Dr. Zainul Abideen

Dr. Muhammed Ajmal Khan Institute of Sustainable Halophyte Utilization,
University of Karachi Environmental **Sciences** (UOK**).**
Ranked as World top 2% Scientist (2024, 2025**)**
Web:www.halophyte.org E-mail. zuabideen@uok.edu.pk; z.abideen@uodh.ac.ae publons.com/researcher/2929214/zainul-abideen/. Mobile +923333214858 (whatsp). (+971545953048)

I am a **multi-disciplinary** (Plant ecology, biochemistry, physiology and biotechnology) researcher with wide interest in biological, technological, environmental sciences and engineering solutions (e.g. Gas exchange, Bio stimulants, Plant Factories, Environmental Sustainability, Nature-Based Solutions NBS,); based earlier in Germany, United Arab Emirates and Karachi. I am a broad-minded researcher who crossed boundaries to deliver holistic, effective, and sustainable solutions to research, for commercialization.

Features	Details
Post PhD-experience	10 years
Major	Botany (Plant Ecology)
Specialization	Ecology and Environmental, Agricultural Biotechnology
H and i10 index	36 and 85 (Google scholar)
Citations	4300
ORCID number	0000-0002-4958-8816
Number of articles	135
Article categories	85 Articles in Q1, 15 in Q2 and 5 in Q3
Review Editor	Front Plant Sci, Land Degrad Dev, J. Sustain Earth Management
M. Phil Students	Supervisor (3), Co-supervisor (2), (08) ongoing
PhD Students	Supervisor (1, ongoing, Co-supervisor, 4) ongoing
Grants	3 (6 million PKR)
Role	Principal Investigator (2), Co-principal Investigator (1)
Impact factor	550

EDUCATION

PhD (2010-2015) Split Ph. D Program University of Karachi and University of Giessen Germany. Supervisor: **Muhammed Ajmal Khan** ; **Hans Werner Koyro**. Plant Science (Plant ecophysiology. Biochemistry and Photosynthesis)
MSc (2002) Department of Botany, University of Karachi**,** (Plant Ecology)

TEACHING EXPERIENCE

- **Teaching and Experience Researcher Spring 2025.** College of Agriculture University of Al Dhaid, Sharjah, United Arab Emirates
- **2022-23 Visiting Teaching Faculty in** Shaheed Zulfikar Ali Bhutto Institute of Science and Technology. Karachi, Pakistan
- **Lecturer 2018-onword** Dr. Muhammed Ajmal Khan Institute of Sustainable Halophyte Utilization. Utilization, University of Karachi.
- **2018**- International training course on desertification research and governance in developing countries" at Northwest Institute of Eco-Environment and Resources of **Chinese Academy of Sciences (NIEER, CAS), Lanzhou, China** from Sep 3-23, 2018.

TEACHING COURSES

M.Phil. / MS courses

- **ISHU 772** – Ecology of Saline Habitat
- **ISHU 775** – Physiological Ecology of Halophytes
- **ISHU 776** – Research Methodology
- **ISHU-777**- Saline Agriculture
- **ISHU-778**- Biology of mangroves

BS / Master Biotechnology Courses

- Ecology, Biodiversity & Evolution – I
- Ecology, Biodiversity & Evolution – II
- Applied Biology AGR 102
- Applied Chemistry AGR 100

RESEARCH EXPERIENCE

- **2025-November onword Experience Researcher:** Sharjah Seed Bank and Herbarium, University of Al-Dhaid, Sharjah. United Arab Emirates
- **2025-July to October: Experience Researcher.** Sharjah Seed Bank and Herbarium, Environment and Protection Area authority Sharjah Safari.
- **2024-2025-** Postdoctoral researcher at College of Agriculture, University of Al-Dhaid, Sharjah. United Arab Emirates
- **2023-2024-** Postdoctoral researcher at Department of Applied Biology University of Sharjah, Sharjah, United Arab Emirates.
- **2016-2017-** Postdoctoral (**DAAD)** Fellow in Justus-Liebig-University Giessen, Germany.
- **2013- Feb 2018- onward** (Lecturer) at Dr. Muhammed Ajmal Khan Institute of Sustainable Halophyte Utilization. Utilization, University of Karachi.
- **2011- Received Split-PhD scholarship from HEC** through "International linkage between University of Karachi and Justus-Liebig-University Giessen, Germany.
- **2007-** Received Indigenous Ph.D. Fellowship from Higher Education Commission, Pakistan.
- **2008-** Research Associate. Project title Salt induces oxidative stress consequence and possible management Funded by: Pakistan Science Foundation.

SPECIAL FEATURES

- 59.2% articles with international collaboration
- 54.9% (39 documents) Documents in top citation percentiles
- 55 times corresponding author and 18 times First authored publications
- 85 Articles in Q1, 38 in Q2 and 22 Q3.

SCIENTIFIC EQUIPMENTS

- LiCOR **6400** and LiCOR **8100**, Portable Photosynthesis equipment with Fluorescence meter.
- Pulse Amplitude modulated Chlorophyll Fluorescence meter, PAM 2500. Junior PAM. (Walz).
- HR-33T, Wescor Dew Point micro-voltmeter (Wagtech Inc., USA).

- Osmometer, Osmostat 030 (Germany). Model 600, Plant Water Status Console (PMS Instruments, USA).
- Expert in Quick Check hydroponic system (QCS).
- High Performance Liquid Chromatography (HPLC)

SEMINARS/ CONFERENCES

- **2021:** First International Conference on Advances in Material Science and Environmental Engineering ICAMSEE.
- **2020:** International Conference on "Climate Change Adaptation: Evidences from Best-Practice in Coastal Areas" 4-5 December **2020**, Brac CDM Rajendrapur, Bangladesh.
- **2020:** 1 day conference-Halophytes for Science and Society (November 10, 2020), held at Dr. Muhammad Ajmal Khan Institute of Sustainable Halophyte Utilization, University of Karachi.
- **2016:** 14th National and 5th international conference of Botany, Climate change and phytodiversity: Challenges and opportunities. University of Karachi, Karachi, Pakistan. January 15-18, 2016. (Member organizing committee & Poster Presentation).
- **2016:** 4th International Conference on Environmental Horizon, Valuing and Conserving Nature. Department of Chemistry and ICCBS, University of Karachi. Karachi, Pakistan. 8-10 January. (Poster Presentation).
- **2014:** Hands on Tanning in Ecophysiological Techniques (April 12-14) at Institute of Sustainable halophyte (Member organizing committee).
- **2011:** Advances in Ecophysiology of Salt Tolerance (April 11-13) at Institute of
- **2010:** Workshop on "Physiological Ecology of Salt Tolerance" (April 27-29), Institute of Sustainable Halophyte Utilization, University of Karachi.
- **2008:** Workshop on Recent Trends in Plant Sciences: Impact on Biodiversity (April 16-18) organized by Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi.

