Dr. NuzhatArshad Associate Professor

NED University of Engineering and Technology

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Discipline:	Chemistry	City:	Karachi
CNIC:	42000-5996646-4	Department:	Chemistry
Specialization:	Organic Chemistry	Address:	Lab no II, Dept. of Chemistry, NED University of Engineering & Technology
Email:	nuzhat_minhas@yahoo.com	Phone:	02199261261-2604

Honors / Awards/ Won Funded Projects

NEDAASC Best Publication Award 2016-17 along with Cash Prize received (28 Feb 2018)

Selected in Productive scientists of Pakistan directory under 40 for the year 2016 published in June 2017

NRPU/ HEC: Competitive Research Grant 2016 (9.23 Million) as Principle Investigator (PI)

Appreciation letter From Vice Chancellor of NEDUET 2017

SRGP/ HEC: No: 21-250/SRGP R&D/HEC/2014 (0.318240 million) as COPI

HEC Approved PhD Supervisor 2011

SRGP/ HEC: SRGP R&D/HEC/2010 (0.5 million) as Principle Investigator (PI)

HEC Research Support Initiative Scholarship 2006

HEC Indigenous 5000 Scholarship 2004

Passed International (ETS) GRE Subjective (69 %, Formula Score 81) in 2005

Gold Medal For Securing Ist Class Ist Positions in MSC 2003

Professional Experience (16 years)

Institution/ Organization	Position / Job Title	Period	
Dept. of Chemistry, NED University of Engineering & Technology, Karachi	Associate Professor	2012	continue
Dept. of Chemistry, Federal Urdu Univ. For Arts, Science & Technology, Gulshan Campus, Karachi	Assistant Professor	2009	2012
Karl Franzens University of Graz, Austria	Ph.D. Research Fellow	2006	2009
ICCBS, HEJ Research Inst. of Chemistry, Univ. of KHI, Pakistan	Senior Research Fellow	2005	2006
ICCBS, HEJ Research Inst. of Chemistry, Univ. of KHI, Pakistan	Junior Research Fellow	2002	2005

Academic Activities. Teaching, Administration and Research

Designed and Composed 05 LAB Manuals for BSIC Students.

- 1. Organic Chemistry-1 2. Inorganic Chemistry-1 3. Industrial Chemistry-III
- 4. Industrial Chemistry- VI 5. Industrial Chemistry- VI

Involved in Teaching

- 1. Applied Chemistry, First year BE Students
- 2. Organic Chemistry, Second Year BS (IC)

- 3. Spectroscopy, Third Year BS (I.C)
- 4. Natural Products, Third Year BS (IC)
- 5. Pharmaceutical Chemistry, Final Year BS (I C)
- 6. Surfactants And Cosmetics Final Year BS (I C)

Involved in conducting Lab Courses

- 1. Applied Chemistry
- 2. Organic Chemistry
- 3. Industrial Chemistry Lab II

- 4. Industrial Chemistry Lab IV
- 5. Industrial Chemistry Lab V
- 6. Industrial Chemistry VI.

Administrative Activities

- 1. Incharge of Chemistry Lab II
- 2. Prepared PC(M-IV)/Chemistry, Convener of technical evaluation Committee, Successfully completed Installation process

Research Activities

Theses Supervision

Туре	Role	No. of Students Supervised & Year of Awarded Degrees
BS	Supervisor	1/2012
M.Sc	Supervisor	1/2012
MS(ISP)	Supervisor	2/ 2015
MS(ISP)	Supervisor	2/ 2017
BSIC (Final Year Project)	Supervisor	8/2017
BSIC (Final Year Project)	Supervisor	8-continued

Research Interests

Current Interests: Microwave Assisted/ Conventional Syntheses of Ligands, Medicinal Compounds, Potential Prodrugs, Dyes, Macromolecules and Complexes along with the structural, biological and fluorescent characterization, Coupling Reactions (Pd, Ni, Cu).

Isolation and characterization of Natural Products, Bio transformations.

Under going research project

- 1. Modification of an existing anti-cancer drug for better Pharmacokinetics.
- 2. Preparation of heterocyclic based crown ethers
- 3. Green Preparation of biological active compounds

Publications (Impact Factor 2016 = 17.896)

Co-Author of high ranked International publications

- 1. Kashif Ahmed, Hafiz Abdul Rehman, Nuzhat Arshad, Sobia Israr, Journal of Biodiversity and Environmental Sciences, Vol. 12, No. 2, p. 117-127, 2018
- Ajmal Khan , Jamshed Hashim , Nuzhat Arshad , Ijaz Khan , Naureen Siddiqui , Abdul Wadood, Muzaffar Ali a, Fiza Arshad a, Khalid Mohammed Khan a, M. Iqbal Choudhary, Bioorganic Chemistry 64 (2016) 85-96, Dihydropyrimidine based hydrazine dihydrochloride derivatives as potent urease Inhibitors (impact factor =2.15)
- 3. Talat Mahmood, Yasmin Bibi, Raana Zafar, Aneela Wahab, Iffat Mahmood, Nuzhat Arshad, Sikandar

