Address by Head of Department

Alhamd-o-lillah! The first batch of Chemical Engineering Program has now leaped into final semester engraving the history simultaneously. Moving into the full swing has been demanding restless efforts and energies. Encapsulated in the vision of making this department as a “paradise” for Chemical Engineers is a life resource. To make this dream come true the concept of research based teaching in laboratory performances has become operational. Active experimental and mathematical modeling based research has been initiated.

The developmental targets are no more difficult fruits to pick since ALLAH Almighty has blessed me with a confident team for quality assurance together with financial & administrative support from our worthy Director & worthy Rector. The indigenization in terms of laboratory equipment to a world class level is a milestone that would serve in the development of our country in generations to come.

Strong industrial liaison is inevitable and would sustain only in case of win-win situation. For this it is envisaged our graduates would provide engineering solutions to industries and bring-in new horizons and improvement opportunities in the department. This would further facilitate seeking live problems from industry.

In line with national developmental policies for quality, productivity and process performance enhancement, inter- & intra-departmental research groups have been established. These groups are focused on economically viable processes, alternate / renewable energy, biochemical & food engineering, technical textile, effective utilization of indigenous natural resources, and production improvement options in a packaged manner.

The warfronts are not too many. Hand in hand integrated down to the students' level I believe together, we will make it.
**Prof. Dr. SOHAIL MURAD VISITS DCE**

Dr. Sohail Murad, Head Department of Chemical Engineering, University of Illinois, Chicago, USA (UIC) visited COMSATS, Lahore on a special invitation of honorable Rector. The main objective of the visit was to develop collateral Research & Development relationships between the two universities, who have already signed a MoU in this regard.

Dr. Murad also delivered a series of lectures to faculty and students and envisioned about the latest technical methodologies being followed in USA. He briefed about mathematical modeling and encouraged the faculty to focus this emerging technology for future research work. The students and faculty discussed possible higher education opportunities on offer in USA especially in UIC and the prospect of Pakistani students.

The faculty demonstrated the current research activities being carried out in the department and sought Dr. Sohail’s guidance to explore new horizons.

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**PROJECTS WORKOUT**

The best way of depicting academic learning is final year (Semester) Plant Design Project. The department through a rigorous exercise and finally the students finalized their project titles in consultation with their respective Supervisors. Engr. Fahad Rehman has been nominated the Project Coordinator to solve problems / clarifications required to commence with the projects.

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**6th MEETING OF ChE BoS**

The 6th Meeting of the Board of Studies (BoS) for Chemical Engineering was held on 31st July 2008 at 1400 hours at the Conference Room, CIIT, Lahore Campus. Dr Moinuddin Ghauri, Incharge, Department of Chemical Engineering, CIIT chaired the meeting, while Mr. Liaquat Mahmood, Senior Manager, Engineering Presson Descon International (Pvt) Ltd., Dr. Shahzad. A. Muftri, Advisor / Incharge, Interdisciplinary Research Center in Biomedical Materials (IRCBM), Lahore (by Special Invitation), Dr. Nasir Mahmood, Asstt. Prof. (by Special Invitation), Dr. M. Shamim Sabir, Advisor & Mr. Muhammad Hanif, Assistant Registrar, (M), Principal Seat, CIIT, Islamabad attended the meeting.

Beside recommending the minutes of the 5th meeting of the BoS, following items were deliberated upon:

- The BoS recommended the course contents of the 7th and 8th semesters and forwarded the same to the Board of Faculty of Engineering.
- The BoS recommended the Scheme of Studies of Doctor of Philosophy in Chemical Engineering (PhD-ChE) along with its course contents and forwarded the same to the Board of Faculty of Engineering.
- The BoS recommended the Scheme of Studies (HEC) of BS in Chemical Engineering along with its course contents and forwarded the same to the BoF of Engg.
Embarking on the vision laid by HEC, the department is all set to launch the postgraduate program. The concept paper was drafted by Engr. Aqeel Ahmad Bazmi and was put up in the 6th Board of studies (BoS) meeting. The program was unanimously approved and forwarded to Board of Faculties. The department envisions starting the very program from the next semester and already has some potential candidates from industry and academia.

Realizing the importance of chemical engineering, the Masters program (MS Leading to PhD) in Chemical Engineering will provide knowledge in subjects which is of importance both for further developing both today’s and tomorrow’s process industry. The graduate program is designed to accommodate engineering professionals who are seeking to broaden their knowledge and deepen their technical skills to solve problems of local chemical and processing industries with greater responsibility.