SELECTED ARTICLES **(**First or Corresponding author**)**

- Mukhtar N, Abbas Z, Umbreen S, Harun N, Hameed M, Dias DA, Semary HE, **Abideen Z*.2026**. Exploring the growth, photosynthesis and anatomical adaptation of halophytic fodder crops in remediation of nickel contaminated ecotypes for optimum land safety. Land Degradation and Development (IF= 3.7).
- Sarwar Z, Munir N, **Abideen Z***, Gulzar W, Hessini K. **2026.** Zinc oxide nanoparticles-biochar nanocomposite enhanced $Pb^{2+}$and Cr^{6+}removal efficiency from wastewater for environmental safety. Water, Air, & Soil Pollution 237, 50 (IF= 3.0).
- Alam S, Hanif A, Shaheen S, Zhu M, Mehdizadeh M, **Abideen Z*. 2025**. Enhancing growth and suppressing root rot in Phaseolus vulgaris using ginger powder derived natural antifungal agent for optimum disease control and crop health. Journal of Crop Health. 77, 179. 10.1007/s10343-025-01248-z (IF= 3.0)
- Munir N, Sarwar Z, Hanif M, Siddiqui ZS, Siddique KHM, **Abideen Z***. **2025.** Enhancing crop resilience and agricultural sustainability: Synergistic interactions between phytohormones and nanoparticles. Environmental Sustainability (IF= 3.0).
- Munir N, Chaudhary A, Hanif M, Dias DA, El-Sheikh M, **Abideen Z*.** 2025. Co-application of apple peel nanoparticles and functional halophytic biochar improve the remediation of hazardous Cr and Pb for environmental safety. International Journal of Environmental Research 19 (207) (IF= 3.5).
- Aissaoui S., **Abideen Z***., Shanableh A. **2025**. The role of biostimulants for mitigating the negative impacts of antibiotics to improve environmental safety. International Journal of Environmental Science and Technology (IF= 3.4).

- Hasnain M, Ali F, Ismat Hira I, Zainab R, Abdallah Shanableh A, **Abideen Z*. 2025.** Navigating towards a plastic-free future: A holistic review of microplastic accumulation and management for land and environmental sustainability. Environmental Research. 285, 122572 (IF= 7.7).
- Hasnain M, Zainab R, Ali F, **Abideen Z***. **2025.** An overview of bio-sorption, remediation and desalination of algae to remove wastewater toxic pollutants for environmental safety. Environmental Monitoring and Assessment (IF= 3.2).
- Gul S, Aslam H, Nawaz MF, Yasin G, Riaz S, Hasnain M, El-Sheikh MA, Radicetti E, **Abideen Z***. **2025.** Fertilizing effects of seaweed (Enteromorpha intestinalis) derived bio-stimulant enhanced Spanich production, nutrient fluxes and seocndry metoblism in *Spinacea oleracea* L. under NaCl stress. Journal of Soil Science and Plant Nutrition. 25, 6773-6789 (IF= 3.4).
- Khan Z, Gul H*, Rehman A, Tabassum A, Rauf M, Arif M, Hamayun M, El-Sheikh MA, **Abideen Z* 2025**, Combination of *Sargassum wightii* extract and pyridoxin mixture improve growth and salinity tolerance in Okra for sustainable agriculture. Algal Research, 90, 104145. (IF= 4.6).
- Bora AB, Hashmi, S., **Abideen Z***. 2025. Applying chemical and bio-mediated synthesis of manganese oxide nanoparticles for enhancing growth and nutrient fluxes in *Arka anamika* plants under saline conditions. Journal of Plant Nutrition. 1–24. (IF= 2.7).
- Shah SMRS, Abbas Z, Hameed M, Ahmad MSAA, Farooq Ahmad, Basharat S, Asgha A, Fatima S, Ashraf M, El-Sheikh M, El-Keblawy A, Yong JWH, Abideen Z*. 2025. Deciphering adaptive and invasive strategies of Ipomoea carnea in formulating land management at elevated mountains. Land Degradation and Development. 36, 4961-4978 (IF= 3.7).

- Khilji SA, Tariq R, Aziz I, Munir N, Javed A, Uppal T, El-Keblawy A, **Abideen Z***. **2025.** Phytoremediation potential and ecophysiological responses of Pistia stratiotes for removal of cadmium and lead from polluted water: A viable option for agricultural resilience Environmental Sustainability. 10.1007/s42398-025-00348-w (IF= 3.0).
- Javaid A, Munir N, **Abideen Z*.**, Duarte B, Siddiqui ZS, Haq R, Naz S**. 2025**. The potential effects of nanoparticles in gene regulation and expression in mammalian, bacterial and plant cells- A comprehensive review. Plant Nano Biology.
- Bora KA, Hashmi, S., **Abideen Z*. 2025**. Applying chemical and bio-mediated synthesis of manganese oxide nanoparticles for enhancing growth and nutrient fluxes in Arka anamika plants under saline conditions. Journal of Plant nutrition (IF= 2.7).
- Rafique N, Sadia Khalil S, Cardinale M, Rasheed A, Zhao F and **Abideen Z*. 2025**. A comprehensive evaluation of the potential of plant growth-promoting rhizobacteria for applications in agriculture in stressed environments. Pedosphere. (IF= 5.7).
- **Abideen, Z*.**, Koyro, HW, Hasnain M, Hussain MI, El-Keblawy A, El-Sheikh MA and Hasanuzzaman M. 2024. Biochar Outperforms Biochar-Compost Mix in Stimulating Ecophysiological Responses and Enhancing Soil Fertility under Drought Conditions. Journal of Soil science and Plant Nutrition.1-15. doi.org/10.1007/s42729-024-02073-5.
- Javaid A, Munir N, **Abideen Z*,** Siddiqui ZS, Yong JWH. The role of natural and synthetic zeolites as soil amendments for mitigating the harmful impacts of abiotic stresses to improve agricultural resilience. Plant stress.14,100627.

