



# **COMSATS University Islamabad (CUI)**

**25<sup>th</sup> Meeting of COMSATS Coordinating Council  
10<sup>th</sup> September 2024**

By:

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Head International Office**

**On Behalf of:  
Prof. Dr. Sajid Qamar  
Rector COMSATS University Islamabad**



# CUI's Vision & Mission



## Vision

The COMSATS University Islamabad envisions assuming a truly national character for itself in the years to come. It envisions having presence in all provinces of the country. It sees for itself a position among the top five (5) universities in the country; among top 100 universities in the developing countries and top 300, 200, 100 universities in the world respectively in the 5, 10 and 15-years' time horizon.



## Mission



Teaching & Learning

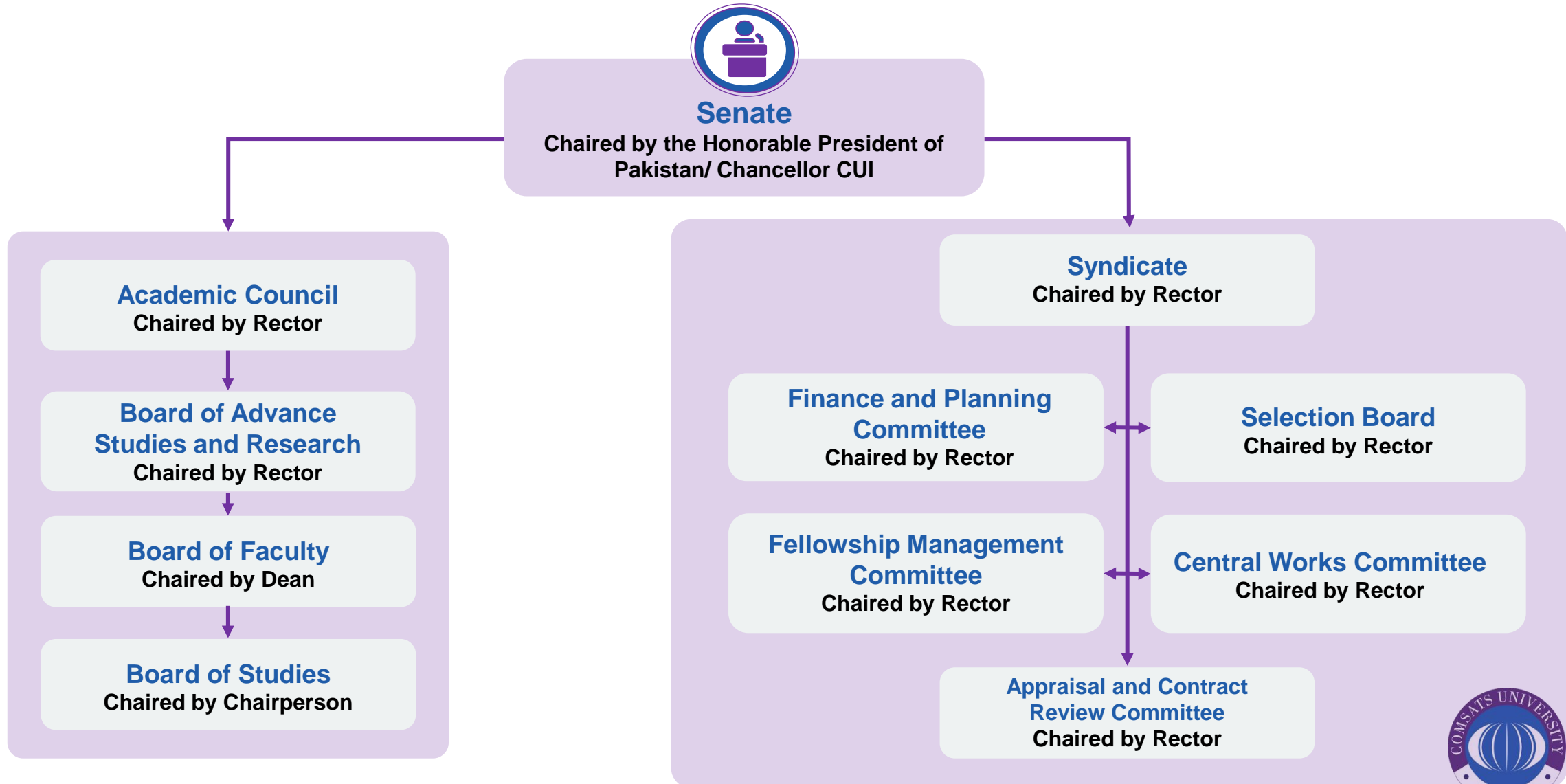


Research, Innovation & Commercialization



Outreach and Public Service

# STATUTORY STRUCTURE





# Journey of Excellence



Milestones	2000	2024
Campuses	1	7
Total Faculty	15	1,940 +
PhD Faculty	--	1,100 + (Highest in Pakistan)
Academic Programs	3	110 +
Student Enrolment	277	34,390 +
International Students	--	210 +
Alumni	--	107,129 +
Research Centers	--	6
Research Publications	--	27,040+
Patents Granted / Licensed	--	44/3

# ACADEMIC DISTRIBUTION

6 FACULTIES

22 DEPARTMENTS

01

