phytochemicals (NCBP) held on 04-06 october 2017, IMBB/CRiMM, UoL, Lahore.

- 2 Zill-e-Huma, N. Jahan, Khalil-Ur Rahman and F. Kousar. Formulation and biological evaluation of Silymarin marianum phytosomes as novel drug delivery system. 1st national conference on bioactivity of phytochemicals (NCBP) held on 04-06 october 2017, IMBB/CRiMM, UoL, Lahore
- 3 Zafar, F., **N. Jahan**, K. Rehman, W. I. Zafar and F. Fatima. Comparative evaluation of phytochemicals, minerals and vitamin contents of gemmomodified and natively used extracts of two indigenous medicinal plants. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on 21-23 Nov 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad
- 4 Anwar, S., **N. Jahan**, K. Rehman and S. Ali. Comparison of different techniques for extraction of polyphenols and evaluation of antioxidant activity in *Bauhinia variegata*. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on 21-23Nov 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad
- 5 Akhter, A., K. Rehman, **N. Jahan**, F. Khursheed and M. Wahid. *Evaluation* of anthropometric indicators with Hb levels, blood glucose levels ESR and BMR as risk factors for CVD onset. Presented in 22<sup>nd</sup> national and 10<sup>th</sup> international chemistry conference held on 21-23Nov 2011 in Department of Chemistry and Biochemistry UAF
- 6 Wahid, M., K. Rehman, **N. Jahan**, F. Khursheed and A. Akhter. The effect of hydroquinone on soil urease activity in rice crop. Presented in 22<sup>nd</sup> National and 10<sup>th</sup> international chemistry conference held on 21-23 Nov 2011 in Department of Chemistry and Biochemistry University of Agriculture Faisalabad.

### **List of Students Supervised**

#### **i) PhD Students under Supervision**

| <b>Sr. No</b> | <b>Students Name</b>           | <b>Topic of research</b>   |
|---------------|--------------------------------|--|
| 1.            | Nosheen Mujtaba (2002-ag-1952) | Isolation and evaluation of peptides from green resources as ACE inhibitor (Thesis submitted).   |
| 2.            | Fareeha (2001-ag-622)          | Extraction and evaluation of secondary metabolites as green angiotensin converting enzyme (ACE) inhibitor (Completed).                     |
| 3.            | Fatiqa Zafar (2009-ag-1203)    | Formulation and characterization of cardioprotective nanosuspension from indigenous medicinal plants (Completed)                           |
| 4.            | Saba Aslam (2009-ag-1075)      | Nano formulation of polyphenolic enriched herbal extracts for the enhancement of bioactivity (Thesis submitted).                           |
| 5.            | Fareeha Kousar (2006-ag-695)   | Preparation and characterization of nano herbal extracts with enhanced bioavailability and hepatoprotective activity ((Thesis submitted)). |
| 6.            | Humaira (2013-ag-95)           | (Synopsis defended and Research in progress)   |
| 7.            | Lubna Hanif, (2012-ag-989).    | Nano formulation of polyphenolic enriched herbal extracts for the enhancement of bioactivity   |
| 8.            | Arooj Fatima 2018-ag-4031      | Preparation and characterizations of phytochemical based green nanoformulation for ecofriendly pest management                             |
| 9.            | Huma Shamshad 2018-ag-4007     | Fabrication and characterization of green nanobiopesticides as eco-friendly approach for pest control                                      |
| 10.           | Kousar Rasheed 2017-ag-561     | Fabrication, characterization, and biological applications of biomimic FexOx+1-graphene/graphene oxide based nanozymes                     |
| 11.           | Amna saleem 2017-ag-517        | Synthesis, characterization of biomimic MxOx+1-graphene/graphene oxide based nanozymes and evaluation of pharmaceutical applications       |

#### **ii) M.Phil./ M.Sc. Students Supervised**

| <b>Sr.#</b> | <b>Degree</b> | <b>Year</b> | <b>Name of Student</b> | <b>Title of Thesis</b>  |
|-------------|---------------|-------------|------------------------|---|
| 1.          | M.Sc          | 2003        | Ammara Amjad           | Determination of mineral composition (S,Na,K,Ca,Mg) in <i>Cuminum lymelom</i> ( zira), <i>Nigella sativum</i> (Kalwagi) and <i>Zinger officinalis</i> (sonth) |