- Jabeen S, Tariq M, Abid R, Hanif A, Shehzad K, Wajahat Ur Rehman M, Dawar S, Dias DA, Alarjani KM, **Abideen Z***. **2024.** Application of powdered Medicago sativa L. enhances eco-physiological output and protects against root rot fungi disease in okra and cowpea. Scientia Horticulture. 337, 113458.
- Zainab R, Hasnain M, Ali F, **Abideen Z*,** Siddiqui ZM, Farrukh Jamil; Murid Hussain, Park YK., 2024. Impact of nano-bio pesticides and their eco-friendly detoxification approaches for environmental safety and food security. Environmental Research. (IF= 7.7).
- Elnaggar A, Tsombou FM, Hussain MI, Almehdi AM, El-Sheikh M, **Abideen Z***, El-Keblawy A. 2024. Citrullus colocynthis regulates antioxidants and photosystem II to improve growth and heat stress resistance to survive under variable temperatures. Plant stress. 12, 100502 (IF= 6.8).
- Ajaib M, Kamran SH, Siddiqui MF, Qasim M, Azeem M*, **Abideen Z*,** Elnaggar A, El-Keblawy A. 2024. Exploring the phytochemical, antioxidant, antimicrobial and analgesic potentials of Solanum erianthum as an alternative biological feedstock for producing sustainable biochemicals. Biocatalyst & Agricultural Biotechnology. 58, 103183 (IF= 4.0).
- Gul S., Yousaf MTB, Nawaz MF, Rashid MHU, Adnan MY, Tausif S, Javed A, **Abideen Z*.,** MA, El- Keblawy **A**.**2024**. Brown macro-seaweed derived agro-biostimulant for Zea mays farming in saline conditions: Growth enhancement and optimum biochemical and ion feedback. Biocatalyst & Agricultural Biotechnology. 57, 103105 (IF= 4.0).
- Waqif W, Munir N, Farrukh MA, Hasnain M, Sohail M, **Abideen Z***. **2024**. Application of algal macromolecules for the synthesis of nanoparticles as biocatalyst for improving plant disease resistance and food security. International J. Macromolecules. 263, 130259. (IF= 8.2).
- Qureshi IA, Abbas A, Salam IU, Bashir F, Siddiqi, F, Dias, DA, El-Keblawy A, El-Sheikh MA., **Abideen Z***. **2024**. Impact of *Pennisetum glaucum* plant powder on soil properties and the growth, nutritive, and physiological aspects of the edible pulse crop (*Vigna radiata* L. Wilczek). Journal of Plant Nutrition. 47, 363-375. (IF= 2.27).
- Hanif M, Munir N*, **Abideen Z*,** Yong JWH, El-Keblawy A, Mohamed A. El-Sheikh MA., 2024. Synthesis and optimizations of nanoparticles from *Phragmites karka* improves tomato growth and salinity resilience. Biocatalyst & Agricultural Biotechnology. 55, 102972 (IF= 4.0).
- Munir N, Hanif M, **Abideen Z***, Seerat A, Hamid M, El-Keblawy A, Radicetti E, Mancinelli R, El-Sheikh M. **2023.** Biochar production from fruit shell waste increases biosorption potential and detoxification of heavy metals from polluted contaminated lands. Land Degradation & Development. 35(4), 1477-1494 (IF= 4.7).
- Munir N, Javaid A**, Abideen Z***, Duarte B, Jarar H, El-Keblawy A, Sheteiwy MS. **2023**. The potential of zeolite nanocomposites in removing microplastics, ammonia and trace metals from wastewater and their role in phytoremediation. Environmental Science & Pollution Research. 10.1007/s11356-023-31185-1 (IF=5.8).
- Hanif M, Munir N*, **Abideen Z*,** Dias DA, Hessini K, El-Keblawy Ali. 2023. Enhancing tomato plant growth in a saline environment through the eco-friendly synthesis and optimization of nanoparticles derived from halophytic

sources.. Environmental Science & Pollution Research. 30, 118830–11885410.1007/s11356-023-30626-1. (IF=5.8).

- Zainab R, Hasnain M, Ali MF, Dias DA, El-Keblawy A, **Abideen Z***. **2023.** Bioremediation potential of petroleum-contaminated polluted soils for sustainable environmental safety and reduction of ecotoxicology. Environmental Science& Pollution Research. 30, 104933–104957 (IF=5.8).
- Gul S, **Abideen Z***, Adnan MY, Hanif M, Nawaz MF, Shumaila, El-Keblawy A. **2023**. Seaweed-derived bio-stimulant improves growth and salt tolerance of radish varieties under saline conditions. Biocatalyst and Agricultural Biotechnology. (IF=4.0).
- Munir N, Gulzar W, **Abideen Z**,*, Hasanuzzaman M, **Ali El-Keblawy A,** Fengliang Zhao F., **2023**.Plant–Nanoparticle Interactions: Transcriptomic and Proteomic Insights. Agronomy, 13(8), p.2112. 10.3390/agronomy13082112. (IF=3.7).
- Hanif A, **Abideen Z***, Ali Hasan K, El-Keblawy A, Umar M, Rao Y, Siddiqui ZS. **2023**. Application of microbial antagonists as alternatives to chemical pesticides: A novel approach for enhancing plant growth and resilience of agricultural land. Land Degradation & Development. 10.1002/ldr.4859. (IF= 4.7).
- Ayesha S, **Abideen Z***, Haider G, Zulfiqar F, El-Keblawy A, Rasheed A, Kadambot H.M. Siddique, Khan MB, Radicetti R. **2023.** Mechanisms and Impacts of Electromagnetic Fields stress on sustainable plant production and food security. Plant Stress (IF= 5.0).
- Askari M, Neelofar Hamid N, **Abideen Z*,** Zulfiqar F*, Moosa A, Nafees M, El- Keblawy Ali. **2023**. Exogenous melatonin application stimulates growth, photosynthetic pigments and antioxidant potential of white beans under salinity stress. South African Journal of Botany. 160, 219-238 (IF= 3.10).
- Munir N, Gulzar W, **Abideen Z*** ,Hancook J , El-Keblawy Ali, Radicetti E. **2023**. Nanotechnology improves disease resistance in plants for food security: Applications and challenges. Biocatalysis and Agricultural Biotechnology (IF=4.0).
- **Abideen Z***, Ansari, R., Hasnain M, Flowers TJ., Koyro HW, El-Keblawy A., Abouleish S., Khan MA., **2023**. Potential use of saline resources for the biofuel production using halophytes and marine algae: Prospects and pitfalls. Frontiers in Plant Science. (IF=6.67).
- **Abideen Z***, Koyro HW, Zulfiqar F*, Rasool SG, Ahmad MZ, Sharif N, El-Keblawy A, Siddique KHM. **2023**. Biochar amendment reduced copper phytotoxicity and increased biomass, photosynthesis, and ion flux in maize. South African Journal of Botany. 158, 469-478 (IF= 3.11).
- Hasnain, M.; **Abideen**, Z*.; Ali, F.; Hasanuzzaman, M.; El-Keblawy, A. **2023.** Potential of Halophytes as Sustainable Fodder Production by Using Saline Resources: A Review of Current Knowledge and Future Directions. Plants, 12, 2150. https://doi.org/10.3390/. (IF= 4.65).
- Umer, S.; Abbas, Z.; Aziz, I.; Hanif, M.; **Abideen, Z***.; Mansoor, S.; Hamid, N.; Ali, M.A.; Al-Hemaid, F.M. **2023**.Potential of Ornamental Trees to Remediate Trace Metals Contaminated Soil for Environmental Safety and Urban Green Space Development. Sustainability 15, 10.3390/su15118963. (IF= 3.88).

