

CURRICULUM VITAE

DR. ZAHEER AHMED

Personal Information:

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Academic Career :

Mar.1985-Nov.1991 : Ph.D. (Chemistry), H.E.J. Research Institute of Chemistry, University of Karachi.
Title of Thesis : Triflate Induced Syntheses in Carbohydrates & Phytochemical Investigation of *Abutilon* Species.
Thesis Advisor : Professor Dr. Abdul Malik (S.I.)

1982-1985 : M.Sc.(Organic Chemistry), University of Karachi., securing 1st Division (A grade)

1978-1981 : B.Sc. (Chemistry, Biochemistry, Microbiology), Univ. of Karachi, securing First Class Second Position in Karachi.

Certificate Courses :

1993 : German Language Course, University of Konstanz, Germany.
1987-1988 : German Language Course, University of Karachi, Karachi.
1981-1982 : Mathematics, Board of Intermediates, Karachi.

Honors & Awards :

2003-2004 : Guest Researcher, Janssen Pharma, Belgium
1999-2000 : Alexander von Humboldt Fellow, Germany.
1993-1995 : Alexander von Humboldt Fellow, Germany.
1991-1992 : Science and Technology Agency (STA) Fellow, Japan.
1991. Award of National Book Council of Pakistan, Ministry of Education, Govt. of Pakistan, for Publication of Articles in International Journals.
1989-1991 : Senior Research Fellow Scholarship from University Grants Commission, Islamabad.
1982-1984 : Scholarship from Directorate of Colleges Education, Karachi.
1981. Gold Medal on acquiring First Class Second Position in B.Sc. Examinations.

Research Publications : Sixty five

No. of Students Enrolled in Ph.D.: Five (All of these students have been converted from M. Phil / Ph.D. Program into Ph.D. Program).
Two M. Phil / Ph.D. students are working in collaboration with Prof. Dr. S. Nizami, Dept. of Chemistry, University of Karachi.

List of Students:

M. Phil / Ph.D. Output:

Following students of my group have cleared GRE, conversion seminars and M. Phil studies and have been converted into Ph.D. Program

1. Mr. Dildar Ali: converted into Ph.D. Program on 17.01.2005
Title of Thesis: Phytochemical Investigation on the Constituents of *Launaea nudicaulis* and *Euphorbia thymifolia* & Applications of Carbohydrate Triflates.
2. Mr. Munawar Hussain: converted into Ph.D. Program on 12.03.2005
Title of Thesis: Phytochemical Investigations on the Constituents of *Abutilon pakistanicum* and *Abutilon indicum*
3. Mr. Syed Muhammad Shakil Hussain: converted into Ph.D. Program in Dec.2005.
Title of Thesis: Constituents of *Solanum suratum* and *Coronopus didymus*.
4. Ms. Durey Nayab Zahra: converted into Ph.D. Program in Dec.2005.
Title of Thesis: Phytochemical Investigations on the Chemical Constituents of *Citrullus colocynthis* and *Abutilon species*.
5. Ms. Nuzhat Arshad: Have been converted into Ph.D. Program
Title of Thesis: Phytochemical Investigation on the Constituents of *Tecomella undulata* and Microbial Transformations of Some Medicinally Important Compounds.

Following students of Prof. Dr. S. Nizami, Department of Chemistry, University of Karachi, are working in collaboration.

1. Ms. Rizwana Razi : Enrolled in the meeting of BASR held in August 2005.
Title of Thesis: Glycosidation of Some Pharmaceutical and Medicinal Agents.
2. Mr. Abdul Sattar : Enrolled in the meeting of BASR held in December 2005.
Title of Thesis: Phytochemical Investigation on the Chemical Constituents of *Abutilon Pannosum*.

Out of these students following students have been selected for Split / Indigenous Ph.D. 5000 Program / International Research Support Initiative Program

1. Mr. Dildar Ali (Split Program)
2. Mr. Munawar Hussain (Split Program)
3. Ms. Durey Nayab Zahra (Split Program)
4. Mr. Shakil Hussain (International Research Support Initiative Program)
5. Ms. Nuzhat Arshad (Indigenous Ph.D. 5000 Program and as well as International Research Support Initiative Program)

Other Events:

1. Participated in different programs during one week visit of Chinese Delegation in May 2005.
2. Established Synthetic Organic Chemistry Lab. For the students of the Institute and designed practical courses for them.

