



### Short Biography

Dr. Usman is currently working at Near East University, TRNC. Dr. Usman does research in Chromatography, Artificial Intelligence, Machine Learning, Standardization of phytochemicals, Herbal products, Water Security, Membrane and Destination, Wastewater, Water Quality, Water Resources, Hydro-Environmental Modeling, and Simulation, Chemometrics, Theoretical chemistry, Separation science, Pollution Control, Climate Change and Sustainable Development. Dr. Usman is currently an Assistant Professor at Near East University, at Faculty of pharmacy department of Analytical chemistry, as well a prestigious researcher at the Operational Research Center in Healthcare. The work of Dr. Usman featured in various peer-reviewed journals, has rightfully established him as a prominent figure in the field. His contributions are considered a legacy, inspiring the upcoming generation of Chemometrics and researchers, while he actively contributes to the continuous progress of theoretical chemistry and its practical applications.

### ACADEMIC CURRICULUM VITAE

**1. Name -Surname: Abdullahi Garba Usman**

**2. Title: Assistant Professor**

**3. Educational Background:**

Degree	Department/Program	University	Year
Bachelor's	Department of Pure and Applied Chemistry	Bayero University Kano , Kano, Nigeria.	2016
Master's	Department of Pharmaceutical Chemistry	Near East University, TRNC.	2018
PhD	Department of Analytical Chemistry	Near East University, TRNC.	2022

#### 4. Master's / PhD Thesis

**4.1. Master's Thesis Title and Thesis Advisor(s):** Study on synthesis and characterization of some 2-benzoxazolinone derivatives. **Advisor:** Assistant Professor Dr. Yusuf Mulazim and Assistant Professor Dr. Banu Kesanli

**4.2. PhD Thesis / Medical Specialty Thesis Title and Advisor(s):** Quantitative determination of Thymoquinone using HPLC technique and determination of its anti-cancer activity in human colon cancer cell line from *Nigella sativa* L. Seeds of different geographical regions: a chemometrics based approach. **Advisor:** Assist. Prof. Dr. Selin IŞIK

#### 5. Academic Titles:

Date of Assistant Professorship: December 23, 2022

Date of Associate Professorship:

Date of Professorship:

#### 6. Supervised Master's and PhD Theses:

**6.1. Master's Theses:** determination of boron from different nuts using Smartphone digital image calorimetry-deep eutectic Solvent liquid-liquid microextraction: a chemometrics Based approach. **Student:** Bashir Ismail Ahmad

**6.2. PhD Theses**

#### 7. Publications

**7.1. Articles Published in International Peer-Reviewed Journals (SCI, SSCI, AHCI, ESCI, Scopus)**

1. **Usman, A. G.**, Tanimu, A., Abba, S. I., Isik, S., Aitani, A., & Alasiri, H. (2023). Feasibility of the Optimal Design of AI-Based Models Integrated with Ensemble Machine Learning Paradigms for Modeling the Yields of Light Olefins in Crude-to-Chemical Conversions. *ACS omega*, 8(43), 40517-40531.
2. Abdulazeez, I., Abba, S. I., Usman, J., **Usman, A. G.**, & Aljundi, I. H. (2023). Recovery of Brine Resources Through Crown-Passivated Graphene, Silicene, and Boron Nitride Nanosheets Based on Machine-Learning Structural Predictions. *ACS Applied Nano Materials*.
3. Umar, H., Aliyu, M. R., **Usman, A. G.**, Ghali, U. M., Abba, S. I., & Ozsahin, D. U. (2023). Prediction of cell migration potential on human breast cancer cells treated with *Albizia lebbek* ethanolic extract using extreme machine learning. *Scientific Reports*, 13(1), 22242.