- Munir N, Tariq R, **Abideen Z*,** Hasnain M, Hussain MI, Haq R. **2023**. Efficient detoxification of textile wastewater by applying *Chenopodium Album* nanoparticles and its application in simulated metal-bearing effluents removal. Environmental Science & Pollution Research. 10.1007/s11356-023-26795-8 (IF=5.8).
- Hasnain, M., Munir, N., **Abideen, Z***., Zulfiqar, F., Koyro, H.W., El-Naggar, A., Caçador, I., Duarte, B., Rinklebe, J. and Yong, J.W.H., **2023**. Biochar-plant interaction and detoxification strategies under abiotic stresses for achieving agricultural resilience: A critical review. Ecotoxicology and Environmental Safety, 249, p.114408. (IF=7.1).
- Khilji, S.A., Munir, N., Aziz, I., Anwar, B., Hasnain, M., Jakhar, A.M., Sajid, Z.A., **Abideen, Z***., Hussain, M.I., El-Habeeb, A.A. Yang, H.H., **2022.** Application of Algal Nanotechnology for Leather Wastewater Treatment and Heavy Metal Removal Efficiency. Sustainability, 14(21), p.13940. (IF=3.889).
- Bora KA, Hashmi S, Zulfiqar F, **Abideen Z***, Ali H, Siddiqui ZS and Siddique KHM **2022.** Recent progress in bio-mediated synthesis and applications of engineered nanomaterials for sustainable agriculture. Front. Plant Sci (IF=6.67).
- **Abideen, Z***. Cardinale, Zulfiqar, Koyro, Rasool, Hessini, Darbali, Zhao, Siddique K. **2022**. Seed endophyte bacteria enhance drought stress tolerance in *Hordeum vulgare* by regulating minerals, physiological characteristics, and antioxidants. Front. Plant Sci. (IF=6.67).
- Munir, N., Hanif, M., **Abideen, Z***., Sohail, M., **El-Keblawy, A**., Radicetti, E., Mancinelli, R. and Haider, G., **2022**. Mechanisms and Strategies of Plant Microbiome Interactions to Mitigate Abiotic Stresses. Agronomy, 12(9), p.2069. https://doi.org/10.3390/xxxxx. (IF=3.41).
- **Abideen**, **Z***.; Waqif H; Munir, N.; **El-Keblawy, A**,; Hasnain, M., Radicetti, E, Mancinelli, R, Nielsen; Hider G., **2022.** Algal-mediated nanoparticles, phycochar, and biofertilizers to mitigate abiotic stresses in plants: a review. Agronomy.12 (8) (IF=3.41).
- Jhakker, AM, Aziz, I., Rashid Kaleri A., Hasnain M., Hider G., Maa, J., **Abideen Z***., **2022.** Nano-fertilizers: a sustainable technology for improving crop nutrition and food security. Nanoimpact. doi.org/10.1016/j.impact.2022.100411. (IF=6.03).
- **Abideen**, **Z***.; Koyro, H.W.; Hussain, T.; Rasheed, A.; Alwahibi, M.S.; Elshikh, M.S.; Hussain, M.I.; Zulfiqar, F.; Mansoor, S.; Abbas, Z. **2022,** Biomass production and predicted ethanol yield are linked with optimum photosynthesis in *Phragmites karka* under salinity and drought Conditions. Plants. https://doi.org/10.3390/ plants11131657. (IF=4.65).
- Munir, N., Hasnain, M., Roessner, U. and **Abideen, Z*., 2022**. Strategies in improving plant salinity resistance and use of salinity resistant plants for economic sustainability. Critical Reviews in Environmental Science and Technology, 52(12), .2150-2196. (IF= 13.12).
- **Abideen**, Z*.; Hanif, M.;Munir, N.; Nielsen, B.L. **2022.** Impact of Nanomaterials on the Regulation of Gene Expression and Metabolomics of Plants under Salt Stress. Plants 11, 691. https://doi.org/10.3390/ plants11050691. (IF=4.65).
- Munir, N, Hanif M, Daniel AD & **Abideen Z***. **2021**. Role of halophytic nanoparticles in the development of saline agriculture to remediate poor

degraded lands. Environmental Science and Pollution Research 10.1007/s11356-021-16139-9 (IF=5.8).

- **Abideen, Z***., Koyro, HW. Huchzermeyer, B., Ahmed, M Z., Zulfiqar, F., Egan. T., Khan, MA. **2021**. *Phragmites karka* plants adopt different strategies to regulate photosynthesis and ion flux in saline and water deficit conditions. Plant Biosystems .155(3), 524-534 (IF=2.8).
- **Abideen**, **Z***. Koyro, HW., Huchzermeyer, B., Gul, B., Khan, MA. **2020**. Impact of a Biochar or a Compost-Biochar Mixture on Water relation, Nutrient uptake and Photosynthesis of *Phragmites karka*. Pedosphere. 30 (4) 466-477 (IF=3.91).
- **Abideen**, **Z*.,** Koyro, HW., Huchzermeyer, B., Razuiddin A, Faisal Z., Gul, B., **2020** Ameliorating effects of biochar on photosynthetic efficiency and antioxidant defense of *Phragmites karka* under drought stress. Plant Biology 22, 259-266. (IF=3.08).
- **Abideen, Z***., Qasim, M., Hussain, T, Rasheed, A., Gul, B., Koyro, HW.Ansari, R., Khan, MA. 2018. Salinity improves photosynthesis and biomass production of *Phragmites karka* a potential biofuel crop. Crop & Pasture Science. 69, 944-953 (IF=2.28).
- **Abideen, Z**., Qasim, M., Fatima, RR. Ansari, R., Gul, B., Khan, MA. 2015. Oilseed halophytes: a potential source of biodiesel using saline degraded lands. Biofuels. 6, 241-248 (IF=2.95).
- **Abideen, Z**., Qasim, M., Rasheed A., Adnan, M.Y., Gul, B., Khan, MA. 2015. Antioxidant activity and polyphenol content of *Phragmites karka* under saline conditions. Pakistan Journal of Botany. 47, 813-818 (IF=0.97).
- **Abideen**, Z., Hameed, A., Koyro, HW, Gul, B., Ansari, R., Khan, MA. 2014. Sustainable biofuel production from non-food sources - An overview. Emirates Journal of Food and Agriculture. 26, 1057-1066 (IF= 1.04).
- **Abideen, Z**., Koyro, HW. Huchzermeyer, B., Ahmed, M Z., Gul, B., Khan, MA. 2014. Moderate salinity stimulates growth and photosynthesis of *Phragmites karka* by water relations and tissue specific ion regulation. Environmental and Experimental Botany. 105, 70-76 (IF=5.54).
- **Abideen, Z**., Ansari, R., Gul. B., Khan, MA. 2012. The place of halophytes in the biofuel industry. Biofuels. 3, 211-220 (IF=2.95).
- **Abideen, Z.,** Ansari, R., Khan, MA., 2011. Halophytes: Potential source of ligno-cellulosic biomass for ethanol production. Biomass and Bioenergy. 35, 1818-1822 (IF=5.06).

BOOK CHAPTERS

- Koyro, HW, Lieth, H., Gul, B., Ansari, R., Huchzermeyer, B., **Abideen, Z**., Khan, MA. 2014. Importance of Diversity within the Halophytes to Agriculture and Land Management in Arid and Semiarid Countries. In Sabkha Ecosystems: Volume IV: Cash Crop Halophyte and Biodiversity Conservation (pp. 175-198). Springer Netherlands.
- Ahmed, MZ, **Abideen, Z**., Aziz, I., Gul, B. 2020. Growth, Water and Ion Relations of Warm-subtropical Halophytes to Salinity. In Handbook of Halophytes. From Molecules to Ecosystems towards Biosaline Agriculture. Springer Netherlands.
- Ali, M., Mustafa, A., **Abideen, Z**. and Gul, B., 2021. Bioenergy Production from Halophytes Crops for Sustainable Development. In Energy and

Environmental Security in Developing Countries (pp. 571-586). Springer, Cham.

