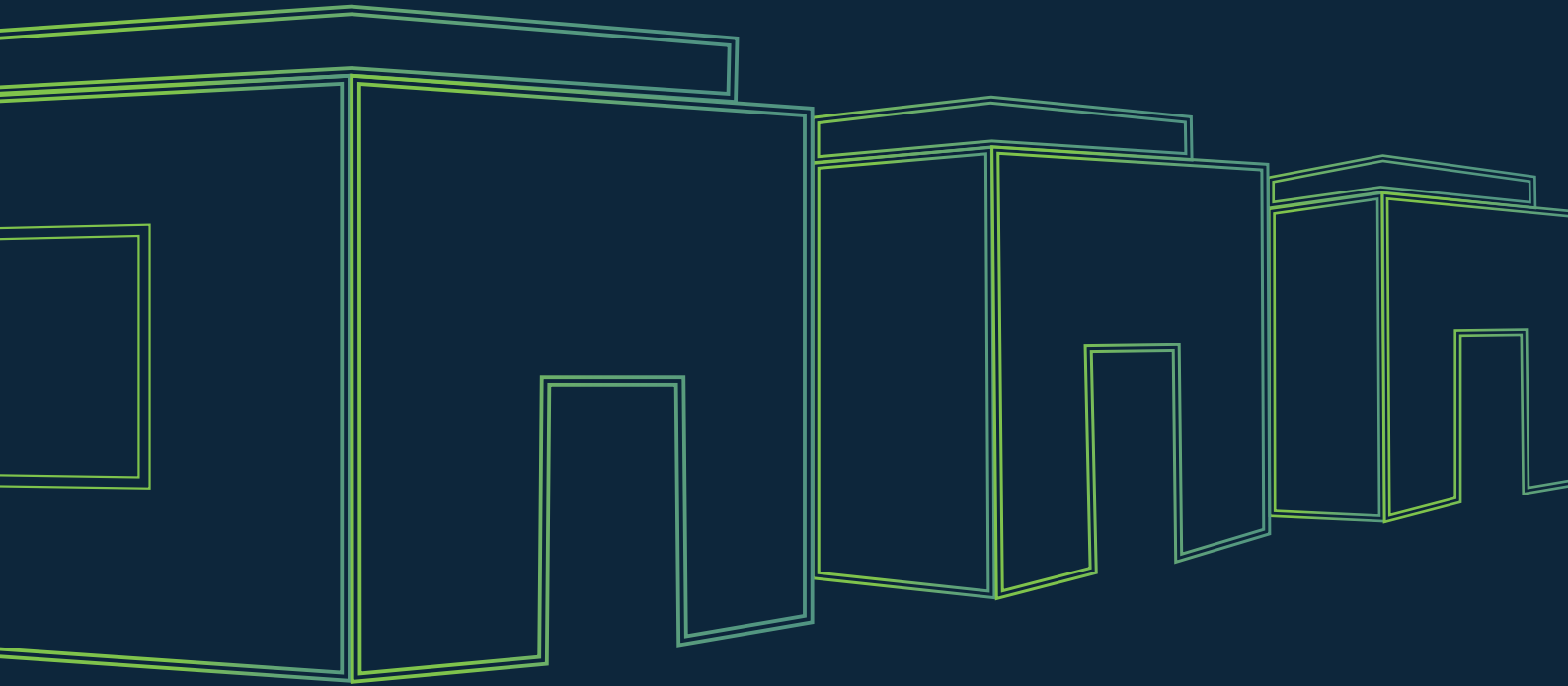
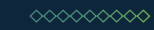