|     |      |       |                          |   |
|-----|------|-------|--------------------------|---|
| 2.  | M.Sc | 2004  | Sahnaz Akhtar            | Mineral composition of Coriander and cardamom   |
| 3.  | M.Sc | 2004  | Shumaila Kiran           | Mineral profile of <i>Fennel vulgare</i> and <i>Eugenia caryophyllus</i>  |
| 4.  | M.Sc | 2004  | Tahir Nadeem             | Effect of moderator on the tone of reactive dyes having Cynuric chloride as reactive base   |
| 5.  | M.Sc | 2004  | Maria Shar               | Level of trace and mineral metal in <i>cinanamon zeylanicum</i> and <i>Allium capa</i> Collected from different areas from Punjab                         |
| 6.  | M.Sc | 2005  | Iram Rasool              | Effect of Mordant on dying behavior of Accacia Dyes ( <i>Acaccia nilotica</i> )   |
| 7.  | M.Sc | 2005  | Fakhra Jamil             | Phytochemical Screening and determination of mineral in zaira siah and dar chini  |
| 8.  | M.Sc | 2005  | Marium Maqbool           | Phyto-constituents and mineral investigation of medicinal plants <i>Rheum emodi</i> and <i>Rheum palamatum</i>  |
| 9.  | M.Sc | 2005  | Kalsoom Wahid            | Analysis of traditionally used medicinal plants <i>piper cubba</i> and <i>Zizypus vulgare</i> for their phytochemical constitutes and mineral composition |
| 10. | M.Sc | 2005. | Munazza Akram            | Synthesis of reactive red with H-Acid as basic nucleus  |
| 11. | M.Sc | 2005  | Irshad Ahmad             | Synthesis and Dyeing performance of mono azo dye based on cyanuric chloride nucleus   |
| 12. | M.Sc | 2006  | Asma Mehboob             | Antimicrobial activity of <i>Albizia lebback</i>  |
| 13. | M.Sc | 2006  | M. Irfan                 | Phytochemical screening of <i>Rheum palamatum</i> ( Revand Khati) and studies on its hepato protective potential  |
| 14. | M.Sc | 2006  | Saira Bano               | Synthesis of bi functional reactive dyes  |
| 15. | M.Sc | 2006  | Afsheen Anwar            | Antimicrobial activity of <i>Chenopodium album</i>  |
| 16. | M.Sc | 2007  | Syeda Nida Zohra         | Antimicrobial activity of <i>Nigella sativa</i> (Kalwangi)  |
| 17. | M.Sc | 2007  | Raffiqa Fardus           | Antimicrobial activity of various extracts of <i>Elactoria cardamum</i>   |
| 18. | M.Sc | 2007  | Quart –ul-Ain            | Antimicrobial activity of fresh leaves of <i>corrindar sativum</i>  |
| 19. | M.Sc | 2007  | Afzal Ashraf             | Antimicrobial activity of aqueous and ethanolic extracts of <i>Fumaria indica</i>   |
| 20. | M.Sc | 2007  | Shahzad Tariq            | Antimicrobial activity of <i>Banica olecearea</i> (Band Gobi)   |
| 21. | M.Sc | 2008  | Maria Noreen             | Investigation of phytochemicals & antimicrobial activity of <i>Terminalia bellerica</i> .   |
| 22. | M.sc | 2008  | Sadaf Manzoor            | Study of antimicrobial potential of <i>Cinnamomum tamal</i>   |
| 23. | M.Sc | 2008  | Shahzadi Fahmeeda Ashraf | Antimicrobial activity of <i>Emblica officinalis</i>  |
| 24. | M.Sc | 2008  | Umara Rahim              | Antimicrobial activity of <i>Euphorbia hirta</i> ( Asthma Herb)   |
| 25. | M.Sc | 2008  | Aneeqa Farooq            | Antimicrobial activity & phytochemical activity of <i>Ocimum Sanctum</i>  |
| 26. | M.Sc | 2008  | Zill-i-Huma              | Determination of phytochemical and mineral composition of <i>Cyprus rotundus</i>  |

|     |      |      |                 |  |
|-----|------|------|-----------------|--|
| 27. | M.Sc | 2008 | M.Asif Javed    | Determination of phytochemical and mineral composition of oat  |
| 28. | M.Sc | 2008 | Fareeha Kousar  | Phytochemical Screening and cardioprotective potential of <i>Corriandrum sativum</i> against chemically induced cardiac injury |
| 29. | M.Sc | 2008 | Zahid Rasheed   | Evaluation of phytochemical and antimicrobial activity of Dill Seeds   |
| 30. | M.Sc | 2008 | Iffat Batool    | Phytochemical screening and antimicrobial activity of <i>Rheum palmatum</i>  |
| 31. | M.Sc | 2008 | Sumaira Kousar  | Antilipidemic activity of <i>Corriandrum sativum</i>   |
| 32. | M.Sc | 2008 | Tehmina Anjum   | Mineral composition and cardioprotective potential of <i>Cassia fistula</i>  |
| 33. | M.Sc | 2008 | Kanwal Mustafa  | Antimicrobial activity of <i>Protulaca oleraca</i>   |
| 34. | M.Sc | 2009 | Ammara Mariam   | Effect of various extraction conditions on total polyphenol & their antioxidant activity in Banana peels                       |
| 35. | M.Sc | 2009 | Mahwish Tariq   | Determination of antifungal activity of Rose   |
| 36. | M.Sc | 2009 | Kinza Aslam     | Synthesis and application of Coumarin  |
| 37. | M.Sc | 2009 | Hina Naheed     | Evaluation of antioxidant activity of Rose   |
| 38. | M.Sc | 2009 | Anam Sajid      | Free radical scavenging activity of geotherapeutically treated <i>Terminalia bellerica</i>                                     |
| 39. | M.Sc | 2009 | Mohsin Ali      | Phytochemical composition & mineral analysis of <i>Physoeolus aureus</i> (Dall mung)   |
| 40. | M.Sc | 2009 | Bushra Siddique | Determination of phytochemical & mineral composition of Banana ( <i>Musa paradisiaca</i> )                                     |
| 41. | M.Sc | 2009 | Arfa Sajid      | Free radical scavenging activity of gemmotherapeutically treated <i>Glycyrrhiza glabra</i>                                     |
| 42. | M.Sc | 2009 | Sana Munir      | Antimicrobial activity of Banana peels   |
| 43. | M.Sc | 2009 | M.Amir shehzad  | Cardioprotective effect of polyphenolic fraction of <i>Terminalia bellerica</i>  |
| 44. | M.Sc | 2009 | Asifah Aslam    | Effect of various extraction condition on the antibacterial activity of <i>Glycyrrhiza glabra</i>                              |
| 45. | M.Sc | 2009 | Nazia Ahmad Ali | Determination of antifungal activity of <i>glycyrriza glabra</i>   |
| 46. | M.Sc | 2009 | Samina Sharif   | Determination of antifungal activity of banana peel  |
| 47. | M.Sc | 2009 | Maqsood Ahmad   | Antilipidemic activity of <i>Terminalia Bellerica</i>  |
| 48. | M.Sc | 2009 | Hira Mahfooz    | Synthesis and Application of phenolphthalein   |
| 49. | M.Sc | 2009 | Asifa Aslam     | Effect of various extraction condition on the antibacterial activity of <i>glycyrriza glabra</i>                               |
| 50. | M.Sc | 2009 | Muniba Akbar    | Phytochemical activity of <i>Cassia fistula</i>  |
| 51. | M.Sc | 2009 | Maria Noreen    | Investigation of phytochemical and antimicrobial activity of <i>Terminalia Bellerica</i>                                       |
| 52. | M.Sc | 2010 | Fozia Tabassum  | Determination of phytochemicals & mineral profile vit.C potential of carrot.   |
| 53. | M.Sc | 2010 | Shabana Akhtar  | Determination of phytochemicals & mineral profile of chick pea   |