## Faculty of Architecture & Design

- Architecture, and Art & Design

02

## Faculty of Engineering

- Chemical, Civil, Mechanical, and Electrical & Computer

03

## Faculty of Business Administration

- Development Studies, Economics, Humanities, and Management Sciences

04

## Faculty of Information Science & Technology

- Computer Science, and Health Informatics

05

## Faculty of Science

- Chemistry, Earth Sciences, Mathematics, Meteorology, Physics, and Statistics

06

## Faculty of Health Sciences

- Biosciences, Environmental Sciences, Pharmacy, and Biotechnology

# INTERNATIONAL RANKINGS



## World University Rankings 2024

**601-800**  
2<sup>nd</sup> in Pakistan

**157** in Asia

**154** Young University Rankings 2024

ENGINEERING & TECHNOLOGY	401	-to-	500
LIFE SCIENCES	401	-to-	500
COMPUTER SCIENCE	401	-to-	500
BUSINESS AND ECONOMICS	301	-to-	400
PHYSICAL SCIENCES	301	-to-	400

## THE IMPACT RANKINGS

**201-300** Impact Ranking 2023

### FIRST IN PAKISTAN In UN's all SDGs



# RESEARCH CENTERS



**Interdisciplinary  
Research Center for  
Biomedical  
Materials**

**Lahore Campus**

**Medical Image  
Processing Research  
Group**

**Islamabad Campus**



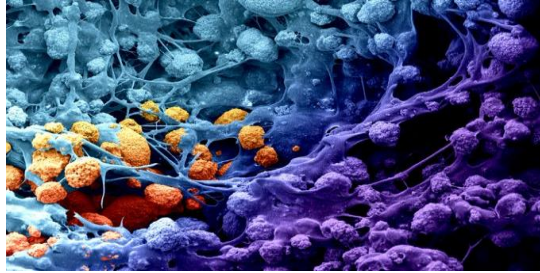


# Interdisciplinary Research Center for Biomedical Materials Lahore Campus

## DENTAL MATERIALS



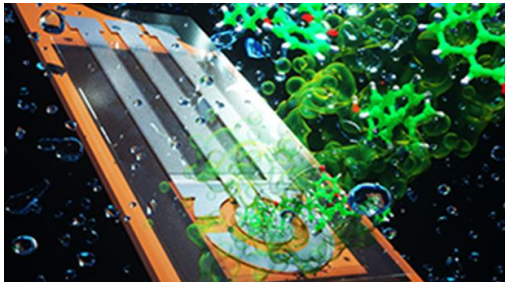
## BONE REPAIR & REGEN.