جامعة خليفة
Khalifa University

ANNUAL REPORT 2023





NURTURING
TOMORROW'S
LEADERS
GROWING THE
KNOWLEDGE
ECONOMY



TABLE OF CONTENT



SUSTAINABILITY
@ KU

18



UNIVERSITY
RANKING

23



2023 – THE
SUCCESS STORY

64



PRESIDENT'S
FOREWORD

06



OUR INFLUENTIAL
RESEARCH

55



PARTNERSHIPS &
COLLABORATIONS

81



ABOUT KHALIFA
UNIVERSITY

07



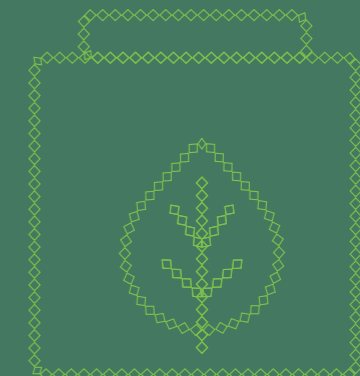
KU'S WORLD
CLASS
EDUCATION

22



KU AS A CATALAYST
FOR UAE ECONOMIC
DEVELOPMENT

61



PRESIDENT'S FOREWORD

For Khalifa University of Science and Technology, the year 2023 marked several milestones. The collaborative efforts of our diverse group of renowned faculty, staff, and top students enabled us to reach 2nd position in the Times Higher Education (THE) Arab University Rankings 2023, out of 313 universities across 18 countries from the Middle East and North Africa region. Each year, as we progress, we continue to validate our research capabilities, faculty expertise and cutting-edge facilities that expedite innovation.

COMMITTED TO EVOLVING WITH THE UAE'S DYNAMIC STATUS AS AN ADVANCED ECONOMY, WE DELIVER PIONEERING RESEARCH AND INNOVATION IN KEY AREAS OF STRATEGIC RELEVANCE, INCLUDING: SUSTAINABILITY, CLEAN AND RENEWABLE ENERGY, WATER AND ENVIRONMENT, HYDROCARBON EXPLORATION, ARTIFICIAL INTELLIGENCE AND ROBOTICS, HEALTHCARE, AEROSPACE AND ADVANCED MATERIALS.



PROFESSOR SIR
JOHN O'REILLY
PRESIDENT

Throughout the year, I have been impressed to witness the continuous dedication of Khalifa University's faculty and staff to ensuring our graduates are fully equipped with the knowledge and skills needed to succeed in a fiercely competitive professional world, with our collaborative efforts continuing to enhance the caliber of our students' research output.

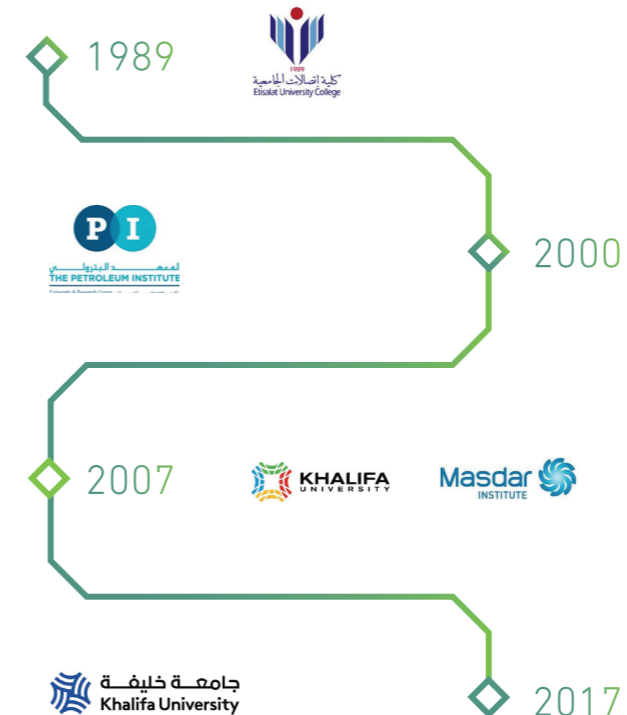
As the top-ranked university in the country, Khalifa University remains at the forefront of the UAE's knowledge economy transformation, pushing the boundaries of science, technology, and research, creating the next generation of leaders who will guide the UAE onwards to the next phase of progress.

I am confident that with the drive and commitment of faculty, staff, and students, Khalifa University will continue the momentum and engagement that have enabled our success and recognition, as we consistently respond to the directives of the UAE leadership.



ABOUT KHALIFA UNIVERSITY

HISTORY / JOURNEY



Khalifa University of Science and Technology can trace its origins back to 1989, when Etisalat University College was established by the Emirates Telecommunications Corporation, the UAE's telecommunications and phone provider, in Sharjah, UAE, to develop a pipeline of human capital in the fields of engineering and applied sciences.