|     |      |      |                               |  |
|-----|------|------|-------------------------------|--|
| 54. | M.Sc | 2010 | Zunaira Rafiq                 | Antioxidant potential of gemmo modified plant of <i>fumaria indica</i>   |
| 55. | M.Sc | 2010 | Sidra Umbreen                 | Antioxidant potential of Gemmotherapeutically treated <i>Foeniculum vulgarc</i>  |
| 56. | M.Sc | 2010 | Nagina Kanwal                 | Antilipidemic effect of gemmo modified integrated herbal product   |
| 57. | M.Sc | 2010 | Ayesha                        | Evaluation of Antioxidant potential of gemmomodified extract of <i>Silybum marianum</i>  |
| 58. | M.Sc | 2011 | Saba Aslam                    | Extraction and antioxidant potential of polyphenols from <i>Osimum Basilicum</i>   |
| 59. | M.Sc | 2011 | Shumaila Anwar                | Comparative evaluation of polyphenols and antioxidant potential in different parts of <i>Bauhinaia variegata</i>   |
| 60. | M.Sc | 2011 | Fatiqa zafar                  | Comparative evaluation of phytochemicals , mineral and vitamins contents of gemmomodified and natively used extracts of two indigenous medicinal plants  |
| 61. | M.Sc | 2011 | Madiha Ghulam Rasool          | Investigation of phytoconstituents and mineral contents of gemmomodified and natively used parts of two indigenous medicinal plants  |
| 62. | M.Sc | 2011 | Nadeem Arshad                 | Comparative phytochemical and mineral composition of gemmomodified and natively used parts of <i>Crinum asiaticum and cardia myxa</i>  |
| 63. | M.Sc | 2011 | Ambreen                       | Determination of total polyphenols and antioxidant potential of <i>Peganum harmala</i>   |
| 64. | M.Sc | 2011 | Sajida Maqbool                | Comparative evaluation of total polyphenol and antioxidant activity in various extract of <i>Lepidium sativum</i>  |
| 65. | M.Sc | 2011 | Asad Bashir Noshai            | Evaluation of caffeine and tannin contents of tea available in the market of Pakistan  |
| 66. | M.Sc | 2012 | Humaira Bashir<br>2010-ag-841 | Effect of emerging gemmomodification method on polyphenol extraction and antioxidant activity of <i>Medicago sativa</i>  |
| 67. | M.Sc | 2012 | Abdul Dayan<br>2010-ag-1621   | Comparative study of polyphenolic contents and antioxidant potential of <i>Citrullus colocynthis</i>   |
| 68. | M.Sc | 2012 | Memona Sehar<br>2010-ag 878   | Comparative evaluation of polyphenolic contents and antioxidant potential of conventional and gemmomodified <i>Barlerica cristate</i>  |
| 69. | M.Sc | 2012 | Bilal Shafiq<br>2010-ag-224   | Evaluation of caffeine and tannin contents of tea available in the market of Pakistan  |
| 70. | M.Sc | 2012 | Tuba Fazal<br>2010-ag-788     | Assessment of microwave assisted extraction method in term of oxidation inhibitors contents and free radical inhibition capacity in extract prepared from bark and pods of <i>Accicia nilotica</i> |
| 71. | M.Sc | 2012 | Rabia Tabbasum<br>2010-ag-867 | Influence of microwave assisted extraction and conventionally used extraction methods on yield and antioxidant potential of polyphenols from <i>Cinnamon tamala</i>                                |