4. Yassin, M. A., **Usman, A. G.**, Abba, S. I., Ozsahin, D. U., & Aljundi, I. H. (2023). Intelligent learning algorithms integrated with feature engineering for sustainable groundwater salinization modelling: eastern province of Saudi Arabia. *Results in Engineering*, 20, 101434.
5. Usman, J., Abba, S. I., Ishola, N. B., El-Badawy, T., Adamu, H., Gbadamosi, **Usman, A. G.**, & Aljundi, I. H. (2023). Genetic neuro-computing model for insights on membrane performance in oily wastewater treatment: An integrated experimental approach. *Chemical Engineering Research and Design*, 199, 33-48.
6. Jibril, M. M., Malami, S. I., Jibrin, H. B., Muhammad, U. J., Duhu, M. A., **Usman, A. G.**, ... & Abba, S. I. (2023). New random intelligent chemometric techniques for sustainable geopolymer concrete: low-energy and carbon-footprint initiatives. *Asian Journal of Civil Engineering*, 1-19.
7. Abba, S. I., Usman, J., Abdulazeez, I., Lawal, D. U., Baig, N., **Usman, A. G.**, & Aljundi, I. H. (2023). Integrated Modeling of Hybrid Nanofiltration/Reverse Osmosis Desalination Plant Using Deep Learning-Based Crow Search Optimization Algorithm. *Water*, 15(19), 3515.
8. Gbadamosi, A., Adamu, H., Usman, J., **Usman, A. G.**, Jibril, M. M., Salami, B. A., ... & Abba, S. I. (2023). New-generation machine learning models as prediction tools for modeling interfacial tension of hydrogen-brine system. *International Journal of Hydrogen Energy*.
9. Ishaq, A. I., Suleiman, A. A., Daud, H., Singh, N. S. S., Othman, M., Sokkalingam, R., **Usman, A. G.**, & Abba, S. I. (2023). Log-Kumaraswamy distribution: its features and applications. *Frontiers in Applied Mathematics and Statistics*, 9, 1258961.
10. Selin, I., **Garba, U. A.**, & Sani, A. (2023). A chemometrics-based approach for the determination of thymoquinone from *Nigella sativa* L.(Black Cumin) seeds of different geographical regions using the HPLC technique. *Istanbul Journal of Pharmacy*, 53(3), 320-328.
11. Alotaibi, B. S., Yahuza, M. S., Ozden, O., Abuhussain, M. A., Dodo, Y. A., **Usman, A. G.**, ... & Abba, S. I. (2023). Sustainable Green Building Awareness: A Case Study of Kano Integrated with a Representative Comparison of Saudi Arabian Green Construction. *Buildings*, 13(9), 2387.
12. Jibril, M. M., Zayyan, M. A., Malami, S. I., **Usman, A. G.**, Salami, B. A., Rotimi, A., & Abba, S. I. (2023). Implementation of nonlinear computing models and classical regression for predicting compressive strength of high-performance concrete. *Applications in Engineering Science*, 15, 100133.
13. Usman, J., Salami, B. A., Gbadamosi, A., Adamu, H., **Usman, A. G.**, Benaafi, M., ... & Aljundi, I. H. (2023). Intelligent optimization for modelling superhydrophobic ceramic