Eleven years later, the Petroleum Institute was established as a leading international educational and research center for the oil and gas industry. Funded by the Abu Dhabi National Oil Company (ADNOC) and its international partners, the Petroleum Institute graduated its first group of engineers in summer 2006 and witnessed the enrolment of the first female students in the fall of the same year.

In 2007, Khalifa University of Science, Technology and Research (KUSTAR) was established by Presidential decree to offer a broader range of engineering programs to the nation's budding engineers. The same year, Etisalat University College was acquired by KUSTAR. Also in 2007, the Masdar Institute of Science and Technology was established by Presidential decree, as the region's first research-intensive, graduate-level university focused on advanced energy and sustainable technologies.

In 2017, UAE President and Ruler of Abu Dhabi, His Highness Sheikh Khalifa bin Zayed Al Nahyan, issued a decree to merge KUSTAR, Masdar Institute and Petroleum Institute under one university called the Khalifa University of Science and Technology.

BOARD OF TRUSTEES



H.H. SHEIKH HAMED BIN ZAYED AL NAHYAN
Chairman of The Board of Trustees of Khalifa University



H.E. HOMAÏD AL SHIMMARI
Vice Chairman of the Board of Trustees of Khalifa University, Deputy Group CEO and Chief Corporate & Human Capital Officer, Mubadala



H.E. AHMED TAMIM HISHAM AL KUTTAB
Member of the Abu Dhabi Executive Council Chairman of the Department of Government Enablement



H.E. SALEM BUTTI SALEM AL QUBAISI
Director General of the UAE Space Agency



H.E. FAISAL AL BANNAI
Chairman, EDGE Group



H.E. DR. SALEH AL HASHMI
Director, Group Commercial & In-country Value Directorate , ADNOC



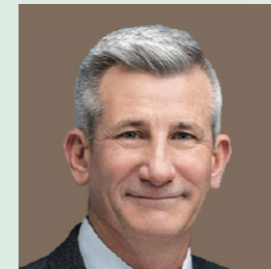
MR. ANAS JAWDAT AL BARGUTHI
Chief Operating Officer Of ADQ



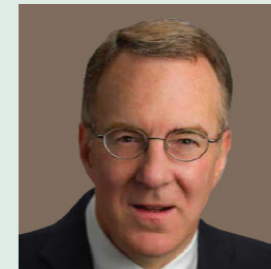
ENG. HATEM DOWIDAR
Chief Executive Officer of Etisalat Group



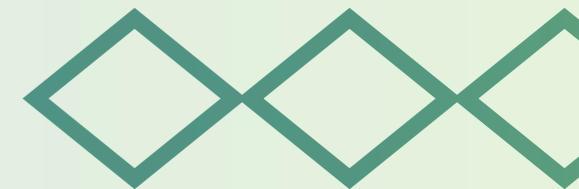
DR. HORST SIMON
Director of Abu Dhabi Investment Authority



MR. JOHN W. NICHOLSON JR.
Chief Executive, Lockheed Martin Middle East



MR. JEFF SIMMONS
Senior Vice President, Technical Planning and Evaluation Occidental Petroleum Corporation



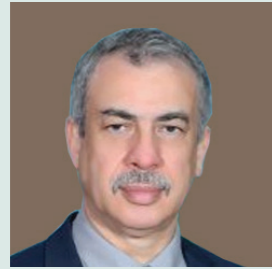
LEADERSHIP TEAM



PROFESSOR SIR JOHN O'REILLY
President



DR. ARIF SULTAN AL HAMMADI
Executive Vice President



DR. BAYAN SHARIF
Provost



DR. EBRAHIM AL-HAJRI
Senior Vice President, Support Services



MR. JALAL EL JAZZAR
Senior Vice President, Finance and Investment



DR. YOUSOF AL-HAMMADI
Acting Senior Vice President, Academic and Student Services Associate
Professor and Assistant Vice President, Graduate Studies.