- Hussain M.I., Abideen Z., Danish S., Asghar M.A., Iqbal K. **2021**. Integrated Weed Management for Sustainable Agriculture. In Sustainable Agriculture Reviews 52 (pp. 367-393). Springer, Cham.https://doi.org/10.1007/978-3-030-73245-5_11.
- Hussain M.I., Abideen Z., Qureshi A.S. **2021**. Soil degradation, resilience, restoration and sustainable use. In Sustainable Agriculture Reviews 52 (pp. 335-365). Springer, Cham. https://doi.org/10.1007/978-3-030-73245-5_10.
- Abideen Z, Ahmed MZ, Hussain MI and Abbas Z.2022. Utilization of coastal land and brackish water for the cultivation of economically important coastal halophytes of Pakistan. DAAD Conference on Climate Change Adaptation.
- Zainul Abideen, Maria Hanif, Zirwa Sarwa, Irfan Aziz, Neelma Munir and Maria Hasnaian. 2024. Recent trends in promising membrane technologies for the removal of heavy metals from water and wastewater.
- Zainab, R., Hasnain, M., Abideen, Z., Kayani, H.A. (2023). The Role of Halophytic Plant Invasions for the Conservation and Restoration of Degraded Agricultural Lands. In: Tripathi, S., Bhadouria, R., Srivastava, P., Singh, R., Batish, D.R. (eds) Plant Invasions and Global Climate Change. Springer, Singapore. https://doi.org/10.1007/978-981-99-5910-5_14.
- Javeed, H.M.R., Ali, M., Qamar, R., Nawaz, F., Yasmin, H., Chakraborty, K., Abideen, Z., Ihsan, M.Z. and Adnan, M., 2023. Potential Applications of Algae-based Bio-fertilizers. Biofertilizers for Sustainable Soil Management.
- Dawood MFA, Mohamed H, Abideen, Z, Sheteiwy MS, Eissa MA, Abdel Latef AAH. **2025**. Biochar amendments and drought tolerance of plants. In Biochar in Mitigating Abiotic Stress in Plants. 229-246. https://doi.org/10.1016/B978-0-443-24137-6.00013-6
- Haider, G., Rahman, H., Ghaffar A., Qayyum, MF, Naqqash, T., **Abideen, Z.,** 2020. Climate Change: Biochar as a Climate Resilient Carbon Sequestration Technology. Springer (Submitted).

RESEARCH PROJECT FUNDING

- **2022.** Use of halophytic nanoparticles as a sustainable approach towards improvement of crop yield and nutritional quality in saline conditions. (Rs. 3.43 million) Funded by Higher Education commission (Pakistan). Ongoing.
- **2022.** Exploiting the potential of biochar in improving salinity resistance of emerging biofuel species *Phragmites karka*. (Rs. 150,000 Rupees). Dean Faculty of Science University of Karachi. Ongoing
- **2024**. Research services regarding Composting of Soiled Banknote & Prize bond Shreds (Rs. 3.0 million PKR Rupees). State Bank of Pakistan. Ongoing.

RESEARCH SUPERVISED

***Umme Ey Farwa Hassan**: Effect of compost on growth and Eco-physiological performance of Maize plants in Salinity (M. Phil; 2022-2023).*
***Ahmreen Ejaz**: "Green synthesis of compost by using currency waste and its application to improve physiological performance of sorgham under saline condition. M. Phil; 2023-Synopsis submitted).*
***Umme Ey Farwa Hassan**: Effect of compost on growth and Eco-physiological performance of Maize plants in Salinity (Ph.D. 2023).*

RESEARCH CO-SUPERVISED

***Ayesha Maqsood**: Biochar stimulate salinity resistant in conventional and nonconventional plants for saline area (M. Phil; 2020-ongoing).*
***Syeda Nida Zehra Rizvi**: Comparative study between conventional and non-conventional plants for drought tolerance with biochar amendments (M. Phil; 2020- ongoing)*
***Maria Hanif:** Phytonanoparticle fabrication from halophytes and their role in mitigation of salt stress in Tomato (Solanum lycopersicum) (Ph.D 2021-ongoing).*
***Naila Rafique:** Evaluations of marine halophytes associated bacteria for growth promotion of saline soils (M. Phil; 2021- ongoing).*
***Samma Ain**: Impact of Nanoparticles on Growth and Plant Eco-physiological parameters under saline Environment. (M. Phil; 2022- ongoing).*
***Zirwa Sarwer**. Evaluation of bioremediation potential of algae based nanocomposites against wastewater pollutants. (Ph.D. 2023- ongoing).*
***Wafa Gulzar.** (Ph.D 2023- ongoing). Fabrication of bone char based nanofertilizer to alleviate*
drought stress in tomato plants

LANGUAGE SKILLS

German language course (A1and A2.2) from Goethe institute Gottingen Germany.
Proficiency in English and Urdu language.

MEMBERSHIP

2021: Member of the Review panel for the African Research Initiative for Scientific Excellence, Pilot Programme (ARISE-PP).
2019: Member of Landscape Gardening Council University of Karachi, Pakistan
2016: Member of DAAD Alumni Germany
2016: Member of Goethe-Institute Gottingen Alumni Germany
2015: Member of Pakistan Botanical Society

INTERNATIONAL COLLABORATORS

Prof. Dr. Hans-Werner Koyro (Germany) Prof. Dr. Bernhard Huchzermeyer (Germany) Prof. Dr. Todd Egan (USA), Markus Tuller (USA), Brent Nielsen (USA), Prof. Dr. Massimiliano Cardinale (Italy) Prof. Dr. Xian Xue (China) and Fengliang Zhao (China), Ute Roessner (Australia), Daniel Anthony Dias (Australia), Ali El-Keblaway (UAE), Kamel Hessini (Saudi Arabia).

PATENTS

Patent application: 16919. A Process for Microwave assisted Biodiesel production from new algal species (Oedogonium sp., Ulothrix sp., Cladophora sp. and Spirogyra sp. (Revised)

MANUSCRIPT REVIEWER (2)

Biofuels (5), Biomass and Bioenergy (3), South African Journal of Botany

International Journal of Phytoremediation (2), Applied Soil Ecology (2), Crop and Pasture Science (1) Journal of Hazardous Material (1), Plant Physiology and Biochemistry (1), Cellulose (1), Waste and Biomass Valorisation (1), Botanical Studies (1), African Journal of Ecology (1) Frontiers in Plant Sciences (2)

GRANT REVIEWER *2022: National Science Centre, Funding scheme: OPUS-23. Poland*

(Influence of selected nanoparticles on the number and biodiversity of plant growth promoting bacteria)

2022: AAS / The Olusegun Obasanjo Prize for Scientific Discovery and/or Technological Innovation. African Academy of Sciences

REFERENCES

Prof Dr. Hans Werner Koyro
Justus-Liebig University Giessen Germany
Institute of Pflanzenökologie
Email: Hans-Werner.Koyro@bot2.bio.uni-giessen.de
+4915142252125

Prof Dr. Irfan Aziz
Director
Dr. Muhammed Ajmal Khan Institute of Sustainable Halophyte Utilization

E-mail: irfanaziz@uok.edu.pk
+923218962445

Prof Dr. Ali El-Keblawy
University of Sharjah, United Arab Emirate
E-mail: akeblawy@sharjah.ac.ae
+971505432065

Prof Jean Yong Wong
Swedish University of Agriculture
jean.yong@slu.se
+46702492321

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
UNIVERSITY

November 14, 2024

TO WHOM IT MAY CONCERN

This is to certify that **Dr. Zain Ul Abideen** was associated with the SZABIST University, Karachi Campus as Visiting Faculty. Details of his Teaching Assignment are as under:

S. No	Year	Semester	Program	Subject
1	2022	Fall	BS Bio	Ecology, Biodiv. & Evolution-I
2	2023	Spring	BS Biotech	Ecology, Biodiv. & Evolution-II

For any further query please email on zabhr@szabist.edu.pk

Regards,

HR Department
SZABIST, Karachi

Registrar

University of Karachi
University Road
Karachi-75270
Pakistan

No.Estt.N.T.I/2018-

June 25, 2018

"SAY NO TO CORRUPTION"

JOINING REPORT

Reference Office order No. Estt.N.T.I.(Officers)2018, dated May 24, 2018.