## SOFT TISSUE ENGG.



## SENSORS & BIOSENSORS



## Selected Examples in the Aforementioned Domains:

- ❖ Digital Orthopaedics and Dentistry (3D Printing, Machining of Biomedical Devices)
- ❖ Halal Bone Regenerative Materials for Improved Tissue Healing
- ❖ Advanced Characterization (Micro CT, FE-SEM, XRD, FTIR, Confocal Microscopy etc.)
- ❖ Disease diagnostics and monitoring (Alzheimer's, Dengue, Cancer)
- ❖ Skin and Wound repair (diabetic foot ulcers, chronic wounds, burns)







# Interdisciplinary Research Center for Biomedical Materials Lahore Campus

## TECHNOLOGY COMMERCIALIZATION

**850**  
Pub. IF ~ 2500

**40**  
Patents

**Rs 60m**  
Inflows

**Rs. 286 m**  
Inflows till 2028

**03**  
Licensed Tech.



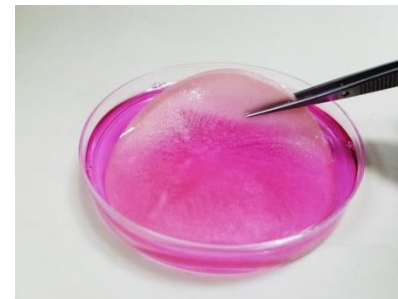
**Cannenta**  
ADVANCED WOUND CARE  
Licensing Partner  
Australia



**Cotton Craft Pvt Ltd**  
Licensing Partner  
Pakistan



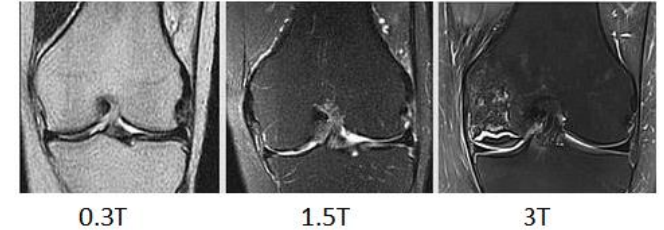
**Licensing Partner**  
Pakistan



\* Established in 2014

### MRI Scanning (Conventional)

- Limited access to expensive high-field MRI scanners
- High operational & infrastructure costs for high-field MRI scanners
- Predominance of low field MRI scanners (0.25T, 0.35T, 1.5T)
- Inadequate image resolution impacting diagnostic accuracy



### MIPRG Research Areas

- Parallel Imaging and Compressed Sensing
- ASIC (Chip Design)
- Parallel Computing
- AI in image reconstruction
- Magnetic Resonance Fingerprinting (MRF)

### Research Benefits

1. Cost effective (Low Cost) solution for patients
2. Better diagnosis and treatment of diseases
3. A better solution in case of electricity and power shortage