MR. ABDULAZIZ ABDULLA ALKHOORI
Vice president, Audit, Acting Vice President, Compliance and Risk Management



MR. EBRAHIM JAFAR ALAHMED
Vice President, Finance and Business Development



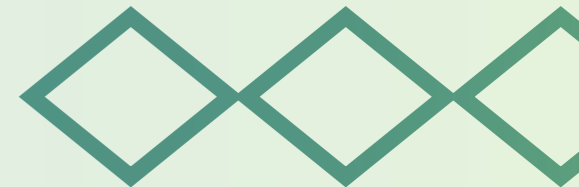
MR. ESMAEEL ABDUL KARIM ALAHMED
Vice President, Procurement and Contracts



MR. RUDOLPH PAUL WAELS
Vice President, Investment



MR. FAHEM SALEMAL NUAIMI
CEO Ankabut



COMPLIANCE & ACCREDITATION

COMPLIANCE

In line with our mandate and the UAE leadership's directive to uphold the values of integrity, honesty and professionalism in a multi-ethnic, multicultural and hugely diverse environment, the Khalifa University Office of Compliance and Risk Management aims to sustain the high ethical standards of our institution. Our objective is to ensure respect for one another, freedom of inquiry and expression, trust, honesty and fairness, especially through integrating these values into education, research, and business practices.



3 

PHD PROGRAMS

ACCREDITATION

The University is fully licensed and all its programs are accredited by the Commission for Academic Accreditation (CAA) of the Ministry of Education in the United Arab Emirates.

The University aims to obtain accreditation and recognition for its programs from international accreditation and recognition bodies.

The accreditation applications for the programs during 2022-23 include 3 PhD programs, 3 MSc programs and 1 BSc program as well as 5 substantive changes that have all been approved by CAA and Abu Dhabi Department of Education and Knowledge (ADEK).



ABET

ABET ACCREDITATION

The following programs offered by the College of Engineering and Physical Sciences are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET), www.abet.org:

- ▶ Bachelor of Science in Aerospace Engineering
- ▶ Bachelor of Science in Biomedical Engineering
- ▶ Bachelor of Science in Chemical Engineering
- ▶ Bachelor of Science in Civil Engineering
- ▶ Bachelor of Science in Computer Engineering
- ▶ Bachelor of Science in Electrical Engineering
- ▶ Bachelor of Science in Industrial and Systems Engineering
- ▶ Bachelor of Science in Mechanical Engineering
- ▶ Bachelor of Science in Petroleum Engineering

The following program offered by the College of Engineering and Physical Sciences are accredited by the Applied and Natural Science Accreditation Commission (ANSAC) of the Accreditation Board for Engineering and Technology (ABET), www.abet.org:

- ▶ Bachelor of Science in Petroleum Geosciences



NEW PROGRAMS INTRODUCED DURING 2023

3 

MSC PROGRAMS

1 

BSC PROGRAM

CAMPUS & FACILITIES

Khalifa University has two campuses in Abu Dhabi – the Main Campus and the Sas Al Nakhl Campus. Each is fully equipped to facilitate high quality academic and research activities whilst also supporting an active student life.

MAIN CAMPUS

The KU Main Campus is located on Abu Dhabi Island at the intersection of Al Saada St. and Old Airport Rd. It is where the central administration for the University is located and all general education courses are taught.

The Main Campus covers over 135,000 square meters and houses 105 laboratories, including state-of-the-art aerospace and underwater robotics labs, 72 classrooms, the UAE's largest academic sports center, retail and food outlets, and multi-story parking.

A campus extension was completed in 2016 with a new building that won the award for best Cultural and Institutional Project at the 2015 Middle East and North Africa (MENA) Interior Design and Architecture Awards. The building was inspired by the Arab region's rich artistic history and heritage. The interior design contains curves and ellipses that are meant to mimic the beauty and purity of the desert.

The academic sports center, which is housed over four stories, consists of separate men's and women's facilities featuring state-of-the-art cardiovascular and weight lifting equipment, fitness studios, and courts for basketball, squash, volleyball and badminton.

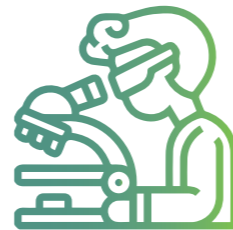
The Main Campus also features a 200-meter long pedestrian walkway, called the Creative Spine which spans the heart of the campus, providing clear and unobstructed views of the main buildings, while encouraging innovation through interaction and a collaborative academic environment.

The Main Campus holds one library, a clinic, a student hub with a dining room, and numerous cafes and restaurants.