- membrane oil flux and oil-water separation efficiency: Evidence from wastewater treatment and experimental laboratory. *Chemosphere*, 331, 138726.
14. Abba, S. I., Egbueri, J. C., Benaafi, M., Usman, J., **Usman, A. G.**, & Aljundi, I. H. (2023). Fluoride and nitrate enrichment in coastal aquifers of the Eastern Province, Saudi Arabia: The influencing factors, toxicity, and human health risks. *Chemosphere*, 139083.
  15. Umar, H., Rizaner, N., **Usman, A. G.**, Aliyu, M. R., Adun, H., Ghali, U. M., ... & Abba, S. I. (2023). Prediction of Cell Migration in MDA-MB 231 and MCF-7 Human Breast Cancer Cells Treated with Albizia Lebbeck Methanolic Extract Using Multilinear Regression and Artificial Intelligence-Based Models. *Pharmaceuticals*, 16(6), 858.
  16. Abba, S. I., Benaafi, M., **Usman, A. G.**, & Aljundi, I. H. (2023). Sandstone groundwater salinization modelling using physicochemical variables in Southern Saudi Arabia: Application of novel data intelligent algorithms. *Ain Shams Engineering Journal*, 14(3), 101894.
  17. Uzun Ozsahin, D., Precious Onakpojeruo, E., Bartholomew Duwa, B., **Usman, A. G.**, Isah Abba, S., & Uzun, B. (2023). COVID-19 Prediction Using Black-Box Based Pearson Correlation Approach. *Diagnostics*, 13(7), 1264.
  18. **Usman, A. G.**, Usanase, N., Abba, S. I., Ozsahin, I., Uzun, B., Yassin, M. A., ... & Ozsahin, D. U. (2023). Environmental modelling of CO concentration using AI-based approach supported with filters feature extraction: a direct and inverse chemometrics-based simulation. *Sustainable Chemistry for the Environment*, 100011.
  19. Umar, H., **Usman, A. G.**, Rabiou, M., Ghali, U. M., Abba, S. I., & Ozsahin, D. U. (2023). The anti-proliferative potential of Albizia lebbeck ethanolic extract on human breast cancer cells and performance of extreme machine models in modelling of cell migration.
  20. Bala, K., Etikan, I., **Usman, A. G.**, & Abba, S. I. (2023). Artificial-Intelligence-Based Models Coupled with Correspondence Analysis Visualization on ART—Cases from Gombe State, Nigeria: A Comparative Study. *Life*, 13(3), 715.
  21. Selin, I. Ş. I. K., & **USMAN, A.** (2023). Applications of New Generation Solvents for Extraction of Herbal Products Prior to Atomic and Molecular Analysis. *Journal of the Turkish Chemical Society Section A: Chemistry*, 10(1), 117-128.
  22. Abba, S. I., Benaafi, M., **Usman, A. G.**, Ozsahin, D. U., Tawabini, B., & Aljundi, I. H. (2023). Mapping of groundwater salinization and modelling using meta-heuristic algorithms for the coastal aquifer of eastern Saudi Arabia. *Science of The Total Environment*, 858, 159697.
  23. Jibril, M. M., Malami, S. I., Muhammad, U. J., Bashir, A., **Usman, A. G.**, Salami, B. A., ... & Abba, S. I. (2023). High strength concrete compressive strength prediction using an evolutionary computational intelligence algorithm. *Asian Journal of Civil Engineering*, 1-15.

24. Madaki, Z., Abacioglu, N., **Usman, A. G.**, Taner, N., Sehirli, A., & Abba, S. I. (2023). Novel Hybridized Computational Paradigms Integrated with Five Stand-Alone Algorithms for Clinical Prediction of HCV Status among Patients: A Data-Driven Technique. *Life*, 13(1), 79.
25. Sadiq, I. Z., Katsayal, B. S., Abdulazeez, R., Adedoyin, O. S., Omengwu, Y. F., & **Usman, A. G.** (2023). Peptides from Casein Extend the Survival Rate and Protect *Drosophila melanogaster* from Oxidative Stress Via Interacting with the Keap1-Nrf2 Pathway. *Jordan Journal of Biological Sciences*, 16(2).
26. Benaafi M, Tawabini B, Abba SI, Humphrey JD, Al-Areeq AM, Alhulaibi S, A., **Usman, A. G.**, Aljundi IH. Integrated Hydrogeological, Hydrochemical, and Isotopic Assessment of Seawater Intrusion into Coastal Aquifers in Al-Qatif Area, Eastern Saudi Arabia. *Molecules*. 2022 Oct 12;27(20):6841.
27. Abba, S. I., Benaafi, M., **Usman, A. G.**, & Aljundi, I. H. (2022). Inverse groundwater salinization modelling in a sandstone's aquifer using stand-alone models with an improved non-linear ensemble machine learning technique. *Journal of King Saud University-Computer and Information Sciences*.
28. Abba, S. I., Mohammed Benaafi, **Usman, A. G.**, and Isam H. Aljundi. "Sandstone groundwater salinization modelling using physicochemical variables in Southern Saudi Arabia: Application of novel data intelligent algorithms." *Ain Shams Engineering Journal* (2022): 101894.
29. Yassin, Mohamed A., Bassam Tawabini, Abdulaziz Al-Shaibani, John Adedapo Adetoro, Mohammed Benaafi, Ahmed M. Al-Areeq, **Usman, A. G.**, and S. I. Abba. "Geochemical and Spatial Distribution of Topsoil HMs Coupled with Modelling of Cr Using Chemometrics Intelligent Techniques: Case Study from Dammam Area, Saudi Arabia." *Molecules* 27, no. 13 (2022): 4220.
30. Abdelgader Alamrouni, Fidan Aslanova, Sagiru Mati, Hamza Sabo, Maccido, **Usman, A. G.**, S I Abba (2022). Multi-Regional Modelling of Cumulative COVID-19 Cases Integrated with Environmental Forest Knowledge estimation: A Deep Learning Ensemble Approach. *International Journal of Environmental Research and Public Health*
31. Mohammed Benaafi, Mohamed A. Yassin, **Usman, A. G.**, S.I. Abba (2022). Neurocomputing modelling of hydrochemical and physical properties of groundwater coupled with spatial clustering, GIS, and statistical techniques. *Sustainability- (SCI-IF-3.251)*.
32. Uzun Ozsahin, D., Balcioglu, O., **Usman, A. G.**, Ikechukwu Emegano, D., Uzun, B., Abba, S. I., ... & Engin, C. (2022). Clinical Modelling of RVHF Using Pre-

