

Prof. Dr. Saeeda Nadir Ali

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A- Research Interest

Method development and validation by HPLC, Drug-Drug and Drug-Metal Interaction, Pesticides determination by chromatography, Synthesis of Drug-Metal Complex and Structure Elucidation, Spectrophotometric Studies of Charge Transfer Complexes, Liquid Chromatography, Industrial Waste Management, Solid Liquid Extraction, Nanochemistry

B- Academic Qualification

PhD (Chemistry)	2014	Department of Chemistry, University of Karachi, Pakistan.
MSc (Chemistry)	2006	Department of Chemistry, University of Karachi, Pakistan.

C- Professional Experience

ORIC, NEDUET

- **Focal Person Technology & Innovation Support Center (TISC)**, ORIC, NEDUET (Feb 2023 to-date)
- **ISO Coordinator of ORIC**, ORIC, NED University of Engineering and Technology (Dec 2022 to-date)
- **Manager TT & UIL**, ORIC, NED University of Engineering and Technology (June 2022 to-date)

Teaching

- **Associate Professor**, Department of Chemistry, NED University of Engineering & Technology (Aug 2017 to-date)
- **Contract Faculty**, Department of Chemistry, NED University of Engineering and Technology (Feb 2014-Aug 2017)
- **Assistant Professor**, Department of Chemistry, NED University of Engineering & Technology (June 2014-May 2015)
- **Co-operative Teacher**, Department of Chemistry, University of Karachi. (Sept 2007-Dec 2007)
- **Research Fellow**, Pakistan Agricultural Research Council, University of Karachi. (April 2007-June 2007)

D- Academic Services

- **Member Board of Studies** at Sindh Madressatul Islam University (June 2024 to-date)
- **External Examiner (PhD and MS Level)**: Served as External Examiner at Sindh Madressatul Islam University, University of Karachi, Federal Urdu University of Engineering and Technology and ICCBS, Karachi.
- **Reviewer** of well reputed Journals including Arabian Journal of Chemistry, Biomedical Chromatography, Scientific Reports, Journal of Fluorescence
- **Reviewed HEC Projects** including NRP Projects (2025, 2021) CPEC (2021), Local Challenge Fund (2021), Rapid Research Grant (2020)
- **Paper Setter and Examiner** conducted by Commissions

E- Awards and Honors

i- Teaching/Researcher Award

- **NEDAASC Best Teacher Award** for 2023 (Dec 2024)
- **Best Final Year Project** for the academic year 2024 by the UNESCO Chair NEDUET (Dec 2024).
- **Best Researcher Award, NEDUET** (March 2024).
- **Financial Rewards** in Aug-2021, May-2022, Nov-2023, May-2024, Oct-2024 for publishing in HEC Recognized Journal
- **Session Best Paper Award** in 2nd International Conference on Chemical, Biological, and Environmental Sciences (May 2015).

ii- Professional Recognitions

- Life time member of The Chemical Society of Pakistan.
- PEC STEM Ambassador for the year 2024.

iii- Panelist/ Keynote Speaker/ Session talk

- Panelist at the event “**Innovation Landscape of Pakistan**”, organized by the Sindh HEC in collaboration with Institute of Business Management Karachi on 24th April 2025.
- **Keynote Talk** on the “**Climate Change and Biodiversity**”, at 2nd ICGSE- 2024 at SMIU (Feb 2024).

- Session talk on safety measure in “**Fire Fighting Training Session**” at Department of Chemistry, NEDUET (Jan 17th-18th, 2025).
- Delivered two talks entitled “**Introduction to High Performance Liquid Chromatography**” and “**Interpreting Chromatogram**” in “**Hands-on Workshop on High Performance Liquid Chromatography (HPLC)**” organized by Department of Chemistry, NEDUET (Dec 23rd-24th, 2021).

iv- Session Chair/Moderator

- **Session Chair**
 - 2nd International conference on Green and Sustainable Environment (ICGSE 2024), SMIU (Feb 2024)
 - 1st Global Research Congress, SMIU (Mar-9, 2023)
 - 1st ICAMSEE organized by Department of Metallurgical Engineering, NEDUET (June 2021)
 - 1st Global Research Congress, SMIU (Mar-9, 2023)
- **Moderator in three Sessions** of National Idea Bank (NIB) City Level Competition-2022-23

v- Conference Secretary/Organizing Committee

- **Conference Secretary** in 1st IICC-2021 (Feb 2021) and 2nd IICC-2023 (Mar 2023) organized by DCY, NEDUET
- **Conferences**
 - 1st EFTP-2024 conference organized by the Department of Food Engineering, NEDUET (April 2024).
 - ICAPE-2021 (Head of Editorial Board) organized by Department of Physics NEDUET.