|     |         |      |                                    |  |
|-----|---------|------|------------------------------------|--|
| 72. | M.Sc    | 2012 | Tuba Afzal (2010-ag-788).          | Assessment of Microwave assisted extraction method in terms of oxidation inhibitors contents and free radical inhibitor capacity in the extracts prepared from bark and pods of <i>Acacia nilotica</i> |
| 73. | M.Sc    | 2012 | Muhammad Bilal Shafiq              | (2009-ag-224). Evaluation of Caffeine, Tannin and Amino acid contents of Teas available in the market of Pakistan.   |
| 74. | M.Sc    | 2012 | Abdul Dayyan Ajmal (2010-ag-1621). | Comparative study of polyphenolic contents and antioxidant potential of <i>Citrullus colocynthis</i> extracts prepared with microwave assisted and conventional extraction method.                     |
| 75. | M.Sc    | 2012 | Humaira Bashir (2010-ag-841).      | Effect of emerging modification method on polyphenolic extraction and antioxidant activity of <i>Medicago Sativa</i>   |
| 76. | M.Sc    | 2012 | Rabbia Tabbsum (2010-ag-867).      | Influence of microwave assisted and conventionally use extraction method on yield and antioxidant potential of polyphenol from <i>Cinnanomomum tamala</i>  |
| 77. | M.Sc    | 2012 | Memona Sahar (2010-ag-878).        | Comparative evaluation of polyphenolic contents and antioxidant potential of conventional and gemmo-modified extracts of <i>Barleria cristata</i>  |
| 78. | M.Phill | 2013 | Saba Aslam (2009-ag-1075).         | Cardioprotective Prospective of Natural Products Against Induced Oxidative Stress In Animal Model  |
| 79. | M.Phill | 2013 | Fatiqa Zafar (2009-ag-1203         | ). Efficacy of combination of gemmo modified and herbal extract in treatment of chemically induced cardiotoxicity in rabbits   |
| 80. | M.Sc    | 2013 | Yasmeen Akhtar (2011-ag-1196).     | Studies on green extraction of polyphenols from <i>Chenopodium album</i> and their antioxidant potential   |
| 81. | M.Sc    | 2013 | Uzma Kiran (2011-ag-536).          | Green extraction of polyphenolic compounds from <i>Albizia lebbeck</i> and evaluation of its antiradical prospective   |
| 82. | M.Sc    | 2013 | Tooba fatima (2011-ag-1310).       | Green Processes for extraction of polyphenols from <i>Picrorrhiza kurru</i> and their potential as oxidation inhibitor   |
| 83. | M.Sc    | 2013 | Sabiha Batool (2011-ag-1376).      | Evaluation of cardioprotective activity of polyphenol rich herbal combination  |
| 84. | M.Sc    | 2013 | Nida Liaquat (2011-ag-782).        | Phytochemical profile and Synergetic cardioprotective therapeutic potential of three indigenous medicinal plants   |
| 85. | M.Sc    | 2015 | Zill-i-Huma, (2013-ag-92)..        | Phytochemical, mineral profile and antihypertensive potential of <i>Rouwolfia serpentina</i>   |
| 86. | M.Sc    | 2014 | Husnain Ali, (2012-ag-664).        | Comparative evaluation of fatty acids composition in three different areas of Punjab.  |
| 87. | M.Sc    | 2014 | Muhammad Naveed (2012-ag-1131).    | A comparison of mineral contents and proximate composition of milk thistle ( <i>Silybum marianum</i> ) seed grown in three different areas of Punjab.  |
| 88. | M.Sc    | 2015 | Humaria Iqbal, (2013-ag-95         | Evaluation of half-life of eucalyptus bark as natural dye with reference to textile application.   |