- Operative Variables: A Direct and Inverse Feature Extraction Technique. *Diagnostics*, 12(12), 3061. (SCI-IF- 4.129).
33. Metekia, W. A., **Usman, A. G.**, Ulusoy, B. H., Abba, S. I., & Bali, K. C. (2021). Artificial intelligence-based approaches for modelling the effects of spirulina growth mediums on total phenolic compounds. *Saudi Journal of Biological Sciences*.
  34. **Usman, A. G.**, Işık, S., & Abba, S. I. Hybrid data-intelligence algorithms for the simulation of Thymoquinone in HPLC method development. *Journal of the Iranian Chemical Society*, 1-13. Jan. 2021.
  35. Abba, S. I., R. A. Abdulkadir, Saad Sh Sammen, **A. G. Usman**, Sarita Gajbhiye Meshram, Anurag Malik, and Shamsuddin Shahid. "Comparative implementation between neuro-emotional genetic algorithm and novel ensemble computing techniques for modelling dissolved oxygen concentration. *Hydrological Sciences Journal*. (2021).
  36. Abba, S. I., Pham, Q. B., **Usman, A. G.**, Linh, N. T. T., Aliyu, D. S., Nguyen, Q., and Bach, Q. V. (2020). "Emerging evolutionary algorithm integrated with kernel principal component analysis for modeling the performance of a water treatment plant". *Journal of Water Process Engineering*, 33, 101081.
  37. Abba, S. I., **Usman, A. G.**, & Selin, I. Ş. I. K. (2020). "Simulation for response surface in the HPLC optimization method development using artificial intelligence models: A data-driven approach. *Chemometrics and Intelligent Laboratory Systems*", 104007..
  38. **Usman, A.G.**, Işık, S. & Abba, S.I. A Novel Multi-Model Data-Driven Ensemble Technique for the Prediction of Retention Factor in HPLC Method Development. *Chromatographia* (2020). <https://doi.org/10.1007/s10337-020-03912-0>..
  39. **Usman AG**, IŞIK S, Abba SI, Mericli F. Artificial intelligence-based models for the qualitative and quantitative prediction of a phytochemical compound using HPLC method. *Turkish Journal of Chemistry*. 2020 Oct 26; 44(5):1339-51.
  40. **Usman, A.G.**, Işık, S., Abba, S.I. and Meriçli, F., Chemometrics-based models hyphenated with ensemble machine learning for retention time simulation of Isoquercitrin in Coriander sativum L. using high performance liquid chromatography. *Journal of Separation Science*. 2020.