# MIPRG Milestones



International Collaborations

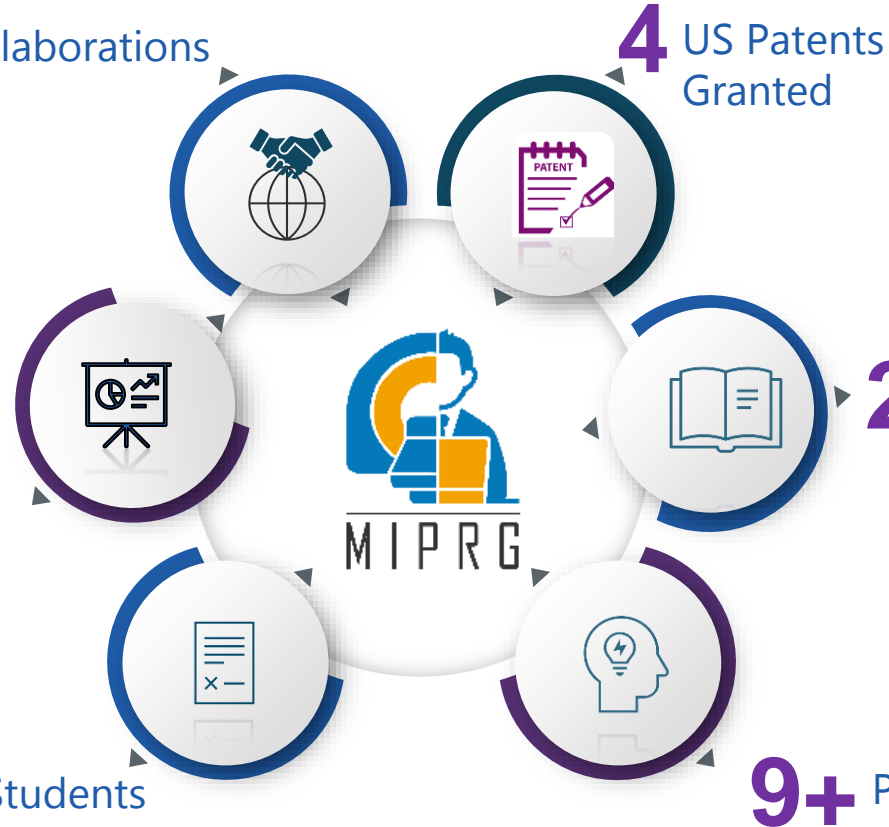
4 US Patents  
Granted

220+ Research Papers  
Scientific Journals & International Conferences

60+ UG Students

27+ Masters Students

9+ Ph.D. Students Graduated



## International Patents Granted by United States Patent and Trademark Office (USPTO)

- 'GPU BASED IMPLEMENTATION OF SENSE (A PARALLEL MRI ALGORITHM) USING QR DECOMPOSITION'; Patent No. US 10,408,906 B2, Type: Grant, Date of Patent: September 10, 2019, Inventors: Hassan Shahzad, Irfanullah, Hammad Omer. Grant Authority: United States Patent & Trademark Office
- 'GRAPHICAL PROCESSING UNIT (GPU) IMPLEMENTATION OF MAGNETIC RESONANCE FINGERPRINTING (MRF)'; Patent No. US 10,634,748 B2, Type: Grant, Date of Patent: April 28, 2020, Inventors: Irfanullah, Hammad Omer. Grant Authority: United States Patent & Trademark Office
- 'PARAMETERIZED FPGA IMPLEMENTATION OF A REAL-TIME SENSITIVITY ENCODING RECONSTRUCTION'; Patent number: US 10,488,483 B2, Type: Grant, Date of Patent: November 26, 2019, Inventors: Muhammad Faisal Siddiqui, Hammad Omer. Grant Authority: United States Patent & Trademark Office
- 'GPU BASED IMPLEMENTATION OF SENSE (A PARALLEL MRI ALGORITHM) USING LEFT INVERSE METHOD'; Patent No: US 10,598,753 B2, Type: Grant, Date of Patent: March 24, 2020, Inventors: Hassan Shahzad, Irfanullah, Hammad Omer. Grant Authority: United States Patent & Trademark Office





# China Study Centre Islamabad Campus



## Focus Areas

- ❖ Joint Research and Collaborations with Pakistan Study Centers and Universities & Institutions in China
- ❖ Placement of Pakistani Students in Institutes of Higher Learning in China
- ❖ Promotion of Student & People to People Contacts between Pakistan and China







# Engagements with COMSATS Member Countries 1/4

## Scholarships for COMSATS Member Countries

- ❖ Offered 100 Scholarships for MS & PhD
- ❖ 40 Scholarships Utilized by:
  - ❖ China, Gambia, Jordan, Nigeria, Palestine, Sudan & Yemen
- ❖ Admission for Spring 2025 & Fall 2025 are Open
- ❖ This Scholarship covers the fee for the entire MS and PhD programs, including:
  - i. One-time charges (Admission, Graduation & security) \$550
  - ii. Per semester fee (Tuition, Registration & lab charges) \$1600



# Engagements with COMSATS Member Countries 2/4

## Ongoing Academic Collaborations

Collaborating Partners	Commencement Date
General Sir John Kotelawala Defense University, Sri Lanka	September 2021
Industrial Technology Institute, Sri Lanka	March 2, 2021
Harbin Engineering University, China	November 2, 2020
D-8 International University, Iran	February 26, 2024
Usak University, Turkiye	March 1, 2024
Xidian University (XDU), China	June 11, 2024



# Engagements with COMSATS Member Countries 3/4

## International Mobilities

### Visit of Official Delegations

- ❖ Two CUI Official Delegations Visited International University, Malaysia and USAK University, Turkiye
- ❖ Fifteen Official Delegations from COMSATS Member Countries including Iran, Nigeria and Turkiye Visited CUI