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|------|--------|------|---------------------------------|---|
| 89.  | M.Sc   | 2015 | Raheela Tariq, (2011-ag-825).   | Optimization of extraction and dyeing parameters for the natural dye extracted from <i>Tamarindus indica</i>                |
| 90.  | M.Sc   | 2014 | Sidra Sajid, (2012-ag-991)..    | Optimization of extraction condition for extraction of flavonolignans (silymarin) from milk thistle                         |
| 91.  | M.Phil | 2014 | Rubab Saher (2012-ag-534).      | Influence of particle size reduction on free radical scavenging activity of <i>Coriandrum sativum</i> seed extract          |
| 92.  | M.Phil | 2014 | Tuba Fazal, (2010-ag-788).      | Effect of size reduction on the activity and solubility of poorly water soluble indigenous silymarin.                       |
| 93.  | M.Phil | 2014 | Fareeha Anwar, (2012-ag-535).   | Impact of particle size reduction on antioxidant potential of <i>Elettaria cardamomum</i> fruit extract.                    |
| 94.  | M.Phil | 2015 | Memona Sahar, (2010-ag-878).    | Comparison of Phytochemical Constituents and Antimicrobial Activity of Fresh Rose Petals and Their Residues.                |
| 95.  | M.Phil | 2016 | Nida Rehman, (2013-ag-1508).    | Polyphenolic Contents, Anti-Arrhythmic and Hypolipidemic Potential of <i>Coriandrum sativum</i>                             |
| 96.  | M.Phil | 2016 | Nagina Kanwal, (2008-ag-689).   | Screening Of Secondary Metabolites, Hypolipidemic and Antiarrhythmic Potential of <i>Rauwolfia Serpentina</i> .             |
| 97.  | M.Phil | 2016 | Tahmina Kausar, (2013-ag-1551). | Phytochemical Investigation, Hypolipidemic and Anti-Tachycardial Potential of Cardamom ( <i>Elettaria Cardamomum</i> ).     |
| 98.  | M.Phil | 2016 | Nida Liaqat, (2011-ag-782).     | Green Synthesis, Characterization and Antimicrobial Potential of Silver Nanoparticles                                       |
| 99.  | M.Phil | 2016 | Shamsa Shazadi                  | Phytochemical Screening and Antioxidant Activity of Fresh Rose Petals and Their Residues                                    |
| 100. | M.Phil | 2016 | Gulnar Bano, (2010-ag-1619).    | Green Synthesis of Silver Nanoparticles of <i>Azadirachta</i> and <i>Moringa oleifera</i> And Their Antimicrobial Activity. |
| 101. | M.Phil | 2016 | Tahmina Kausar (2013-ag1551)    | Phytochemical investigation, hypolipidemic, and anti-tachycardial potential of Cardamom ( <i>Elettaria cardamomum</i> ).    |
| 102. | M.Phil | 2016 | Rubab Saher (2012-ag-534).      | Influence of particle size reduction on free radical scavenging activity of <i>Coriandrum sativum</i> seed extract.         |
| 103. | M.Phil | 2016 | Tuba Fazal (2010-ag-788).       | Effect of size reduction on the activity and solubility of poor water soluble indigenous silymarin.                         |
| 104. | M.Phil | 2016 | Fareeha Anwar (2012-ag-535).    | Impact of particle size reduction on antioxidant potential of <i>Elettaria cardamomum</i> fruit extract.                    |
| 105. | M.Phil | 2016 | Arooj Amna (2012-ag-815)        | Optimization of Physicochemical Parameters for Green Synthesis of Zinc Oxide Nanoparticles and Their Antimicrobial Activity |
| 106. | M.Phil | 2016 | Nimra Bari (201-ag-1001).       | Plant mediated Synthesis, Characterization and Antimicrobial Potential of Silver Nanoparticles                              |
| 107. | M.Phil | 2016 | Ayesha Munsab, (2014-ag-795)    | Green synthesis, Optimization and Characterization of Silver Metal Nanoparticles by Using <i>Elettaria</i>                  |

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|------|--------|------|--|--|
|      |        |      |  | <i>cardamomom</i> and <i>Coriandrum sativum</i>  |
| 108. | M.Phil | 2016 | Javaria Razzaq<br>(2014-ag-983)        | Green Synthesis, Characterization And Antimicrobial Potential of ZnO Nanoparticles from Leaves of <i>Moringa oleifera</i> And <i>Ocimum basilicum</i> Plants     |
| 109. | M.Phil | 2016 | Misbah Batool,<br>(2014-ag-2918).      | Green Synthesis of Iron Nanoparticles using <i>Terminallia arjuna</i> And <i>Eucalyptus camaldulensis</i> Plants Extract And Their Antimicrobial Potential       |
| 110. | M.Phil | 2016 | Rubab Asghar<br>(2014-ag-8208).        | Synthesis, Characterization and Pharmaceutical Potential of Biosynthesized Iron Nanoparticles  |
| 111. | M.Phil | 2016 | Aasma Firdous,<br>(2007-ag-515).       | Preparation of Microemulsion by Using Coriander Seed Oil and Evaluation of Antimicrobial and Antioxidant Activities  |
| 112. | M.Phil | 2016 | Sana Fatima<br>(2009-ag-154).          | Formulation of microemulsions of <i>Piper nigrum</i> and Evaluation of their Antimicrobial and Antioxidant Potential   |
| 113. | M.Phil | 2016 | Sajida Maqbool<br>(2009-ag-153).       | Preparation And Physiochemical Properties of Microemulsions of <i>Glycyrrhiza glabra</i> and Evaluation of Their Antioxidant And Antimicrobial Activities        |
| 114. | M.Phil | 2016 | Muhammad Adnan Akram<br>(2014-ag-9331) | Evaluation of Urease Inhibition Potential of <i>Azadirachta indica</i> (Neem Extract) and Calcium Carbide to Increase Nitrogen Use Efficiency of Urea Fertilizer |
| 115. | M.Phil | 2016 | Maroof Ahmad Khan,<br>(2014-ag-9723)   | Evaluation of Physiochemical Properties of Soil And Urease Inhibition Potential of Thiourea and Silymarin  |
| 116. | M.Phil | 2016 | Salma Nasir<br>(2014-ag-1792).         | Formulation and Characterization of Microemulsions of <i>Azadirachta indica</i> (Seed Oil) and Study of Their Antimicrobial and Antioxidant Activities           |
| 117. | M.Phil | 2016 | Arooj Amna,<br>(2012-ag-815)           | Optimization of Physicochemical Parameters for Green Synthesis of Zinc Oxide Nanoparticles and Their Antimicrobial Activity                                      |
| 118. | M.Phil | 2017 | Zahid Abbas<br>(2015-ag-3308)          | Optimization of physiochemical parameters for green synthesis of silver nanoparticles by using microorganism and evaluation of their antimicrobial potential.    |
| 119. | M.Phil | 2017 | Abida Kamal<br>(2015-ag-209)           | Synthesis of grape ( <i>Vitis vinifera</i> ) seeds extract loaded phytosomes and their physical and biological characterization.                                 |
| 120. | M.Phil | 2017 | Salma Nasir<br>(2014-ag-1792)          | Formulation and Characterization of Microemulsions of <i>Azadirachta indica</i> (Seed Oil) and Study of Their Antimicrobial and Antioxidant Activities           |
| 121. | M.Phil | 2017 | Sidra Sajid,<br>(2012-ag-991)          | Synthesis, characterization and biological evaluation of quercetin-copper (II) complex.  |
| 122. | M.Phil | 2017 | Rida Ahmad,<br>(2015-ag-243)           | Synthesis, Characterization and Biological Investigation of Curcumin-Zn (II) Complexes.  |