3. Conducted part of Synthetic Organic Chemistry Course for the students of the Institute under Course System of the institute.
4. Co-ordinator, Workshop on Application of Modern Spectroscopic Techniques in Chemical Sciences, ICCS, Karachi (December 6 – 23, 2004).
5. Organizer Poster Session in 10th International Symposium on Natural Product Chemistry, Karachi, Pakistan, from 6-9 Jan. 2006
6. Co-ordinator, International Workshop cum Training Course on Natural Products, Drugs, Pharmaceuticals and Nutraceuticals for the Benefit of Mankind, ICCS, Karachi (Feb.10 -19, 2006).

No. of Research Projects: Two

1. **As P.I.:** Phytochemical Investigation on Genus Abutilon with Emphasis on Isolation of Some Hypoglycemic Factors, Grant No. 20-24/R&D/2nd Phase/03/315/ HEC. It is a two years project with total costing of Rs. 1,355,000/= (rupees thirteen lacs and fifty five thousands only).
2. **As Co P.I.** Study on the Syntheses and Biological Evaluation of Structurally Modified Pyrimidine Derivatives. The Funding Agency is H.E.C. and its total cost is Rs.1619760/= only. Dr. Nazar-ul-Islam, Associate Professor, Department of Pharmacy, University of Peshawar is **PI**.

Experience :

- Apr. 2002-Present Assistant Professor, **appointed with four advance increaments** at H.E.J. Research Institute of Chemistry, University of Karachi, Teaching and Guiding of M.Phil / Ph.D. students.
- Dec. 2003-Oct. 2004 Guest Researcher, Faculty of Science (COS), Fac. Univ. Notre Dame de la Paix, Namur, Belgium, working on the synthesis of some anti-AIDS agents in the laboratories of Prof. Dr. Alain Krief for Janssen Pharma, Belgium.
Host: Prof. Dr. Alain Krief
- Sept. 1999-Jan. 2000: Alexander von Humboldt (AvH) Fellow, Faculty of Chemistry, University of Konstanz, Konstanz, Germany, guiding M.Phil. / Ph.D. students besides the synthesis of biotin analogs.
Research Director : Prof. Dr. R.R. Schmidt
- July 1995-Apr. 2002: Conducting Collaborative Research in the group of Prof. Dr. Abdul Malik, H.E.J. Research Institute of Chemistry, University of Karachi, which resulted in several joint research publications.
- July 1995-Apr. 2002 : Quality Control / Quality Assurance Manager in National Pharmaceutical Companies, conducting Research & Development Work on Synthetic Pharmaceutical Products and approving the standard, quality, and stability of raw materials and finished products.
- Aug. 1993 - May 1995: Alexander von Humboldt (AvH) Fellow, Faculty of Chemistry, University of Konstanz, Konstanz, Germany, guiding M.Phil. / Ph.D. students besides concentrating on the collaborative research targets.
Research Director : Prof. Dr. R.R. Schmidt
Title of Project : Total synthesis of biotin (vitamin H) analogs via azidosphingosine as an intermediate which is obtained from D-galactose besides the synthesis of some anti-cancer compounds.

Dec.1992-July 1993 : Quality Control Manager in a National Pharmaceutical Company, Chas-A-Mendoza, conducting Research & Development Work on Synthetic Pharmaceutical Products and approving the standard, quality, and stability of raw materials and finished products.

Nov.1991-Nov.1992 : Science and Technology Agency (STA) Fellow, Government Industrial Development Laboratory, Hokkaido, Japan, guiding M.Phil / Ph.D. students besides concentrating on the collaborative research targets.

Research Director : Dr. Harumi Kaga

Title of Project : Synthesis of Dehydropiperonaline (a coronary vasodilator), Piperonaline (an insecticidal) and related biologically active amides by palladium-catalyzed coupling reaction of (E)- β -bromoacrylamides with alkenyl- and alkylboronates.

Dec.1990-Nov. 1991 : Quality Control Manager in a National Pharmaceutical Company, Chas-A-Mendoza, conducting Research & Development Work on Synthetic Pharmaceutical Products and approving the standard, quality, and stability of raw materials and finished products.