The PhD part consists of three major parts: the first year is devoted to coursework and next two years are devoted to research, and the third part consists of successive seminars to be given by scholar during research period. In addition, an integrative project combines the research and management portions of the program.
# FACULTY SNEAK PEEK

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation</th>
<th>Qualification</th>
<th>Research Area</th>
<th>PEC Registration #</th>
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</thead>
<tbody>
<tr>
<td>Dr. Asad U. Khan</td>
<td>Assistant Professor</td>
<td>PhD (Imperial, UK), M.Sc. Engg (Imperial, UK), D.I.C, B.Sc. Engg (DCET, Pak)</td>
<td>Interface Science/ Engineering, Catalysis</td>
<td>Chem — 1529</td>
</tr>
<tr>
<td>Dr. Anwar–ul–Haq</td>
<td>Assistant Professor</td>
<td>PhD (Ivanovo, Rus), PGDE (Ivanovo, Rus)</td>
<td>Organic Synthesis</td>
<td>Chem — 6951</td>
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</table>
FACULTY SNEAK PEEK

Engr. Wajih ur Rehman

Name
Designation
Qualification
Research Area

Engr. Muhammad Tahir

Name
Designation
Qualification
Research Area
PEC Registration #

FDP SCHOLARS

The faculty development program at COMSATS provides an opportunity to the young faculty members to improve their qualification and enhance professional expertise comparable to international arena. Department of chemical engineering was honoured last year when three of her faculty members were awarded fully funded scholarship under FDP scheme of COMSATS.

Engr. Fahad Rehman completed his M.Sc. in Environmental and Energy Engineering with distinction both in theory courses as well as in his research project from University of Sheffield, UK and recently rejoined the department.

Ms. Maryam Irshad completed her M.Sc. in Polymers and Material Sciences with distinction from University of Sheffield, UK and rejoined the department.

Engr. Muhammad Tahir successfully completed his M.Sc. Advance Process and Plant Design with distinction from Manchester University, UK and recently rejoined the department.
FACULTY ACHIEVEMENTS

The department of Chemical Engineering is proud to have one of the best faculties in town; always ready to sharpen their tools and prove their individuality, versatility and abilities. Petronas is one of the leading Petrochemical firms of the world and has done some great developmental works in the academics and research fields. It is quite customary of her to offer research projects to faculty of University technology, Petronas in varying capacities and areas. Recently, five (05) of her faculty members have been awarded fully funded PhD scholarships by University of Technology Petronas, Malaysia. The details are:

Engr. Abrar Inayat and Engr. Zakir Khan shall be working in the areas of Bio gasification and Biodiesel formation, Engr.

STUDENTS SOCIETY

Department of Chemical Engineering was established in 2003, enrolled students in Bachelor of Chemical engineering in 2005 and launching first batch in June 2009. There is an updated vision of department, research, scheme of studies.

This much students are enrolled

There is a student society in this department which helps in communication between the students effectively and an information from the department travels within seconds to every student. There are different sections among which one is newsletter team which compiles the events taken place in the form of a newsletter.

The structure demonstrates the working of the department for all the student activities and events which is in proper control of the department under direct control of Head of Department.

Faculty members and students join hands to workout various events and make it a success with proper management.
**INTERNSHIPS**

Internship training is an important and integral part of the BS Engg program in any discipline and is mandatory as partial fulfillment of degree requirement. Engr. Abrar Inayat, Industrial Liaison Officer of the department arranged internships in some of the renowned industries of Pakistan and abroad. Students of 7th semester successfully completed their training in industries like Crown Industries, Bahrain, Pakistan Refinery Limited, Attock Refinery Limited, Dewan Salman Fibres, Pakistan Cement, etc.

Visualizing the importance of these programs the department has awarded credits to internship training. The students discussed their learning experiences with the Faculty of Chemical Engineering in form of a formal presentation session organized by Ms. Beenish Sandhu (Batch Advisor, Incharge Co-Curricular Activities).

**INDUSTRIAL TOURS**

Students of 5th semester (Batch-III) visited Rawalpindi and Hattar regions’ industrial zones under the supervision and guidance of Engr. Imran Aslam and Engr. Muhammad Ahmad. They were briefed by the personnel at Attock Refinery Limited, Wah Ordinance factory, Dewan Salman Fibres, Hazara Phosphate, Bestway Cement, Heavy Mechanical Complex, KSB Pumps to name a few.