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|------|---------|------|---|---|
| 123. | M.Phil  | 2017 | Zill-e-Huma,<br>(2013-ag-92)            | Formulation, characterization and biological evaluation of <i>Silybum marimum</i> (milk thistle) phytosomes.  |
| 124. | M.Phil  | 2017 | Kiran Naz,<br>(2015-ag-1146)            | Rapid green synthesis and characterization of silver and Zinc oxide nanoparticles using aqueous extract of <i>Terminalia chebula</i> .  |
| 125. | M.Phil  | 2017 | Noor-ul-Subah Waseem,<br>(2015-ag-1911) | Optimization of physiochemical parameters of green synthesis of silver and Zinc oxide nanoparticles b using <i>Cassia fistula</i> and evaluation of their antimicrobial activity. |
| 126. | M.Phil  | 2017 | Madiha Kousar,<br>(2015-ag-1849)        | Preparation, characterization and pharmacokinetics studies of Rutin-Cu (II) complexes.  |
| 127. | M.Phil. | 2017 | Iqra Akhtar,<br>(2015-ag-135).          | Preparation, characterization and evaluation of curcumin phytosomal complex for the enhanced delivery of phytonutrients.  |
| 128. | M.Phil  | 2017 | Hafiza Nabila Batool,<br>(2013-ag-756). | Green synthesis of silver and Zinc oxide nanoparticles using <i>Allium cepa</i> and analysis of its antimicrobial activity.   |
| 129. | M.Phil  | 2019 | Iqra Akram<br>(2017-ag-3180)            | To Enhance the Nitrogen use Efficiency of plants using Two Nitrification Inhibitors in Combination  |
| 130. | M.Phil  | 2019 | Anam Azmat<br>(2017-ag-331)             | Evaluation of Synergic Effect of Various Combinations of Nitrification Inhibitors in soil of different Districts  |
| 131. | M.Phil  | 2019 | Rumsha Tanveer<br>(2017-ag-3253)        | Synergic Effect of Nitrification Inhibitors (1,2,4-Triaole;Thiourea and boric acid) on inhibition of Nitrate Leaching   |
| 132. | M.Phil  | 2019 | Kiran Dildar<br>(2016-ag-2578)          | Isolation and biological activity of bioactive compounds from <i>caragana conferta</i>  |
| 133. | M.Phil  | 2019 | Ayesha Irfan<br>(2017-ag-5182)          | Application of Inhibitors for the Enhancement In Nitrogen Use Efficiency Of Nitrogen Fertilizers  |
| 134. | M.Phil  | 2019 | Arifa Murtaza<br>(2015-ag-1035)         | Synthesis and Characterization of Piperine Nano-suspension and Evaluation of its In-Vivo Antihypertensive Potential   |