vi- Judge

- STEAM Muqabla-2025 Regional Round held at KMC Sports Complex, Karachi (Feb 2025)
- STEAM Muqabla-2025 District Round held at Govt. Comprehensive Girls School North Nazimabad, Karachi (Dec 2024)
- Sindh Provincial Science Fair organized by Intel Pakistan Corporation (Oct 2015)

vii-Academic Awards

- **HEC Indigenous Scholarship** Batch IV in 2007
- **Qualified Graduate Assessment Test** conducted by National Testing Service in January 2007

F- Professional Meetings/ Training/ Workshops/ Certificate Courses

Participation in WIPO Academy Activities

- Successfully participated in “**WIPO-CEIPI-INPI Advanced Certificate Training Program on Intellectual Property, Technology Transfer, and Licensing**” held during June 23th-28th, 2025 in Strasbourg, France.
- Successfully completed distance learning courses offered by the World Intellectual Property Organization:
 - Three-month “**Advanced Course on Patents (DL-301)**” (April 8th to July 6th, 2025).
 - One month “**DL450 Course on “WIPO-CEIPI-INPI Executive Program on Intellectual Property**” (April-May 2025)
 - One month “**The Essentials of Patents (DL-170)**” (August 2023).
 - Three-month “**General Course on Intellectual Property (DL-101)**” (April 18th to June 2nd, 2023)
- Attended **WIPO-Inventor Assistance Program**, organized by the IPO, Pakistan in collaboration with WIPO, at Pearl-Continental Hotel, Karachi on April 9th, 2025.
- Attended two-day training seminar on “**Technology Search and Development of Technology and Innovation Support Center (TISCs) in Pakistan**” organized by IPO, Pakistan in collaboration with World Intellectual Property Organization-WIPO and Higher Education Commission Pakistan on 23-24 Oct, 2023 at IBA, Karachi.

Capacity Building as a Manager Technology Transfer-ORIC, NEDUET

- **Trainings attended:**
 - One-Day training session on “**Towards Sustainable Future Growth: Exploring Advocacy & Technology Transfer and Fostering Industry-Academia Linkages**” organized by Sindh HEC in February 2025.
 - Two-day pilot training seminar on “**Intellectual Property (IP) for Business Success**”, organized under the umbrella of Intellectual Property Training Institute of IPO Pakistan during 4th and 5th September 2024.
 - Two-days “**Train the Trainers workshop for the Office of Research Innovation and Commercialization (ORIC)**” organized by Higher Education Commission Pakistan in collaboration with Invest2Innovate (i2i) on 2nd and 3rd November 2023 at Jinnah University for Women.
 - Three-days ORICs Capacity Building Training on “**From Lab to Market-Mastering Research Commercialization & Innovation**” held from August 1-3, 2023 organized by Higher Education Commission Pakistan (HEC) and Invest2Innovate (i2i).
 - Two-day training arranged by HEC-HEDP and i2i on “**Business Incubation Centre Management**” at Kinnaird College for Women Lahore during 8th and 9th February 2023.
 - Workshop on “**How to present at National Idea Bank**”, organized by National Idea Bank in Jan 2023.
- **Participation in IP Meetings and Consultative Session:**
 - Meeting led by **TISC Coordinator (South) and team, IPO Pakistan** on February 19, 2024, at the Patent Office, Karachi. The meeting focused on IP capacity building and support for researchers and entrepreneurs at NEDUET.