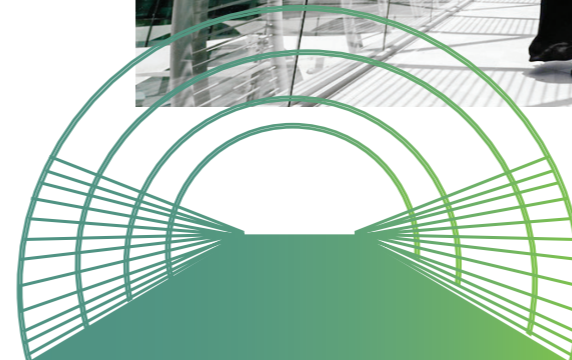


135,000
SQUARE METER

105
LABORATORIES



72
CLASSROOMS



200
200-METER LONG
PEDESTRIAN
WALKWAY



SAN CAMPUS

The Sas Al Nakhl Campus is located near the Maqta Bridge, which connects Abu Dhabi Island to the mainland.

The Sas Al Nakhl Campus hosts the ADNOC Research and Innovation Center (ADRIC), a state-of-the-art research facility comprising 39 labs covering reservoir rock characterization and reservoir fluid characterization.

Student residences at the Sas Al Nakhl Campus consist of male and female dorms. Male students are housed in six hostel buildings on campus while female students reside off-campus at the Umm Lulu Housing Complex. All student dormitories are equipped with Wi-Fi and Internet, cleaning services and 24-hour security.

Exercise rooms are available in Student Center, Arzanah, and Umm Lulu buildings and there are a number of sports courts and fields on campus.

The Sas Al Nakhl campus also houses two libraries with an extensive collection of books, journals and periodicals. In addition, its libraries provide access to more than 40 online databases on- and off-campus such as EBSCOhost, OnePetro and Science Direct. It also features the Independent Learning Center (ILC), which has been designed to help students with self-study.

The campus also has First Aid Clinics to provide primary health care to the students, faculty, and staff members as well as the Sas Al Nakhl Clinic.

The campus also features dining at the male and female Student Life buildings. The Satah building has a dining facility that serves three meals a day and a similar outlet is open to the female students in Arzanah building serving two meals a day.

Smaller cafeterias are open for the Sas Al Nakhl Campus community in the Bu Hasa and Habshan buildings. All of these outlets serve an a la carte menu and breakfast and lunch buffets.

OUTREACH PROGRAMS



Khalifa University has several outreach initiatives including the flagship Young Future Energy Leaders (YFEL) program in the field of advanced energy sustainability that trains and equips young professionals and students from the UAE and abroad to become more engaged in finding solutions to the world's biggest challenges – energy efficiency and climate change. YFEL members are offered an annual schedule of four courses on Technology, Policy and Leadership that cover renewable energy-related issues in environmental engineering and management. In its 14 years existence, the YFEL program has created an alumni body of over 500 students and young career professionals.



The Al Nokhba Program is implemented in partnership with the UAE National Service and Reserve Authority (NSRA) since 2019. The Outreach Office collaborates with the Robotics and Intelligent Systems Institute (RISI) to manage this program by supervising a group of outstanding NSR recruits and providing them with progressive learning materials in a number of scientific and technical subjects. In June 2023, the fourth batch successfully completed their courses, as well as research and academic commitments. Their projects covered aerospace, biotechnology, advanced water technology, information and communication technologies, blockchain, nuclear energy, data science, as well as robotics and autonomous systems.



Other outreach programs include Ekatshif Spring Camp for students in grades 10, 11, and 12; the National Ambassadors Program 'Estedad' that enriches the capabilities of students in UAE high schools and prepare them to excel academically, gain more insights in entrepreneurship and scientific research; the Ro'ya program that offers high school students workshops and hands-on experience in topics related to the oil and gas industry; the KU Community Webinar Series that targets everyone from high school and university students, to parents, professionals interested in broadening their skillset and knowledge; the 6-to-8 week Visiting Undergraduate Student Research Experience Program that provides high-achieving Junior and Senior level

undergraduate university students an opportunity to work on a research project under the supervision of one of Khalifa University faculty; the Dual Credit program that allows outstanding high school students to take Bachelor-level courses for credit, and brilliant Bachelor's students to take Master's level courses; Summer Challenges and Competitions which includes the Smart Mobile Application Contest (SMAC), an introductory course and competition that teaches high school students how to develop mobile applications; and the Mubadala Career Boot Camp that is designed to help UAE National high school students in grades 10 to 12 learn more about careers in STEM fields and jobs of the future.