41. Pham, Q. B., Abba, S. I., **Usman, A. G.**, Linh, N. T. T., Gupta, V., Malik, A., ... and Tri, D. Q. (2019). "Potential of Hybrid Data-Intelligence Algorithms for Multi-Station Modelling of Rainfall". *Water Resources Management*, 33(15), 5067-5087
42. Haruna, S. I., Salim Idris Malami, Musa Adamu, **A. G. Usman**, A. I. B. Farouk, Shaban Ismael Albrka Ali, and S. I. Abba. "Compressive Strength of Self-Compacting Concrete Modified with Rice Husk Ash and Calcium Carbide Waste Modeling: A Feasibility of Emerging Emotional Intelligent Model (EANN) Versus Traditional FFNN." *Arabian Journal for Science and Engineering* (2021): 1-16.
43. **Usman, A. G.**, IŞIK, S., & Abba, S. I. Qualitative prediction of Thymoquinone in the high-performance liquid chromatography optimization method development using artificial intelligence models coupled with ensemble machine learning. *Separation Science Plus*.
44. Jibril, M. M., Malami, S. I., Jibrin, H. B., Muhammad, U. J., Duhu, M. A., **Usman, A. G.**, ... & Abba, S. I. (2023). New random intelligent chemometric techniques for sustainable geopolymers concrete: low-energy and carbon-footprint initiatives. *Asian Journal of Civil Engineering*, 1-19.
45. **Abdullahi Garba Usman**, Umar Muhammad Ghali, Mohamed Alhosen Ali Degm, Salisu M. Muhammad, Evren Hincal, Abdulaziz Umar Kurya, Qendresa Hoti, S.I. Abba. Simulation of liver functions enzymes as determinants of thyroidism: A novel Ensemble machine learning Approach. (2022). Just accepted. *Bulletin of the National Research Centre*.
46. Salihu Ismail, R.A. Abdulkadir, **Abdullah Garba Usman**, S.I. Abba. "Development of chemometrics-based neuro-computing paradigm for simulation of manganese extraction using solid-phase tea waste (sorbent)". *Modelling Earth Systems and Environment* (2022): 1-15.
47. Khalid G.M, **Usman A.G.** Application of data-intelligence algorithms for modelling the compaction performance of new pharmaceutical excipients. *Future Journal of Pharmaceutical Sciences*. 2021 Dec; 7(1):1-1
48. Ahmad, M. H., **Usman A. G.**, & Abba, S. I. (2021). Comparative performance of extreme learning machine and Hammerstein–Weiner models for modelling the intestinal hyper-motility and secretory inhibitory effects of methanolic leaf extract of *Combretum hypopilinum* Diels (Combretaceae). *In Silico Pharmacology*, 9(1), 1-11