- Consultative Session organized by IPO Pakistan on “**Proposed amendments in Patent Ordinance, 2000, and the accession of Pakistan to Patent Cooperation Treaty**”. The session was held on March 24th, 2023, at TDAP, Finance & Trade Centre, Karachi.
- **FPCCI Central Standing Committee Meetings**
 - Attended 12th and 13th meetings of FPCCI Central Standing Committee on Bio-Economy held at FPCCI May 24th, 2025 and June 2025.
- **Scholarly Publishing and Editorial Trainings**
 - Participated in the **Capacity Building Workshop on HEC’s Journal Recognition**, organized by HEC, Pakistan in collaboration with NEDUET on April 10th, 2025.
 - Webinar on “**Accelerate your research using Elsevier’s Scopus**” organized by Elsevier in collaboration with NEDUET on January 13th, 2022.
 - Online workshop on **Emerald guide to Getting published** in April 2020.
 - **Publication Ethics, Peer Review and Metrics** by Elizebeth Wager (Publications Consultant, Sideview, UK, Ex Chairperson COPE, Member of Ethics Committee for BMJ & WAME) held at Metropolitan Palace, Dubai UAE on August 13-14th, 2015.
 - **Developing a Successful Journal** by Pippa Smart (Research communication and publishing consultant, UK) held at Metropolitan Palace, Dubai UAE on August 13-14th, 2015.
 - **C21st Marketing for Scholarly Journals** by Rachel Maund (Marketability, a UK-based publishing consultancy. London) held at Metropolitan Palace, Dubai UAE on August 13-14th, 2015.
- **Meeting and Networking: French Embassy, Islamabad and French Collaborators, Industrial Experts and Academic Personnels**
 - Meetings with Ms. Sabine Vermillard (**Attachée for Scientific & Higher Education Cooperation, Islamabad**) (C/O PERIDOT Project-2022) at French Embassy on 11th March 2024 and 28th May 2025.
 - Meetings with Dr. Philippe Daniel (Director, Institute of Molecules and Materials of Le Mans-IMMM, Department of Physics) and Prof. Dr. Jean Pilard at **Le Mans University, France**, during PERIDOT 2022 Project Meetings (May 2024 & June 2023), including laboratory visits and sharing of project outcomes.
 - Meetings with industrial experts Engr. Adnan Javed Pirzada (General Manager) and Mr. Faizan Shareef from **Dewan Distillery Division** on July 11th, 2024, Jan 15th, 2024 and August 2023.
 - Meetings with Prof. Dr. Abdul Wadood (Head of the Department of Materials Science and Engineering) and research faculty Dr. Saima Shabbir and Dr. Muhammad Atiq Ur Rehman to explore the laboratories and testing facilities available at **Institute of space Technology, Islamabad**, with the aim to enhance the collaboration between NEDUET and IST Islamabad, focusing on resource and expertise sharing between the two institutions in March 11th, 2024 and May 28th, 2025.
- **IRCA ISO 9001:2015 OMS Auditor/Lead Auditor Course** organized by QEC, NED University of Engineering and Technology, Karachi during March 15-19, 2021. (Course Instructor: Mr. Raheel Ehsan, Senior Lead Assessor, LRQA).
- **Crash Course on Generative AI for University Faculty**
 - Successfully completed **Crash Course on Generative AI for University Faculty** during Aug 25-27, 2023 organized by NEDUET.
 - Participated in the **Pilot Study on Generative AI at Universities** during Sept-Dec 2023 organized by STEM X in collaboration with Elif and PAKGPT.
- **Personal and Professional Development**
 - Successfully completed **Two months Higher Education Teacher's Training** Course organized by NED University of Engineering and Technology, Karachi during October 1st, 2019 to December 13th, 2019. (Course Instructor: Dr. Huma Khalid, NEDUET)
 - Successfully Participated in **Two-weeks Faculty Development Program** organized by Quality Enhancement Cell, NED University of Engineering and Technology, Karachi during Jan 15th - Feb 2nd, 2018.
 - **Strategic Time Management Workshop** organized by Timelenders during 23rd-25th November 2018. (Instructor: Mr. Kamran Zahid, Timelenders)
 - **Strategic Vision Workshop** organized by Time lenders during 11-13th May 2018. (Instructor: Mr. Yameenuddin)
 - A Lecture Series on **Modern Mass Spectrometry** held at LEJ International Center for Chemical and Biological Sciences, University of Karachi (2009) (Instructure: Prof. Dr. David Smith-University of Nebraska, USA).
 - Three Months Certificate Course of **Medical Transcription** from Efrogtrain Institute (2004).