Dr. Zainul Abideen S/o Ali Hussain, Research Officer in the Institute of Sustainable Halophyte Utilization has joined his duty as Research Officer equivalent in rank as Faculty Member (Lecturer B-18) from the date of approval of the Syndicate i.e. 10-03-2018.

The joining report has been received through proper channel.

REGISTRAR

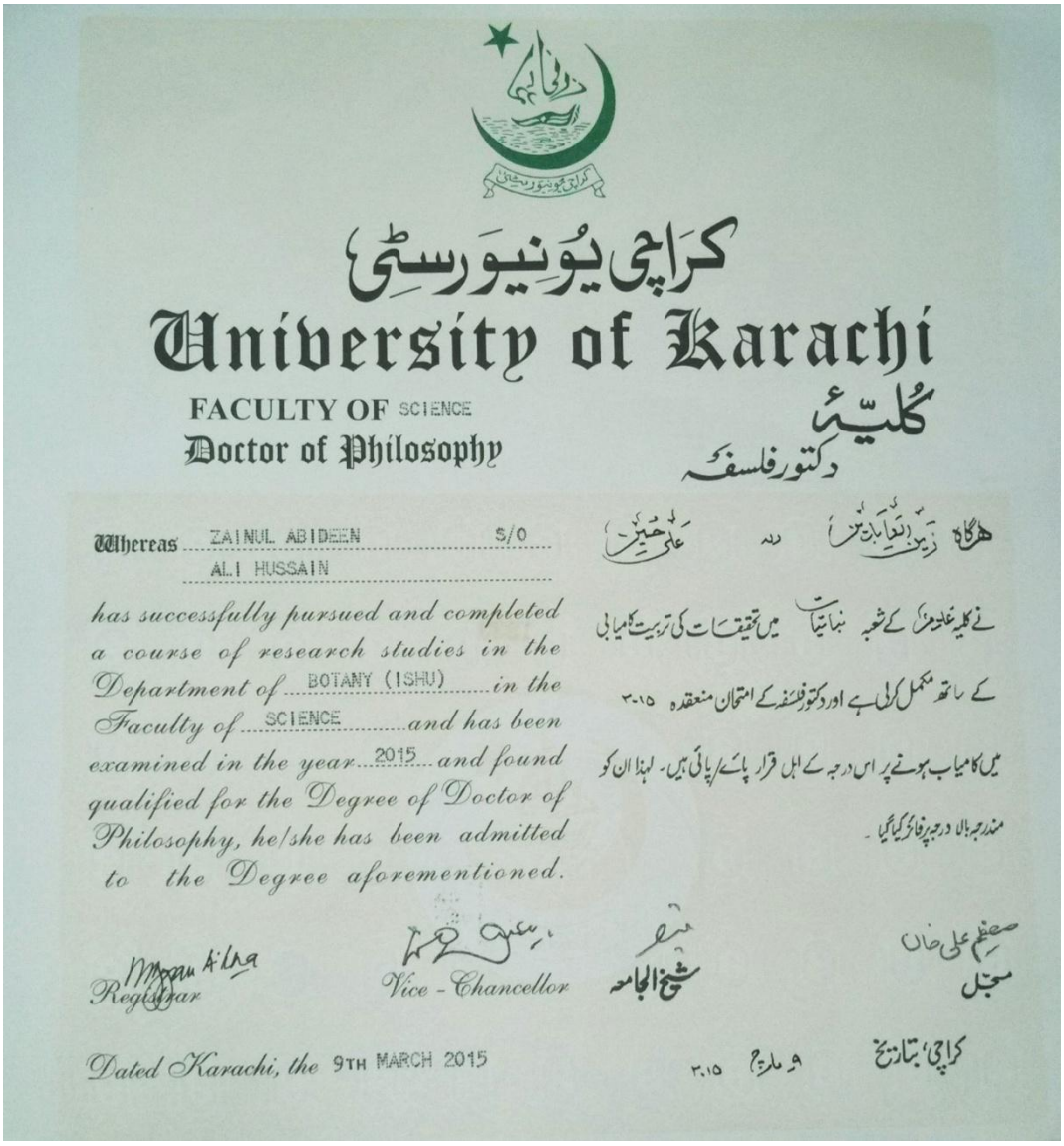
Dr. Zainul Abideen
S/o Ali Hussain
Research Officer in the Institute of
Sustainable Halophyte Utilization

Copy to:

1. Director, Institute of Sustainable Halophyte Utilization
2. Secretary to Vice Chancellor
3. P.A. to Registrar
4. Director Finance
5. Auditor
6. Chief Accountant
7. S. B. Supdt./N.T.
8. File Concerned

DEPUTY REGISTRAR
GENERAL

Office of the Registrar, University of Karachi. Direct Tel. No. 92-21-99261344
Exchange Tel. No. 92-21-99261300 to 99261314 (Ext-2233) Fax-99261343
E-mail: registrar@uok.edu.pk Website: www.uok.edu.pk



کراچی یونیورسٹی
University of Karachi

FACULTY OF SCIENCE
Doctor of Philosophy

کلیۂ
دکتور فلسفہ

Whereas ZAINUL ABIDEEN S/O ALI HUSSAIN

has successfully pursued and completed a course of research studies in the Department of BOTANY (ISHU) in the Faculty of SCIENCE and has been examined in the year 2015 and found qualified for the Degree of Doctor of Philosophy, he/she has been admitted to the Degree aforementioned.