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| 135. | M.Phil | 2019 | Sidra Waheed<br>(2017-ag-3209)          | Determination of the Nitrification Inhibition Potential of the Hydroquinone and Acetohydroxamic Acid in different Types of soil                          |
| 136. | M.Phil | 2019 | Siddiqa Nasim<br>(2015-ag-480)          | Optimization of Formulation Parameters of <i>Hibiscus rosa-sinesis</i> Nanosuspension by using RSM and Evaluation of its Biological Activities           |
| 137. | M.Phil | 2019 | Jawaad Habib<br>(2015-ag-213)           | Antioxidant, Antimicrobial and Angiotensin Converting Enzyme(ACE) Inhibitory Activity of <i>Hibiscus rosa sinesis</i> Linn phytosomes                    |
| 138. | M.Phil | 2019 | Sana Mubarak<br>(2017-ag-3183)          | Mitigation of the NO <sub>3</sub> Leaching by using Combination of Boric Acid and Hydroquinone to increase Nitrogen Use Efficiency of Plants             |
| 139. | M.Phil | 2019 | Ayesha Tanveer<br>(2017-ag-3274)        | Formulation and Characterization of Nano-suspension From Flavonoid Rich Fraction of <i>Crataegus monogyna</i> and Evaluation of Its Hypotensive Activity |
| 140. | M.Phil | 2019 | Muhammad Abdul Hafeez<br>(2017-ag-3140) | Synthesis, Chracterization and ACE Inhibition Potential of <i>Crataegus monogyna</i> phytosomes  |
| 141. | M.Phil | 2019 | Habib-u-Nisa<br>(2016-ag-1881)          | Synthesis and Characterization of <i>Centella asiatica</i> Nano-suspension and Evaluation of its Therapeutic Potential                                   |
| 142. | M.Phil | 2019 | Pariya Naz<br>(2017-ag-3315)            | Evaluation the Synergic Effect of Combination of Inhibitors on Nitrate Leaching  |
| 143. | M.Phil | 2019 | Hina Ayub<br>(2017-ag-3227)             | Formulation and Characterization of <i>Rauvolfia serpentina</i> Nanosuspension and Evaluation of its Antihypertensive Potential                          |
| 144. | M.Phil | 2020 | Aimen Noor bajwa<br>(2018-ag-3910)      | Formulation and characterisation of nanosuspension from <i>Citrus sinensis</i> peel and evaluation of its pesticidal potential                           |
| 145. | M.Phil | 2020 | Aqsa Basharat<br>(2018-ag-3926)         | Green synthesis of silver nanoparticles using <i>Eucalyptus camaldulensis</i> leaves extract and their pesticidal potential                              |

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| 146. | M.Phil | 2020 | Sara Saman Irshad<br>(2015-ag-1815) | Synthesis, characterization and biological investigation of <i>Cassia fistula</i> (amultas) phytosomes  |
| 147. | M.Phil | 2020 | Farasha Nnadeem<br>(2016-ag-963)    | Biogenic synthesis of silver nanoparticles using <i>Zingiber officinale</i> extract and their pesticidal potential  |
| 148. | M.Phil | 2020 | M. Mumtaz<br>(2016-ag-2434)         | Synthesis, characterization and angiotensin converting enzyme( ace) inhibition potential of <i>Terminalia arjuna</i> phytosomes                               |
| 149. | M.Phil | 2020 | Naila Hanif<br>(2018-ag-4001)       | Synthesis of plant mediated nano zinc oxide with <i>Allium sativum</i> and evaluation of its biopesticidal potential  |
| 150. | M.Phil | 2020 | Kainat Shoukat<br>(2018-ag-3919)    | Formulation and characterization of nanosuspension of <i>Silybum marianum</i> (milk thistle ) and evaluation of its pesticidal effect                         |
| 151. | M.Phil | 2020 | Adeela Jabeen<br>( 2016-ag-3544)    | Plant mediated synthesis of silver nanoparticles using bulb extract of <i>Allium sativum</i> and evaluation of their biopesticidal activity                   |
| 152. | M.Phil | 2020 | Qurat-ul-ain<br>( 2018-ag-4723)     | Formulation and characterization of <i>Rosemarinus officinalis</i> phytosomes and evaluation of its ace inhibition potential                                  |
| 153. | M.Phil | 2020 | Rida Nawaz<br>(2018-ag-3910)        | formulation of <i>Withania somnifera</i> nanosuspension and evaluation of its angiotension converting enzyme (ace) inhibition potential                       |
| 154. | M.Phil | 2020 | Samra Younas<br>(2016-ag-3118)      | Formulation of <i>Phaseolus vulgaris</i> nano-suspension and evaluation of its ace antihypertensive potential   |
| 155. | M.Phil | 2020 | Farah Shafiq<br>(2018-ag-3938)      | Formulation and characterization of green nano zinc oxide by using <i>Zingiber officinale</i> and evaluation of their pesticidal potential                    |
| 156. | M.Phil | 2020 | Sania Sadiqa<br>(2015-ag-3244)      | Nanosuspension formulation and evaluation of antimicrobial and pesticidal activities of essential oil extracted from the leaves of <i>Eucalyptus globulus</i> |
| 157. | M.Phil | 2020 | Fatima Waseem<br>( 2018-ag-4004)    | Formulation and characterization of <i>Zingiber officinale</i> nanosuspension and evaluation of its pesticidal potential                                      |