G-Research Projects

- PI of **04 funded projects** including NRPU-HEC, PERIDOT/Campus France, SRSP-SHEC, SRGP-HEC (**Worth PKR 16.89 M**)
- PI of **02 in-kind industrial collaborative projects** with **Dewan Sugar Mill and Distillery Division**

H- Patents

- 07 Patents filed at IPO, Pakistan

I- Research Mobility

Year	University/ Organization	Agenda of Mobility	Description
May 2024 & June 2023	Le Mans University, France	PERIDOT 2022 Project Meeting	Meeting with Dr. Philippe Daniel, Dr. Jean PILARD and their team, Lab visits, sharing project outcomes.
Feb 2019	Mahidol University, Thailand	Presenting research findings in conference	Presented Research Article in Pure and Applied Chemistry Conference (PACCON-2019) on Pesticide determination in Rice Samples.
Aug 2015	Asian Council of Science Editors, Dubai	Attending Short Courses on Publication	Presented Research Article on Synthesis and Spectrophotometric study of omeprazole charge transfer complexes with bromothymol blue, methyl orange and picric acid.
May 2015	ICCBES'15 Dubai	Presenting research findings in conference	Presented Research Article in ICCBES,15 on Charge Transfer Complexes received Session Best Paper Award.
Aug 2013	15 th Asian Chemical Congress, Singapore	Presenting research findings in conference	Presented Research Findings on method development and validation for drug determination in pharmaceutical formulation in 15 th Asian Chemical Congress, Singapore.

J- Research Supervision/Co-supervision

At present: 01 PhD and 07 MS Students, 03 FYDP
Completed: 01 PhD, 32 MS, 16 FYDP Projects

K- Publications

Last Five Years Publications

- 38 Ramsha Shamshad, **Saeeda Nadir Ali**, Somia Gul, Syed Sarim Ahmed, Ali Dad Chandio, Ayesha Aziz, Philippe Daniel, Iftikhar Ahmed Channa (2025) Sugarcane Wax-Based Solid Lipid Nanoparticles as an Atorvastatin Carrier: Characterization and *In Vivo* Evaluation of Antihyperlipidemic Activity in Rats. *BioNanoScience* 15, no. 2: 304.
- 37 Shaz Asrar, Amtul Qayoom, **Saeeda Nadir Ali**, Dilshad Hussain (2025), Quercetin capped Au-Ag bimetallic nanoparticles for the detection of calcium dobesilate monohydrate in biological and environmental samples
- 36 Muzamil Jalil Ahmed, Jaweria Ashfaq, Sarim Ahmed, **Saeeda Nadir Ali**, Ali Dad Chandio, Iftikhar Ahmed Channa (2025), Mixed fatty acid cellulose esters from diosmectite oxalate-assisted surface esterification. Investigating properties, techno-economics and sustainability
- 35 Muzammil Jalil Ahmed, Javeria Ashfaq, Z. Sohail, Iftikhar Ahmed Channa, A. Sánchez-Ferrer, **Saeeda Nadir Ali**, Ali Dad Chandio (2024) Lignocellulosic bioplastics in sustainable packaging-Recent developments in materials design and processing: A comprehensive review. *Sustainable Materials and Technologies* Volume 41, e01077.
- 34 Sameera Zaki, **Saeeda Nadir Ali**, Amtul Qayoom, Rafiq Ahmed, Aiman Rasheed Khan (2024) Green synthesis, spectroscopic and theoretical studies on molecular charge-transfer complex of linagliptin with 2, 3-dichloro-5,6-dicyano-1,4-benzoquinone, chloranilic acid and ninhydrin. *Journal of Molecular Liquids* 401 (2024): 124696.
- 33 Muhammad Amir, Muhammad Sajid Ali Asghar, **Saeeda Nadir Ali** (2024) Characterization and antimicrobial properties of cotton fabric loaded with green synthesized silica nanoparticles. *Jurnal Kejuruteraan*, 36(2), 811-816.
- 32 Hafiz Abdul Samad, **Saeeda Nadir Ali**, Amtul Qayoom, Urooj Haroon, Muhammad Saad, Ghina Mumtaz Alavi. (2023) Development, validation and forced degradation studies of green liquid chromatographic method for determination of remdesivir in bulk drug and pharmaceutical formulation. *Pakistan Journal of Pharmaceutical Sciences*, 36(1), 159-170.
- 31 Amtul Qayoom, **Saeeda Nadir Ali**, Rafiq Ahmed, Neha Kanwal and Shazia Nisar. (2023) Synthesis, Characterization and Statistical Optimization of Hydrophobic/Oleophilic Polystyrene Coated ZnO-Cotton Composite as Vegetable Oil Adsorbent. *Journal of Chemical Society of Pakistan*, 45(6), 368.
- 30 Irshad Alam, **Saeeda Nadir Ali**, Amtul Qayoom, Rehana Bibi, Muzna Aqeel, Haji Muhammad, "Green Liquid Chromatographic Method for Simultaneous Determination of Metformin, Linagliptin and Rivaroxaban: Tablet Manufacturing and Application to In-Vitro Dissolution Studies," *Microchem. J.*, p. 109025, 2023.
- 29 Aneeqa Khalid, **Saeeda Nadir Ali**, Amtul Qayoom, Sajid Iqbal, Sadia Ansari, Zahoor Ul Hussain Awan, Farah Kishwar, Philippe Daniel. (2022) High Performance Liquid Chromatography–Ultraviolet Method for the Determination of Fludioxonil Fungicide Residues: Application on Rice Grains Cultivated in Pakistan. *Arabian Journal of Chemistry*, 15(4) 103692.
- 28 Nida Naz, **Saeeda Nadir Ali**, Amtul Qayoom, Sajid Iqbal, Shumaila Akram (2021) "Rapid and Sensitive Method for Simultaneous Determination of Citalopram with Antihistamines by Liquid Chromatography". *Pakistan Journal of Pharmaceutical Sciences*. 34(3) 835-841.