ھرگاہ زین العابدین ولد علی حسین نے کلیہ علوم کے شعبہ نباتیات میں تحقیقات کی تربیت کامیابی کے ساتھ مکمل کرلی ہے اور دکتور فلسفہ کے امتحان منعقدہ ۲۰۱۵ میں کامیاب ہونے پر اس درجہ کے اہل قرار پائے/پائی ہیں۔ لہٰذا ان کو مندرجہ بالا درجہ پر فائز کیا گیا۔

Registrar — Vice-Chancellor

معظم علی خان — شیخ الجامعہ

مسجل

Dated Karachi, the 9TH MARCH 2015

کراچی، بتاریخ ۹ مارچ ۲۰۱۵

Seat No. 0206171

سیٹ نمبر ۰۳۰۶۱۷۱

کراچی یونیورسٹی
University of Karachi

FACULTY OF SCIENCE
Master of Science

کلیہ علوم
ایم۔ایس سی

Whereas ZAINUL ABIDEEN S/O ALI HUSSAIN

has pursued a course of study prescribed by this University for the Degree of Master of Science in BOTANY *in the Faculty of Science and has passed the requisite examination, held in* 2006 *, having been placed in* FIRST *class.*

It is hereby certified that he/she has been duly admitted to the degree of **Master of Science** *in this University.*

Registrar

Vice-Chancellor

Dated Karachi, the 4TH JUNE 2007

Note :- *Detailed transcripts of examination results have been issued separately.*

زین العابدین ولد علی حسین

کلیۂ علوم کے مضمون نباتیات میں ایم۔ایس سی
سند کے لیے اس جامعہ کے منظورہ نصاب کی تکمیل
لی ہے اور مطلوبہ امتحان منعقدہ ۲۰۰۶ میں
میاب ہوکر اوّل درجہ حاصل کرلیا ہے،
لہذا تصدیق کی جاتی ہے انھیں اس جامعہ میں
یم۔ایس سی کے درجہ پر فائز کیا گیا۔

شیخ الجامعہ

مسجّل

کراچی، بتاریخ ۴۔جون ۲۰۰۷

امتحان کے مضامین اور حاصل کردہ نشانات کی تفصیلات علیحدہ جاری کی گئی ہیں۔

JUSTUS-LIEBIG-

UNIVERSITÄT GIESSEN

Institut für Pflanzenökologie

Prof. Dr. rer. nat. Hans-Werner Koyro
Heinrich-Buff-Ring 26-32,D-35392 Giessen
Tel: +49 (0)641 99 35313 Fax: 19965
Hans-Werner.Koyro@bot2.bio.uni-giessen.de

Institut f. Pflanzenökologie, Heinrich-Buff-Ring 38, 35392 Gießen

Wednesday 2012-12-04

To whom it may concern

Mr. Zainul Abideen, HEC Research Scholar, Institute of Sustainable Utilization of Halophytes, University of Karachi, has successfully attended in our Institute a practical training in the periods from November 17th 2011 to May 31st 2012 and June 15th 2012 to October 21st 2012.

He was taught the setup of a so called "Quick-check-system" with plants such as *Phragmites karka* in a modern air-conditioned computer regulated greenhouse. He acquired in this context non-invasive techniques, such as chlorophyll fluorescence (Junior PAM) or CO_2/H_2O gasexchange (LICOR 6400) to study soil-plant-atmosphere interaction with salinity, drought and biochar.

He got also mediated how to proceed a proper meaningful harvest and how to calculate its statistical significance.

In the lab of our institute he learned several Methods of Plant-Ecophysiology by using the harvested plant material. In this context he studied enzymatic activities of enzymes involved in the Halliwell/Asada system (ROS-defence), 2D-gele electrophoresis, water relations of plant and soil (including WHC, OP, WP) and parameters to estimate the suitability as a biofuel crop (lignocellulose, ADF, NDF, calorimetry).

His work, engagement and his acquirement was this excellent that I decided to use him as an assistant in lab work in several modules in the frame of the BSc and MSc education such as BioF-L3-7 (Methods of Plantecology for teachers), V-OE-ATÖ (Techniques in Ecology), M-Ök-STÖ (Stress-Ecology) and M-Ök-PSA (Interaction of Plant-Soil-Atmosphere) in the periods from November 17th 2011 to May 31st 2012 and June 15th 2012 to October 21st 2012.

He was even able to assist superb under my guidance in the supervision and initial training of various BSc and MSc students during their thesis.

With kind regards

Prof. Dr. Hans-Werner Koyro

Prof. PD Dr. Hans-Werner Koyro

Center of Applied Plant Biotechnology
Gottfried Wilhelm Leibniz University Hannover

Certificate

Mr. Zainul Abideen,
HEC Research Scholar, Institute of Sustainable Utilization of Halophytes, University of Karachi,
has successfully attended in our laboratory a practical training on
Plant Stress Physiology and Biochemistry
organized by the Center of Applied Plant Biotechnology in the period of
April 1st to June 17th 2012.

Hannover, June 17th 2012

Dr. Bernhard Huchzermeyer,
Professor of Botany

This type of a summer school events has been developed under the umbrella of the ongoing Karachi - Giessen - Hannover university partnership supported since 2008 by the Higher Education Commission (HEC).
Project title:
Biochemical, eco-physiological, anatomical and morphological stress responses of cash-crop halophytes.
Partners are jointly contributing to the EU COST project "FA 0901: Putting Halophytes to Work - From Genes to Ecosystems".

Attendees will be selected by their merits with help of colleagues at our partner universities.

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Letter of Award

Name:	Abideen Zainul
Date of birth:	01/03/83
Personal ref. no.:	91605261
Funding programme/-ID:	Research Grants for Doctoral Candidates and Young Academics and Scientists (more than 6 months), 2016/17 (57210260)
Nationality:	Pakistan

You are being granted a DAAD scholarship. The scholarship includes the following benefits:

Start of funding	End of funding	Destination country	Institution
01/10/16	31/07/17	Germany	Justus-Liebig-Universität Gießen. Department of Plant ecology

Preparatory language course

Start of course	End of course	Course location	Organiser
01/06/16	23/09/16	Göttingen	Goethe Institut

Costs for the above language course totalling: EUR 6.500,00.
DAAD transfers this scholarship directly to the course organiser, who covers the costs of the course and accommodation with these funds and pays you pocket money of 410,00 EUR a month.

Scholarship and supplementary benefits

Benefit	Destination country	Amount	Payment	From	To
Scholarship instalment	Germany	1,000.00 EUR	monthly	01/10/16	31/07/17
Research allowance	Germany	460.00 EUR	01/10/16		
Travel allowance	Germany	400.00 EUR	01/06/16		
Travel allowance Germany	Germany	50.00 EUR	01/10/16		

For months with a funding period of less than 23 days, the scholarship payment will be calculated on a daily basis and the exact number of funding days paid.

HIGHER EDUCATION COMMISSION

Research and Development Division

No: Ref No. 20-17444/NRPU/R&D/HEC/2021 2021

Creation Date: 12.04.22

1. Dr. Zainul Abideen,
   Lecturer,
   Institute of Sustainable Halophyte Utilization,
   University of Karachi, Karachi

SUBJECT: PROVISIONAL AWARD UNDER National Research Program for Universities- NRPU

Reference research project No 17444 entitled "Use of halophytic nanoparticles as a sustainable approach towards improvement of crop yield and nutritional quality in saline conditions" having total cost of Rs. 3437500/- and project duration of 36 months, submitted for funding by Dr. Zainul Abideen, University of Karachi, Karachi, (the Principal Investigator).

The Higher Education Commission (HEC) hereby awards Rs. 3437500/- (three million four hundred thirty seven thousand five hundred) to the University of Karachi, Karachi (the Grantee) for the above mentioned project subject to the provision of following documents:

a. Final revised proposal after incorporating reviewer's comments in letter & sprit, duly signed/endorsed by HoD, Director ORIC, Head of Institution (Vice Chancellor/Rector)
b. A certificate duly signed by HoD and PI stating that reviewer's comments have been incorporated in the revised proposal (specimen attached)
c. Revised Implementation Plan of the project after incorporating reviewer's suggations if any.Gantt Chart of Procurement Plan of the project

You are, therefore. requested to execute an agreement on stamp paper as per attached specimen and the same may be furnished to this office within 15 days of the issuance of this award. The award shall stand cancelled upon failure on your part to submit the agreement with in the stipulated period of time. This award is subject to the Terms and Conditions of the Grant outlined in the specimen Grant Agreement.