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| 158. | M.Phil | 2020 | Faiza<br>(2016-ag-4739)       | Formulation and characterization of nanosuspension of <i>Syzygium aromaticum</i> essential oil and evaluation of its pesticidal activity                                      |
| 159. | M.Phil | 2020 | Nazish Riaz<br>(2018-ag-3933) | Development of novel drug delivery system for traditional herbal plant <i>Withania somnifera</i> and evaluation of its biological activities                                  |
| 160. | M.Phil | 2020 | Nimra Javed<br>(2018-ag-3849) | <i>Azadirachta indica</i> mediated green synthesis of silver nanoparticles and characterization and evaluation of bio pesticidal potential                                    |
| 161. | M.Phil | 2021 | Farah<br>2019-ag-2255         | Green synthesis of nano silver using <i>Cymbopogon citratus</i> and evaluation of its biopesticidal potential   |
| 162. | M.Phil | 2021 | Moniba<br>2019-ag-2236        | Plant-mediated Synthesis of Zinc oxide nanoparticles from <i>Chrysanthemum indicum</i> extract and estimation of their antimicrobial and pesticidal potential                 |
| 163. | M.Phil | 2021 | Saeeda Aslam<br>2016-ag-3594  | Formulation and characterization of biopesticide based green synthesized silver nanoparticles and evaluation of their pesticidal potential                                    |
| 164. | M.Phil | 2021 | Fatima Zafar<br>2017-ag-5364  | Preparation And Characterization Of Green Synthesized Zinc Oxide Based Nanobiopesticides  |
| 165. | M.Phil | 2021 | Kousar Rasheed<br>2017-ag-561 | Green synthesis of zinc oxide nanoparticles using seed extract of <i>Silybum marianum</i> (Milk thistle) and their biological evolution                                       |
| 166. | M.Phil | 2021 | Laraib Fatma<br>2019-ag-2283  | <i>Ocimum basilicum</i> Mediated Green Synthesis of Zinc Oxide Nanoparticles and Estimation of their Biopesticidal Potential  |
| 167. | M.Phil | 2021 | Hafsa<br>2019-ag-2264         | Formulation and characterization of green synthesized silver nanoparticles by <i>Tagetes erecta</i> (marigold) and evaluation of their antimicrobial and pesticidal potential |
| 168. | M.Phil | 2021 | Nida Hussain<br>2017-ag-647   | Formulation and characterization of nanosuspension of <i>Mentha piperita</i> (mint) and evaluation of its pesticidal effects  |

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| 169. | M.Phil | 2021 | Ayesha Aslam<br>2017-ag-5293 | Formulation and characterization of nanosuspension of <i>Curcuma longa</i> and evaluation of pesticidal activity               |
| 170. | M.Phil | 2021 | Serish Shoukat               | Characterization and Formulation of Nanosuspensions of <i>Ocimum tenuiflorum</i> and Evaluation of Pesticidal Activity         |
| 171. | M.Phil | 2021 | Sana Khalid<br>2019-ag-2233  | Formulation of <i>Trigonella foenum-graecum</i> (fenugreek) base nano biopesticides and evaluation of pesticidal potential     |
| 172. | M.Phil | 2021 | Amara Dilawar 2019-ag-2205   | Formulation and Characterization of Nanosuspension of <i>Nicotiana tabacum</i> and Evaluation of its Biopesticidal Potential   |
| 173. | M.Phil | 2021 | Amna Saleem<br>2017-ag-517   | Formulation and characterization of <i>Chrysanthemum indicum</i> nanosuspension and evaluation of its biopesticide potential   |
| 174. | M.Phil | 2022 | Haroon Ahmad/2020-ag-1163    | Nanotization of <i>Melia azedarach</i> based biopesticide; A sustainable solution for pest control                             |
| 175. | M.Phil | 2022 | Rabia bibi/2017-ag-4177      | Fabrication and characterization of <i>Citrus limon</i> peels based nano biopesticides for eco-friendly pest management        |
| 176. | M.Phil | 2022 | Samiah/2020-ag-1166          | Optimization of synthesis of nano biopesticides from <i>Punica granatum</i> and evaluation of its pesticidal potential         |
| 177. | M.Phil | 2022 | Aqsa Hameed/2018-ag-635      | Development and characterization of <i>Lawsonia inermis</i> based nano biopesticides with enhanced pesticidal potential        |
| 178. | M.Phil | 2022 | Zainab Bibi/2020-ag-1138     | Nano formulation of <i>Capsicum frutescens</i> extract with enhanced antimicrobial and pesticidal potential                    |
| 179. | M.Phil | 2022 | Muhammad Umer/2018-ag-824    | Synthesis and characterization of <i>Lantana camara</i> mediated nano biopesticides as an emerging technology for pest control |

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| 180. | M.Phil | 2022 | Laiba/2020-ag-1206                          | Green synthesis of zinc oxide nanoparticles using aqueous extract of <i>Capsicum frutescens</i> and evaluation of its antimicrobial and pesticidal potential      |
| 181. | M.Phil | 2022 | Faiza Jameel/2020-ag-1226                   | Green synthesis of iron and silver oxide nanoparticles using <i>Phyllanthus emblica</i> extract and investigation of their antimicrobial and pesticidal potential |
| 182. | M.Phil | 2022 | Saman Aslam/2018-ag-759                     | Development of <i>Ficus carica</i> phytosomes and assessment of their antioxidant and anti microbial activity   |
| 183. | M.Phil | 2022 | Syyeda Maimoona Ghayyoor Naqvi/2020-ag-1207 | Fabrication of <i>Aegle marmelos</i> extract loaded phytosomes and evaluation of their antioxidant and antimicrobial activity                                     |
| 184. | M.Phil | 2022 | Maria Gulzar/2020-ag-1175                   | Synthesis of phytophospholipid complexes of <i>Bauhinia variegata</i> leaves extract and evaluation of their antimicrobial and antioxidant activity               |
| 185. | M.Phil | 2022 | Riffat Fatima/2020-ag-1211                  | <i>Lantana camara</i> mediated synthesis of zinc oxide nanoparticles and assessment of its pesticidal and antibacterial activity                                  |