49. Malami, Salim Idris, A. A. Musa, S. I. Haruna, U. U. Aliyu, **A. G. Usman**, M. I. Abdurrahman, Abba Bashir, and S. I. Abba. "Implementation of soft-computing models for prediction of flexural strength of pervious concrete hybridized with rice husk ash and calcium carbide waste." *Modeling Earth Systems and Environment* (2021): 1-15.
50. Ghali, U. M., **Usman, A. G.**, Chellube, Z. M., Degm, M. A. A., Hoti, K., Umar, H., & Abba, S. I. (2020). Advanced chromatographic technique for performance simulation of anti-Alzheimer agent: an ensemble machine learning approach. *SN Applied Sciences*, 2(11), 1-12.
51. Kurya, A. U., Aliyu, U., Tudu, A. I., **Usman, A. G.**, Yusuf, M., Gupta, S. & Hussain, I. (2022). Graft-Versus-Host Disease: Therapeutic Prospects of improving the Long-term Post-Transplant Outcomes. *Transplantation Reports*, 100107.
52. Umar, H., Idris, M., Kavaz, D., Ghali, U. M., **Usman, A. G.**, & Rizaner, N. (2022). Nanoencapsulation of nutraceuticals and dietary supplements for effective delivery. In *Applications of Nanotechnology in Drug Discovery and Delivery* (pp. 27-44). Elsevier.
53. Ghali, U. M., **Usman, A. G.**, Degm, M. A. A., Alsharksi, A. N., Naibi, A. M., & Abba, S. I. Applications of Artificial Intelligence-Based Models and Multi-Linear Regression for the Prediction of Thyroid Stimulating Hormone Level in the Human Body. *vol, 29*, 3690-3699.
54. **Abdullahi Garba Usman**; Mubarak Hussaini Ahmad; Rabi'u Nuhu Danraka; Sani Isah Abba "The effect of ethanolic leaves extract of *Hymenodictyon floribundum* on inflammatory biomarkers: A data-driven approach" (2021). *Bulletin of the National Research Centre*.
55. **Usman Abdullahi Garba**, Umar Muhammad Ghali, and Selin Işık. "Applications of miniaturized and portable near infrared (nir), fourier transform infrared (ft-ir) and raman spectrometers for the inspection and control of pharmaceutical products." (2020)..
56. Ghali, Umar Muhammad, Mohamed Alhosen Ali Degm, Ahmed Nouri Alsharksi, Qendresa Hoti, and **Abdullahi Garba Usman**. "Development of Computational Intelligence Algorithms for Modelling the Performance of Humanin And Its Derivatives in HPLC Optimization Method Development.

## **7.2. Articles Published in Other International Peer-Reviewed Journals**



1. **Usman, Abdullahi.**, Abdullahi, Musa., & Shamsu S. (2023). Phytochemical Screening and Evaluation of Anti-typhoid Activity of *Acalypha hispida* Leaf Extracts Against Clinically Derived Isolates of *Salmonella typhi*, *Staphylococcus*. *A Journal of Research and Development* 8 (No. 1 & 2), pp 20-33
2. Huzaifa Umar, **Abdullahi Garba Usman**, Maryam Rabi'u Aliyu, Dilber Uzun Ozsahin (2023). Phytofabrication of Zinc Oxide Nanoparticles using *Cyprus Mentha Piperita* and Evaluation of its Anticancer and Antimicrobial Activity. *Eur. Chem. Bull.* 12 (6), 7632 – 7638.
3. Ammani, H. M., and **A. G. Usman**. "SYNTHESIS AND CHARACTERIZATION OF 2-BENZOXAZOLONE AND ITS DERIVATIVES." *Asian Journal of Natural & Applied Sciences* Vol 7 (2018): 2.
4. **Usman, Abdullahi Garba**. "STUDY ON SYNTHESIS AND CHARACTERIZATION OF SOME 2-BENZOXAZOLINONE DERIVATIVES."
5. Abdullahi, H. U., **Usman, A. G.**, & Abba, S. I. (2020). Modelling the Absorbance of a Bioactive Compound in HPLC Method using Artificial Neural Network and Multilinear Regression Methods. *DUJOPAS*
6. Abba, S. I., **A. G. Usman**, Y. A. Danmaraya, A. G. Usman, and H. U. Abdullahi. "Modeling of Water Treatment Plant Performance using Artificial Neural Network: Case Study Tamburawa Kano-Nigeria. *DUJOPAS*
7. Alsharksi, Ahmed Nouri, Y. A. Danmaraya, Hadiza Usman Abdullahi, Umar Muhammad Ghali, and **A. G. Usman**. "Potential of Hybrid Adaptive Neuro Fuzzy Model in Simulating *Clostridium Difficile* Infection Status."
8. **Usman, A. G.**, and A. M. Osama. "A Critical Review on the Applications of Metal Materials for Medical Implants.
9. **Usman, Abdullahi Garba**, H. M. Ammani, and Shamsu S. Bala. "Comparative Antioxidative and Cytotoxic Activity of Extracts of *Moringa Oleifera* and its Mistletoe."