L- Community Outreach Program

S. No	Year of activity	Batch	Beneficiary	Description
7	7 th October 2025		TTRC and School students (Orangi Town)	<u>Exposure Visit of Orangi Town School Students to NEDUET:</u> An educational exposure visit for school students from Orangi Town was organized by the in Collaboration with Department of Student Affairs NEDUET and Technical Training Resource Centre.
6	Jan-Dec 2024	Students from Batch 2020 to Batch 2024	1. Foundation Grammer School 2. Superior Grammar School 3. Merit N Merit 4. TCF Alkaram Campus 5. Ibrahim Ali Bhai Govt Secondary School 6. (Jufelhurst Govt Secondary School) 7. Muslim GGSS No. 1, Nazimabad No.1 8. Dastagir Govt. Girls School 9. Children Public Secondary School 10. Raunaq-e-Islam Girls Secondary School	<u>STEM Awareness Sessions</u> In capacity of STEM Ambassador, awareness sessions were conducted in different schools of Karachi. The activity aimed to enlighten Grade VIII students about the significance of STEM Education and its role in shaping their future careers.
5	Feb 2024 & Sept-Nov 2024	Students from Batch 2020 to Batch 2024	1. Al-Hamd Secondary School 2. City Grammar School 3. Al-Hamd High School 4. Al-Habib Secondary School	<u>Outreach Activity at Orangi Town</u> The activity was based on counselling sessions and teaching to students of grade IX and X to support four underprivileged schools in Orangi Town.
4	Aug 2022	Batch 2021 & Batch 2022	Dar-ul-Sukun, Karachi	<u>Independence Day Celebration with Senior Citizens</u> Students dedicated their time to visit Dar-ul-Sukun Senior Citizen Home in August 2022. They engaged in meaningful conversations, lending a patient ear to the stories and experiences shared by the elderly people. Also, they performed entertaining activities and celebrated Independence Day with them, which brought smiles and warmth to the elderly's hearts.
3	Jun-July 2021	Batch 2020	The Cowasjee School, NED Campus	<u>Strengthen practical skill in students of grade IX and X after Covid-19</u> Lab demonstration of chemistry, biology and physics were carried out to revitalize post-pandemic practical learning.
2	Jan-Feb 2022	Batch 2020 & Batch 2017	Hali Muslim Govt. School, Karachi	<u>Contributing in making class rooms and labs functional in Govt School</u> Ameliorated the condition of Hali Muslim Government Boys Secondary School, Nishtar Road, Garden West, Karachi, by making five classrooms functional after 11 years and restoring three non-functional science labs. Lab equipment was organized, and demonstrations in chemistry, biology, and physics were conducted post-COVID-19.
1	Feb 2020	Batch 2019 & 2017-8	Alfalah Ground North Nazimabad, Karachi	<u>Plantation Drive</u> The plantation drives were arranged in collaboration with the Relief Foundation International. Students planted 27 trees in first drive and 110 trees in second drive at Alfalah Ground, North Nazimabad, Karachi, enhancing environmental sustainability and community greening efforts.

End of file (Updated on October 10th, 2025)