Detailed breakup of budget is as under:

Budget Element	Total Budget PKR
PI: Dr. Zainul Abideen Lecturer Institute of Sustainable Halophyte Utilization University of Karachi, Karachi:	450000
Co-PI: Neelma Munir Associate Professor	175000
Ms/M.phil Student	1000000
Total Equipment Cost	700000
Total Consumable Supplies	600000
Total Services Cost	150000
Total Travel Cost	50000
Total Budget (Direct Cost) - A	3125000
Total Overhead Cost	312500
G. Total Budget	3437500

Disbursement plan for the release of funds are as under

Item	%	Amount in Rs.	Remarks
1st Installment	50%	1718750	Upfront payment
2nd Installment	20%	687500	will be released subject to the satisfactory review of 1st Annual Report
3rd Installment	20%	687500	will be released subject to the satisfactory review of 2nd Annual Report
Final Installment	10%	343750	Will be released after successful completion of the project
Total Approved Cost		3437500	

Sincerely

RGM Section,
R&D Division,
Higher Education Commission,
Islamabad

Copy for Information to:

I. Vice Chancellor, University of Karachi, Karachi
II. The Director Finance, University of Karachi, Karachi
III. The Director ORIC, University of Karachi, Karachi

Contract for Employees on Fixed Compensation

عقد استخدام العاملين بمكافأة ثابتة

An agreement has been reached between the
University of AL Dhaid (First Party)
And Mr. Zain Ul Abideen (Second Party)
Nationality: Pakistan

تم الاتفاق بين
جامعة الذيد الطرف أول
السيد / د.زين العابدين الطرف ثاني
الجنسية : باكستان

Whereas the two parties have the legal capacity to enter into contract, they have agreed to accept the following conditions:

وحيث أن الطرفين يتمتعان بالأهلية القانونية للتعاقد فقد اتفقا على التعاقد وفقا للشروط والأحكام الواردة في هذا العقد.

1) Work Location
College of Agriculture
University of AL Dhaid

1) مكان العمل
كلية الزراعة المستدامة
جامعة الذيد

2) Job Title
Research Assistant

2) الوظيفة
مساعد باحث

3) Grade
RA2

3) الدرجة
RA2

4) Salary
Basic Salary 16,000 AED Per Month

4) الراتب
الراتب الأساسي 16,000 درهما شهريا

Clause (1)
This contract shall become effective as of your joining date for the period mentioned in the contract, that if one of the parties chooses to not renew the contract, this party must first inform the other of such in writing at least one month prior to the end of the contract period.

البند الأول
يبدأ نفاذ هذا العقد اعتبارًا من تاريخ مباشرة العمل و للمدة المذكورة في العقد، ما لم يخطر أحد الطرفين الطرف الآخر كتابة بعدم رغبته في تجديد هذا العقد قبل نهاية مدته بشهر واحد على الأقل.

Clause (2)
The first party may, for reasons other than disciplinary, end the contract of the employee at any time after the probationary period has lapsed provided that the employee receives the total sum of his/her fixed compensation until the end of the contract period in effect or the payment of one month's salary, whichever is less, without prejudice to rights of the second party as stipulated by this contract.

البند الثاني
يجوز للطرف الأول ولأسباب غير تأديبية أن تنهي عقد الموظف في أي وقت بعد انقضاء فترة الاختبار وتلتزم في هذه الحالة بأن تؤدي إلى الموظف مجموع مكافأته الثابتة إلى نهاية مدة سريان العقد أو مكافأة شهر واحد أيهما أقل مع عدم الإخلال بكافة الحقوق المترتبة للطرف الثاني بمقتضى هذا العقد .

مباشر : 068024466 - براق : 068024441 - ص.ب 27272 - الذيد - الشارقة - الإمارات العربية المتحدة
Tel.: 068024466 | Fax: 068024441 | P.O.Box:27272 - Al Dhaid- Sharjah - UAE

Date: 12/10/2023
Ref. V.C.R.G. / R. 963/2023

Dear Prof. Ali El Keblawy,
College of Sciences

Subject: Part-Time Research Assistant for a Research Project

Reference to your request regarding the subject above, related to your Research Project entitled:

Evidence-based revival of cultural herbal medicines in Fujairah Emirate by defining medicinally important native plants and their active components

Please be advised that we have approved the appointment of the research assistant (Zainul Abideen), at the rate of (AED 100) per hour to a maximum of (100) hours monthly.

Best Regards

Prof. Maamar Bettayeb
Vice Chancellor for Research and Graduate Studies

cc: Research Department

College of Agriculture,

University of Al-Dhaid,

Sharjah, United Arab Emirates

Dr. Melissa Fitzgerald

Dean of Agriculture

E-mail. MFitzgerald@uodh

Web: www.uodh.ac.ae

30 April 2025

Teaching Recognition & Recommendation letter

To Whom It May Concern,

Dr. Zainul Abideen has worked as a Research Associate in the College of Agriculture at the University of Al Dhaid, Sharjah, United Arab Emirates, from September 2, 2024, to April 30, 2025. During his time, Dr. Abideen showed excellent dedication to his work, and knowledge in his academic and research duties.

In the Spring 2025 semester, Dr. Abideen had taught two courses: Applied Chemistry (AGRC 100) and Applied Biology (AGRC 102). In addition to lecturing, he also acted as a laboratory instructor for both courses. His contributions extended beyond teaching, as he played a fundamental role in developing the lab manual for Applied Biology (AGRC 102), demonstrating his commitment to enhancing the learning experience for students. Students have provided feedback demonstrating that Dr Abideen is excellent at explaining concepts and making sure students understand and meet the course learning outcomes.

In addition, Dr. Abideen's research accomplishments are admirable. He has published approximately 12 high-impact articles, mostly of which fall within Q1 journals, in collaboration with the University. I

I, and the other members of the College, wish Dr. Zainul Abideen great success in his future endeavors and upcoming projects. His contributions to the College of Agriculture have been greatly appreciated, and we are confident that he will continue to excel in his academic and professional pursuits.

Sincerely,

Professor Melissa Fitzgerald
Executive Dean
College of Agriculure

Ref: EPAA/20SHJ/25/6026
Date: 19/06/2025

To whom it may concern,

JOB OFFER LETTER

Dear **ZAIN UL ABIDEEN ALI HUSSAIN,**

We are pleased to offer you employment at Environment and Protected Areas Authority – Sharjah Safari. We feel that your skills and background will be valuable assets to our team.

The position is "**Scientific Researcher**", and your initial monthly salary will be **AED 20,000/-**.

You are also entitled to the Sharjah Government authority's standard benefit package. The principal features of the employment offer and the benefits are as the following:

- Yearly air ticket allowance.
- Annual leave days: 45 days.
- Insurance provided from Al Buhaira Insurance.

We look forward to welcoming you as a new employee at EPAA.

Sincerely,

Shamsa Al Ketbi
Support Services Administration Manager
Environment and Protected Areas Authority