### **7.3. Papers Presented at International Scientific Conferences and Published in Conference Proceedings**

1. Yassin, M., Abba, S., **Usman, A.**, & Aljundi, I. (2023). Spatiotemporal and hydrogeological assessment of groundwater supported by soft computing modeling of heavy metal in Al-Hassa, Eastern Province, Saudi Arabia (No. EGU23-4745). *Copernicus Meetings*.
2. Abba, S., Yassin, M., **Usman, A.**, & Aljundi, I. (2023). Step-ahead forecasting of GRACE-derived terrestrial water storage spatial downscaling in Saudi Arabia using Elman recurrent learning and support vector regression (No. EGU23-4798). *Copernicus Meetings*.

3. Second International Conference on 'Environment: Survival and Sustainability, which was held on November 2019 at Near East University in Lefkoşa, Turkish Republic of Northern Cyprus. Natural Deep Eutectic solvents (NADES) as a novel method used in plants extraction for green and sustainable environment.
4. Second International Conference on 'Environmental sustainability', which was held on November 2019 at Near East University in Lefkoşa, Turkish Republic of Northern. Determination of total hardness of water from six municipalities of north Cyprus tap water by complexometric titration.
5. First Virtual Annual Scientific Conference Held from 10th - 11th March 2021  
THEME: Post COVID-19: Charting a Course for the Pharmaceutical Sciences and Health System at university of Lagos faculty of pharmacy. 'Comparative performance of extreme learning machine and Hammerstein–Weiner models for modelling the intestinal hyper-motility and secretory inhibitory effects of methanolic leaf extract of *Combretum hypopilinum* Diels (Combretaceae).
6. International Symposium on Pharmaceutical Sciences (ISOPS). Held July, 2021 at Ankara University Faculty of pharmacy. 'SPRAY DRYER OPTIMIZATION OF TEA (*Camellia sinensis* L.) EXTRACT FROM DUST CHAMBER RESIDUES AND OVEN FIBERS COUPLED WITH ARTIFICIAL INTELLIGENCE'.
7. International Symposium on Pharmaceutical Sciences (ISOPS). Held July, 2021 at Ankara University Faculty of pharmacy. 'DETERMINATION OF THYMOQUINONE FROM BLACK CUMIN USING HPLC TECHNIQUE: A CHEMOMETRICS BASED APPROACH'.
8. International Symposium on Pharmaceutical Sciences (ISOPS). Held July, 2021 at Ankara University Faculty of pharmacy. 'EFFECT OF GEOGRAPHICAL DIFFERENCES ON THYMOQUINONE CONTENT AND CYTOTOXICITY OF BLACK CUMIN SEEDS'
9. Fourth International Conference on 'Environment: which was held on November 2021 at Near East University in Lefkoşa, Turkish Republic of Northern Cyprus. A non-linear based neuro boosting sensitivity optimization of breast cancer classification towards environmental health sustainability.
10. Fourth International Conference on 'Environment:', which was held on November 2021 at Near East University in Lefkoşa, Turkish Republic of Northern Cyprus. Environmental sustainability based on Multi-step ahead forecasting using dynamic black-box optimization models for Covid-19 outbreak.

**7.4.National/internationalBooksorBookChapters****7.5. ArticlesPublished in National Peer-ReviewedJournals****8. Art and Design Activities****9. Projects****10. AdministrativeResponsibilities****11. Memberships in Scientificand Professional Organizations****12. Awards**

1. Near East University Publication award, 2022

2. Honour award and certificate in Second International Conference on ‘Environment: Survival and Sustainability, which was held on November 2019 at Near East University in Lefkoşa, Turkish Republic of Northern Cyprus.

**13. UndergraduateandGraduate Courses Taught in theLast Two Years**

AcademicYear	Semester	Course Name	WeeklyHours		Number of Students
			Theoretical	Practical	
2021 - 2022					
2022 - 2023	<b>Fall</b>	Phytochemometrics: EAK 617	3	0	7
	<b>Spring</b>	Instrumental methods: EAK 616	3	0	5