AHMED BIN TAHNOUN ATTENDS KHALIFA UNIVERSITY GRADUATION CEREMONY FOR 4TH BATCH OF AL NOKHBA PROGRAM STUDENTS



Major General Pilot Sheikh Ahmed bin Tahnoun bin Mohammed Al Nahyan, Deputy Chief of Staff for the UAE Armed Forces, attended a graduation ceremony for the fourth batch of students from the Al Nokhba Program, a Khalifa University collaboration with the UAE National Service and Reserve Authority (NSRA).





SUSTAINABILITY @ KU

Khalifa University is ranked top in the UAE, and among top 40 in Asia out of nearly 1,400 institutions, in the QS World University Rankings: Sustainability 2024. Khalifa University also came among the Top 200 in Environmental Impact in the 2024 QS World University Rankings: Sustainability that highlights different ways in which universities are taking action to tackle the world's greatest Environmental, Social and Governance (ESG) issues.



#1 UAE IN THE



TOP 40

IN ASIA OUT OF NEARLY 1,400 INSTITUTIONS



KHALIFA UNIVERSITY IMPLEMENTS 30 SUSTAINABILITY-RELATED INITIATIVES AHEAD OF COP28



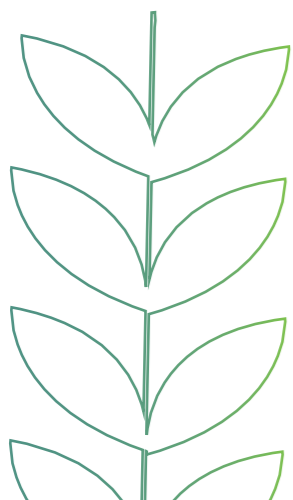
Khalifa University is implementing 30 sustainability initiatives such as a **global sustainable aviation forum**, an **international conference on energy transition**, an exhibition of Khalifa University's sustainability-related projects and a COP28 model exhibition, as the UAE is gearing up to host COP28.

In addition, there are also plans for organizing an exhibition of **climate change activities**, a **hackathon on food waste**, **stopping use of plastic bottles on-campus**, a **campaign to distribute plants to inspire the adoption of environment sustainability practices**, and a **waste-to-clothes conversion initiative to drive home the sustainability theme** across all fronts through research, campus, media and communications, academic and student-related activities.



TOP 200

IN ENVIRONMENTAL IMPACT IN THE 2024 QS WORLD UNIVERSITY RANKINGS





KU RESEARCH OFFERS INSIGHTS TO CREATING A SUSTAINABLE AND ECONOMICALLY ROBUST BUSINESS ENVIRONMENT FOR POLICYMAKERS.

A team of researchers including Khalifa University's Dr. Mecit Can Emre Simsekler, Associate Professor of Management Science and Engineering, has developed a model to explore dependences among SDG risks and business risks to help policymakers mitigate business risks while contributing to national sustainability goals. The results were published in the Journal of Cleaner Production, a top 1% journal for sustainability and business.

KHALIFA UNIVERSITY CELEBRATES OUTSTANDING ACHIEVEMENTS OF 2023 YFEL MEMBERS

Members of Khalifa University's 2023 Young Future Energy Leaders (YFEL) outreach program received their certificates of completion during a gala ceremony for successfully concluding their year-long schedule of commitments, becoming fully equipped in finding sustainable clean energy solutions and tackling climate change. In Just 14 Years, the YFEL program has created a robust 600-strong network of future leaders in alternative energy and sustainability.



ANKABUT AT KHALIFA UNIVERSITY RECEIVES FOUR ISO CERTIFICATIONS, REINFORCING COMMITMENT TO EXCELLENCE IN OFFERING IT SERVICES

Ankabut, the UAE's Advanced National Research and Education Network received four ISO certifications – ISO 9001 (QMS) Quality Management System, ISO 20000 (ITSMS) IT Service Management System, ISO 27001 (ISMS) Information Security Management System, and ISO 22301 (BCMS) Business Continuity Management System, underscore Ankabut's commitment to enhance customer experience.