**LIAISON OFFICE CHANGED**

The department has a new Industrial Liaison Officer in Dr. Asad U. Khan and Engr. Khurram Shahzad shall now assist him. The new team is now fully functional and performing its duties as desired.
SPORTS

Inter Departmental sports competition has been a regular feature of COMSATS, Lahore. Students of chemical engineering department have regularly taken part in this biannual competition but their best performance was yet to come and when it came, it came with a big BANG. The department won Football title beating MBA in the final (9-0), Volleyball beating BBA (3-0), Table Tennis (2-1), and Athletics winning 5 of the 7 tracks; not much encouraging results in Cricket and Hockey.

All the classes took active part ON & OFF the field especially batch-II and batch-III students. Engr. Fahad Rehman (Sports Incharge) and Engr. Amjad Riaz backed up the students with moral support and tips from the yester years’ experience. And the result was awesome as the department Won the Sports Title for the first time. CONGRATS to ChemiNeers.

WELCOME PARTY

Extra Curricular Activities provide students with an opportunity to socially groom themselves to be able to learn other things besides academics and Welcome parties are not unique. This semester again Ms. Kanwal Rashid (Incharge Extra Curricular wing), Engr. Ghulam Murshid (Departmental Student Advisor, DSA) and Engr. Abrar Inayat (Event Coordinator) helped 2nd semester students (Batch VI) to organize welcome party of the young COMSIANS (Batch VII). There were some entertaining and hilarious skits and vocal and acrobatic performances by the students. The program ended with welcome and thankful speeches from both classes and the formal speech of Dr. Moinuddin Ghauri (Incharge/ HoD). Refreshment was served at the end.

Participation @ CIIT Convocation

Faculty and Students of Chemical Engineering participated actively as in organizing Convocation of COMSATS Lahore Campus. Dr Nasir chaired the committee from Department of Chemical Engineering and led to the success of the event.

On the day students beautified the campus outlook with flags and flowers, welcomed guests and coordinated them to their designated section, arranged seats all without disturbing the proceedings of the function. This offered another session of learning teamwork and coordination between multi-tasking events.
Lab work is essential for any engineering program and for the same reason; the department is continuously upgrading its laboratories with state of the art facilities. During the current economic recession in the country, the faculty of Chemical Engineering department stepped forward to design and locally fabricated equipments with the guidance of visionary HoD and leadership of our worthy Director. This sole act (detailed below) saved millions of rupees and a possible foreign reserve of the country.

**Heat Transfer Lab:**
- Open Pan Evaporator
- Flue Gas Heater
- R & D Boiler
- Composite Wall System
- Temperature Distribution system

**Instrumentation & Process Control Lab:**
- Level measurement system
- Level sensing and control system
- Temperature controller
- Thermocouple calibration apparatus
- Manometer Assembly
- Flow & Pressure Controller

**Fluid & Particle Mechanics Lab:**
- Fluid Flow Rig
- Venturi Meter Assembly

**Particulate Technology Lab:**
- Orifice Meter Assembly
- Centrifugal Pumps in Series and Parallel combination

**Fuel & Combustion Lab:**
- Oil Expellers
- Disc Mills
- Tube Furnace

**Engineering Workshop Lab:**
- Lathe Machine
- Pillar Type Drill Machine
- Electric Welding Plant and assembly
- Gas Welding Plant and assembly
- Grinding Machines
- Lots of supporting tools and kits

**Thermodynamics Lab:**
- Boyle's law Apparatus
- Mechanical Energy equivalent measuring apparatus

**General Chemistry Lab:**
- Glass ware and chemicals for running use were bought in addition to Orbital Shakers, water baths, shaking water baths, magnetic stirrers, etc.

**Physical Chemistry Lab:**
- Digital Melting Point Apparatus
- Orbital Shakers
# Department of Chemical Engineering

**COMSATS INSTITUTE OF INFORMATION TECHNOLOGY**

1–Km Defence Road, Off Raiwind Road, Lahore – 54000, Pakistan

Phone: +92-42-111-001-007, Ext. 288  
Fax: +92-42-5914344  
E-mail: ariaz@ciitlahore.edu.pk

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## Newsletter Team

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<thead>
<tr>
<th>Patron</th>
<th>Director</th>
<th>Members</th>
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<tr>
<td>Dr. Shaukat Ali Hayat</td>
<td></td>
<td>Engr. Amjad Riaz</td>
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<td>Lecturer</td>
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<tr>
<td>Chairman</td>
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<td>Engr. Amna Akhtar</td>
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<tr>
<td>Engr. Dr. Moinuddin Ghauri</td>
<td>HoD</td>
<td>Mr. Mudassar</td>
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<tr>
<td>Incharge</td>
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<tr>
<td>Engr. Dr. M. Shamim Sabir</td>
<td>Advisor</td>
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<td>Engr. Aqeel Ahmad Bazmi</td>
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<td>Asstt. Professor</td>
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