Mar.1985-Nov.1990 : Junior Research Fellow, H.E.J. Research Institute of Chemistry, University of Karachi.

Research Supervisor : Prof. Dr. Abdul Malik

Area of Research : Synthetic strategies for achieving novel syntheses of a variety of amino sugars, cyano sugars, and alkaloidal-N-glycosides. The field of Natural Products Chemistry involves the isolation and structural elucidation of several new compounds including alkaloids, terpenoids, steroids, oligosaccharide, and xanthenes etc. from various plants.

Jan.1984- Feb.1985 : Research Student, Department of Chemistry, University of Karachi.

Research Supervisor : Prof. Dr. Atta-Ullah Khan

Title of Project : Synthetic studies in the field of ajmalane alkaloids.

Countries Visited : Japan, Germany, Hong Kong, Switzerland, France, Saudi Arabia, USA, Canada, France, Belgium and Netherland.

Participation in National / International Conferences, Workshops, Seminars & Symposia:

1. 2nd International Symposium UNESCO-SCAMAP, and Pakistan-US Binational Workshop on "Natural Products Chemistry", Karachi, Pakistan (January 1986).
2. International Symposium on Isolation and Structural Elucidation of Natural Products using Spectroscopic Techniques, Karachi, Pakistan (January 1987).
3. 3rd International Symposium and Pakistan-US Binational Workshop on Natural Products Chemistry, Karachi, Pakistan (January 1988).
4. 4th International Symposium and Pakistan-US Binational Workshop on Natural Products Chemistry, Karachi, Pakistan (January 1990)
5. 3rd International Symposium on Flavours and Fragrance Chemistry by H&R, Kyoto, Japan (March 1992).
6. Invited Speaker in 9th National Chemistry Conference, University of Karachi, Karachi (December 1998).

7. Bangladesh-Pakistan Binational Seminar on Natural Product Chemistry, Karachi (Sep. 24 - 26, 2002)
8. Workshop on NMR-Spectroscopy, Karachi (July 27 - 31, 2003).
9. Invited Speaker in Bangladesh – Pakistan Binational Workshop, ICCS, Karachi (2003).
10. 3rd International and 13th National Chemistry Conference, University of Karachi, Karachi(2003).
11. International Symposium on Protein Structure-Function Relationship, ICCS, Karachi (Jan.2003).
12. SAARC - HEJ Training Course on Bioassay and Pharmacological Techniques for Drug Development, ICCS, Karachi (October 10 - 15, 2003).
13. Co-ordinator, Workshop on Application of Modern Spectroscopic Techniques in Chemical Sciences, ICCS, Karachi (Dec. 6 – 23, 2004).
14. International Symposium on Protein Structure-Function Relationship, ICCS, Karachi (Jan.2005).
15. 10th International Symposium on Natural Product Chemistry, ICCS, Karachi (January 2006).
16. Co-ordinator, International Workshop cum Training Course on Natural Products, Drugs, Pharmaceuticals and Nutraceuticals for the Benefit of Mankind, ICCS Karachi (February 2006).

Dr. Zaheer Ahmed

Research Projects of National Interest

1. Phytochemical Investigation on Genus Abutilon with Emphasis on Isolation of Some Hypoglycemic Factors

The species of this genus are reputed to have anti hypoglycemic activities which is a major health problem worldwide. We are continuing research on this topic and so far 3-4 new compounds have been isolated some of which possesses anti- hypoglycemic activities which are being further investigated. We have also obtained financial support from H.E.C. on this project via Grant No. 20-24/R&D/2nd Phase/03/315/ HEC. It is a two years project with total costing of Rs. 1,355,000/= (rupees thirteen lacs and fifty five thousands only).

2. Study on the Syntheses and Biological Evaluation of Structurally Modified Pyrimidine Derivatives.

Search of new medicinally and pharmaceutically interesting compounds is going on in collaboration with Dr. Nazar-ul-Islam, Associate Professor, Department of Pharmacy, University of Peshawar. The Funding Agency is H.E.C. and its total cost is Rs.1619760/= only. As a result of these studies hopefully new medicinally important compounds would

3. Biotransformation Studies.

Biotransformation studies on existing drugs is in process.,