KHALIFA UNIVERSITY PRESENTING INNOVATIVE CLEAN AND SUSTAINABLE ENERGY TECHNOLOGY SOLUTIONS DURING ABU DHABI SUSTAINABILITY WEEK 2023

Khalifa University showcased several innovative clean and sustainable energy technology solutions at the World Future Energy Summit (WFES) 2023 during the Abu Dhabi Sustainability Week (ADSW) 2023, the global initiative championed by the UAE.

From Finance perspective, Khalifa University was able to achieve significant milestones such as implementation of the COSO framework for Internal control over Financial reporting (ICFR) and Spin off of ANKABUT as a separate entity "ANKABUT Information Technology Sole Proprietorship LLC".



03
COLLEGES

KU'S WORLD CLASS EDUCATION

Khalifa University has emerged as a comprehensive research-intensive university with three colleges, 35 academic departments, and several Bachelor's, Master's and Doctoral degree programs covering a broad range of disciplines in science, engineering, and medicine.

Undergraduate degrees from Khalifa University are designed to equip graduates with the necessary skills and knowledge that are highly sought-after in today's job market. KU has granted over 3,200 bachelor's degrees to qualifying undergraduate students.

Khalifa University's interdisciplinary MSc and PhD programs are focused on the skills and sectors in greatest demand regionally and internationally. Our internationally-renowned faculty give students hands-on training and guidance to become world-class problem-solvers. Students work in our cutting-edge labs and on-site with our industry partners to hone their scientific and technical skills. To date, Khalifa University has awarded over 3,000 degrees including those to master's and doctoral students.