### Student Mobilities

- ❖ Three CUI Students availed Semester Exchange Mobility at Middle East Technical University (METU), Turkiye
- ❖ Two Students went to Ajman University, UAE for Semester Exchange

### Staff Mobilities

- ❖ Two CUI Officials from International Office (IO) and Quality Enhancement Cell (QEC) participated in International Staff Week organized by USAK University, Turkiye



# Engagements with COMSATS Member Countries 4/4

## Participation Of Faculty, Staff and Students

- ❖ Trainings, Workshops, Conferences, etc.
- ❖ Resource person as well as participants

## Joint Research Projects





- ❖ Collaborative Projects with organization of COMSATS Members Countries

## International Faculty Serving in CUI




- ❖ Dr. Sadat Al Shariyeh Hosseini, Associate Professor, Architecture, CUI Lahore (From Iran)
- ❖ Dr. Yasser MSA Alkhaiman, Associate Professor, Pharmacy, CUI Abbottabad (From Syria)



# Contribution of CUI towards UN SDGs 1/2

SDGs	Activities
<b>No Poverty</b> 	<p>CUI Students Financial Aid Office (SOFA) is actively engaged in providing assistance to the children belonging to low-income families and want sustainability in education to stand up on their own feet.</p>
<b>Zero Hunger</b> 	<ul style="list-style-type: none"> <li>❖ COMSATS University Islamabad provides student cafeterias that offer a variety of food items at economical prices. These cafeterias serve as a convenient dining option for students and staff on campus.</li> <li>❖ The faculty members of the Environmental Science Department at CUI Vehari Campus are actively involved in research related to food security, food waste management, risk assessment etc.</li> </ul>
<b>Good Health and Well-Being</b> 	<p>The Pakistan Red Crescent Society (PRCS) organized A Blood Donation Camp at COMSATS University Islamabad, on May 21, 2024, to demonstrate CUI's commitment to serving humanity by collecting high quality blood on a voluntary basis.</p>
<b>Quality Education</b> 	<p>The team of Quality Enhancement Cell (QEC) COMSATS University Islamabad (CUI), Principal Seat visited CUI Wah Campus on May 17, 2024 to conduct the MS/PhD Program review.</p>

# Contribution of CUI towards UN SDGs 2/2

SDGs	Activities
<b>Gender Equality</b> 	Participation of Dr. Tahira Nazir Assistant Professor, Department of Management Sciences, attended the 13th International Conference on Business and Economic Development (ICBED) in New York from April 15th to 16th, 2024
<b>Clean Water and Sanitation</b> 	The Director Campus / UNESCO Chair on Knowledge Systems for Integrated Water Resources Management (IWRM) , Prof. Dr. Muhammad Abid T.I. attended the inaugural session of 8th International Water Conference (81WC) on a Valuing Water for Sustainability as Guest of Honor on March 6, 2024
<b>Grow Affordable and Clean Energy</b> 	All buildings at CUI campuses are designed and constructed with a focus on energy efficiency parameters and compliance with standards issued by the capital Development Authority (CDA) and the government of Pakistan



## Way Forward for South-South Cooperation

- ❖ Focus to Achieve Sustainable Development Goals through Partnership and Sharing of Resources
- ❖ Scholarships for Member Countries for MS and PhD Programs of CUI
- ❖ Exchange of Students, Faculty and Staff among Network
- ❖ Training for Repair of Scientific Equipment
- ❖ Create Consortium of Research Centers to Prepare Joint Research Projects
- ❖ Participation in Joint Workshops, Seminars, Trainings and Conferences

# Thank You!



**JUST  
SAY **NO**  
TO PLASTIC!**

<https://www.comsats.edu.pk/>



## Back Up Slide:

# Future Plans for COMSATS Network



- CUI looks forward to receiving positive updates from the University of the Gambia (UTG). CUI still remains committed to this valuable collaboration
- It is proposed that both universities may proceed with signing the IoC and identifying focal persons, allowing for the initiation of joint activities