

Dr. Hina Andleeb

Assistant Professor

SA-CIRBS, Faculty of Basic & Applied Sciences, IIU Islamabad



Dr. Hina Andleeb joined SA-Center for Interdisciplinary Research in Basic Sciences (SA-CIRBS) as an Assistant Professor (Chemistry) at International Islamic University in February 2019. Her research is driven by a desire to apply chemical principles and techniques to understand biological mechanisms, to design and synthesize novel enzyme inhibitors for therapeutic use and to understand biosynthetic and signaling pathways with regard to developing novel drugs in the field of drug discovery.

Dr. Andleeb's research work focuses on the areas of unmet clinical need, i.e. diabetes and its complications, Cancer and related pathways and Alzheimer's disease. The central goal of her research is to design, discover and synthesize novel small drug molecules as inhibitors of enzymes involved in the corresponding pathways, for the treatment of such disorders using both *in vitro* & *in vivo* methods. She intends that all of her projects involve interesting chemistry combined with biomedical applications.

As a dedicated researcher having an excellent academic profile, She did her Ph.D availing HEC Indigenous scholarship from Quaid-i-Azam University (QAU), Islamabad and partial Ph.D. research work at the prestigious Oxford University, UK. Her Ph.D research work focuses on synthesis of novel inhibitors of Aldose reductase and human ectonucleotidase family of enzymes and cancer research. As an active researcher, she is publishing her research work in reputed and high impact peer-reviewed international journals of RSC, ACS, Elsevier, Springer etc. She is honored to have her work greatly acknowledged internationally and featured as a **Cover Page** of a high impact peer-reviewed international journal (Impact factor 2018: 8.678) in the issue of July 2018.

Awards & Honours: Selected as Young scientist (from all over the Pakistan) on merit to participate in Global Young Scientist Summit (GYSS) Singapore 2017, hosted by Prime Minister of Singapore, she was honored to present her work to Nobel Laureates, eminent scientists and millennium technology award holders. She was also awarded **Indigenous Ph.D. Fellowship** by Higher Education Commission, Pakistan (for whole Ph.D Programme). **IRSIP fellowship** was awarded to her by Higher Education Commission (HEC) Pakistan for conducting a part of her PhD research at prestigious Oxford University UK. She was also honoured for the award of "**Talent Farming Scholarship**" by Higher Education Commission, Pakistan in year 2008. She was awarded various **Merit scholarships** in M.Sc and M.Phil. She remained a position holder/ distinction holder from her early education to higher education. Dr. Andleeb has been recognized as one of the **Distinguished** Scholars and Students of organic section, Department of Chemistry, Quaid-i-Azam University as She topped in organic chemistry in her M.Sc and M.Phil programme. She also has presented her research work in various national and international conferences/symposia. She is honored to **organize** a mega event with Royal Society ("RSC- Pakistan 1st International Conference on Medicinal Chemistry and Drug Discovery 18-19 October, 2018).

Dr. Andleeb's research work is augmented with the new strategies in the areas of Synthesis, Medicinal chemistry, Spectroscopy and Structural Chemistry. Her expertise in a wide range of spectroscopic techniques such as NMR, IR, LC-MS, MALDI-TOF-MS, and in analyzing and processing the data using different softwares is commendable. She also has significant experience in tissue culture techniques, histone protein extractions, *in vitro* assays etc. Currently she is going to establish a well-equipped lab for Medicinal Chemistry at SA-CIRBS.