- Khan Sherwani, Pakistan Journal of Pharmaceutical Science, 2015 (28, No 2) 631-634, Complexation of b-Sitosterol with tris(dibenzylideneacetone) dipalladium and its ant-microbial activity. (impact factor = 0.682)
- 4. J. Hashim, N. Arshad, I. Khan, S. Nisar, B. Ali, M. I. Choudhary, *Tetrahedron*, 2014, 70, 8582-8587, Preparation of Dihydrotetrazolo[1,5-a]pyrimidine Derivatives from Biginelli 3,4- dihydropyrimidine-2-thiones. (impact factor = 2.641)
- 5. N. Arshad, J. Hashim, C. O. Kappe ,**SYNFACTS**, **2009**, **10**,**1145**, Palladium(0)/Cu(I)-Mediated Coupling of Cyclic Thioamides and Thioureas
- 6. N. Arshad, C. O. Kappe "Heterocyclic BINAP Analogues" (2010) Vol:99 pp:33-59, Advances in Heterocyclic Chemistry. (impact factor = 1.783)
- 7. N. Arshad, J. Hashim, C. O. Kappe, (2009) Journal Of Organic Chemistry Vol:74 pp:5118-5121 "Palladium(o)-Catalyzed, Copper(I)-Mediated Coupling of Cyclic Thioamides with Alkenyl Boronic Acids, Organostannanes and Siloxanes". (impact factor = 4.721)
- 8. N. Arshad, J. Hashim, C. O. Kappe, (2008) Journal Of Organic Chemistry Vol:71 pp:4755-4758 "Synthesis of Bisquinolone-Based Mono- and Diphosphine Ligands of the Aza-BINAP Type" (impact factor = 4.721)
- 9. D. Nayab, D. Ali, N. Arshad et al, (2006) Natural Product Chemistry Vol:20 pp:409-413 "Cucurbutacin Glucosides from Citrullus Colosynthis" (impact factor = 1.2)
- 10. N. Arshad, J. Hashim, C. O. Kappe, (2009) ChemInform, 40, 50,
 "Palladium(o)-Catalyzed, Copper(I)-Mediated Coupling of Cyclic Thioamides with Alkenyl Boronic Acids, Organostannanes and Siloxanes
- 11. NuzhatArshad "C-P and C-C Bond Forming Reactions Based on Carbostyrils and Thioamides" (2010) Thesis Book Project, VDM Publishers Vol: pp:1-92
- J. Hashim, N. Arshad, C. O. Kappe . "Desulfitative C-C andC-N cross-coupling of pyrimidine-2-Thione"
 th Asian Symposium on Medicinal plants, Spices and other natural products, ICCBS,
 University of Karachi, 2013
- 13. J. Hashim, N. Arshad, T.N.Glasnov, C. O. Kappe. Synthesies of Bisquinolones via homocoupling and cross coupling reactions 8th International and 20th National Chemistry Conference, Quaid-e-Azam University Islamabad, 2010
- 14. D. Ali, M. Hussain, S. M. Hussain, D. N. Zahra, N. Arshad, Z.Ahmed "Advances in Natural Products" (2007)

 Advances in Natural Products and Health Vol:Chapter-4 pp:21-26
- 15. Desulfitative C-C and C-N cross-coupling of pyrimidine-2-Thione" 14 th Asian Symposium on Medicinal plants, Spices and other natural products, ICCBS,
 University of Karachi, 2013

Academic qualifications

- 11				
`	Year	Degree	Field of Study	Institution/University
	2009	Ph.D	Organic Chemistry	Karl Franzens University of Graz, Austria
	2002	M.Sc	Organic Chemistry	University of Karachi, Pakistan, Gold Medalist

19	998	B.Sc	Chemistry, Botany, Zoology	University of Karachi, Pakistan
19	995	H.Sc	Science	Karachi Board, Pakistan

Member of Professional Body

Member of Board of Studies

Member of Pakistan Chemical Society

Major Fields of Training

Dedicated microwave instruments from all major manufacturers (e.g. CEM, Biotage, Anton Paar, and Miles stone)

BiotageSP1™ Purification System (Flash)

Analytical Instrument HPLC, FTIR

Visited Sites

Austria, Hungary, Germany, Switzer Land, Italy, Off course Pakistan

Conferences/Seminars/Workshops

- 1. Conference on "MAOS-2006 (Advances in Microwave-Assisted Organic Synthesis)" Budapest, Hungary (8/16/2006-8/17/2006) [Foreign]
- 2. Seminar on "Synthesis of Phosphine Ligands of Aza-BINAP type" University of Graz, Austria (1/21/2008-1/21/2008) [Foreign]
- 3. Seminar on "Synthesis of Heterocyclic Phosphine Ligands and Liebeskind-Srogl type C-C Coupling Reactions of Thioamides" Univeristy of Graz, Austria (3/22/2009-3/22/2009) [Foreign]