15
ACADEMIC DEPARTMENTS

UNIVERSITY RANKING

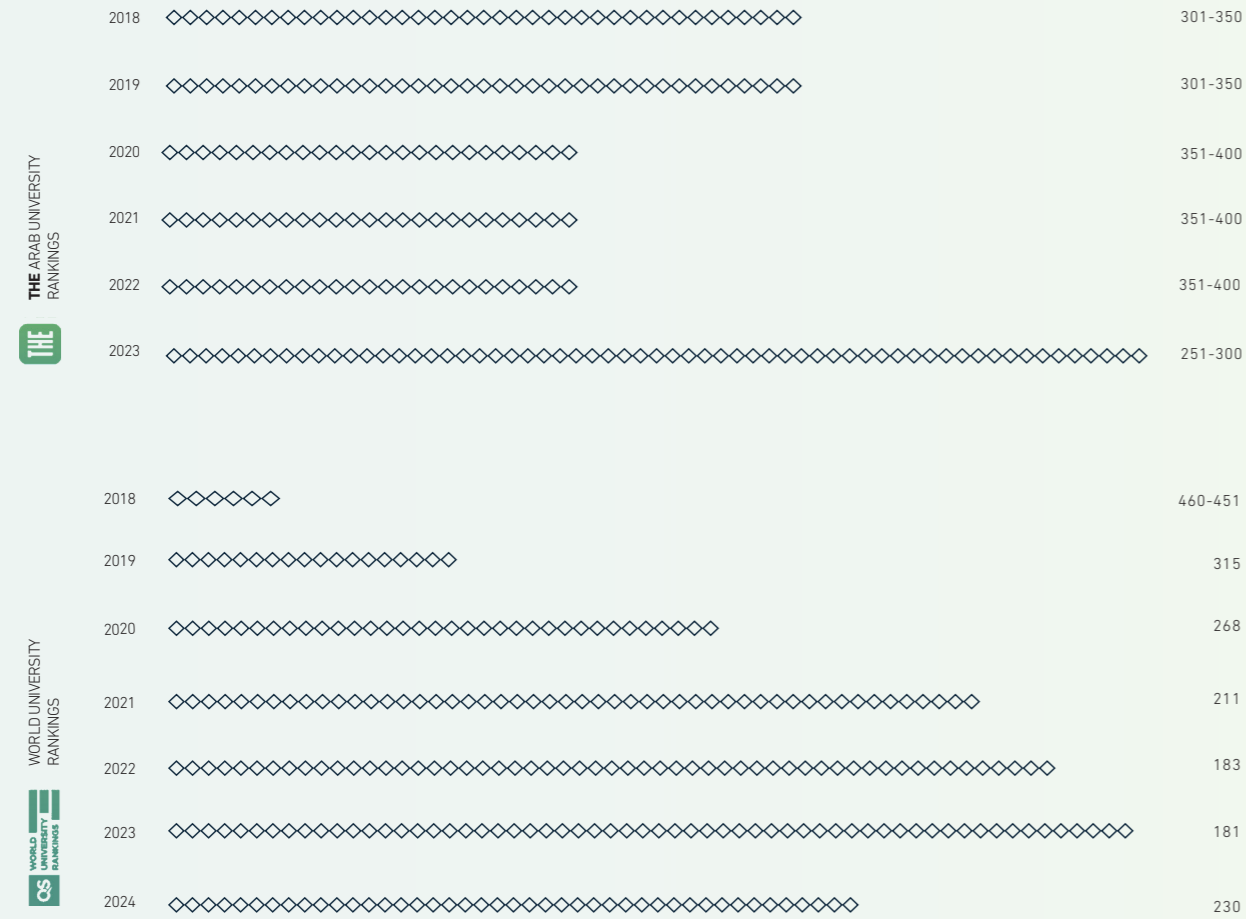


KHALIFA UNIVERSITY SECOND IN ARAB WORLD AND TOP IN UAE IN THE ARAB UNIVERSITY RANKINGS 2023

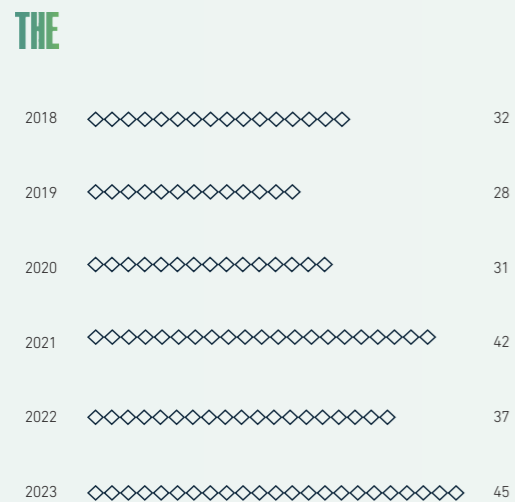
Khalifa University has surged ahead to be placed second in the Times Higher Education (THE) Arab University Rankings 2023, moving higher from the 5th place in last year's ranking, while maintaining its position as the top university in the UAE for the third consecutive year. In all, 313 institutions across 18 countries are listed in THE Arab University Rankings 2023. There are 10 institutions from the UAE in the list. Khalifa University is also ranked first in the 'Society' and 'Teaching' categories in the UAE.

02ND
IN THE ARAB UNIVERSITY RANKINGS

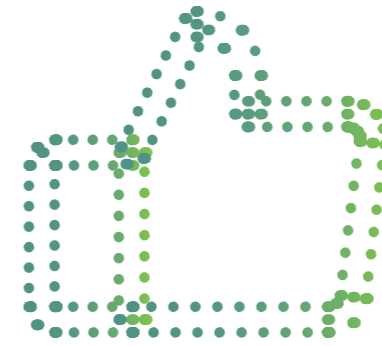
WORLD UNIVERISTY RANKINGS



ASIA UNIVERSITY RANKINGS



ARAB REGION UNIVERSITY RANKINGS



#1
IN THE UAE
FOR 6 YEARS
IN A ROW

#2
IN 2023 **THE**
ARAB UNIVERSITY
RANKINGS

230TH GLOBALLY

IN 2024 **QS** WORLD UNIVERSITY RANKINGS

45TH

IN 2023 **THE** ASIA
UNIVERSITY RANKINGS



KHALIFA UNIVERSITY RANKED AMONG TOP 10 IN PETROLEUM ENGINEERING AND AMONG TOP 100 IN ELECTRICAL AND ELECTRONICS WORLDWIDE BY 2023 QS RANKINGS BY SUBJECT



The Petroleum Engineering department at Khalifa University is ranked 8th in the world, while Electrical and Electronics Engineering is ranked 99th (among top 100) in the world by the 2023 Quacquarelli Symonds (QS) World University Rankings by Subject – Engineering and Technology.

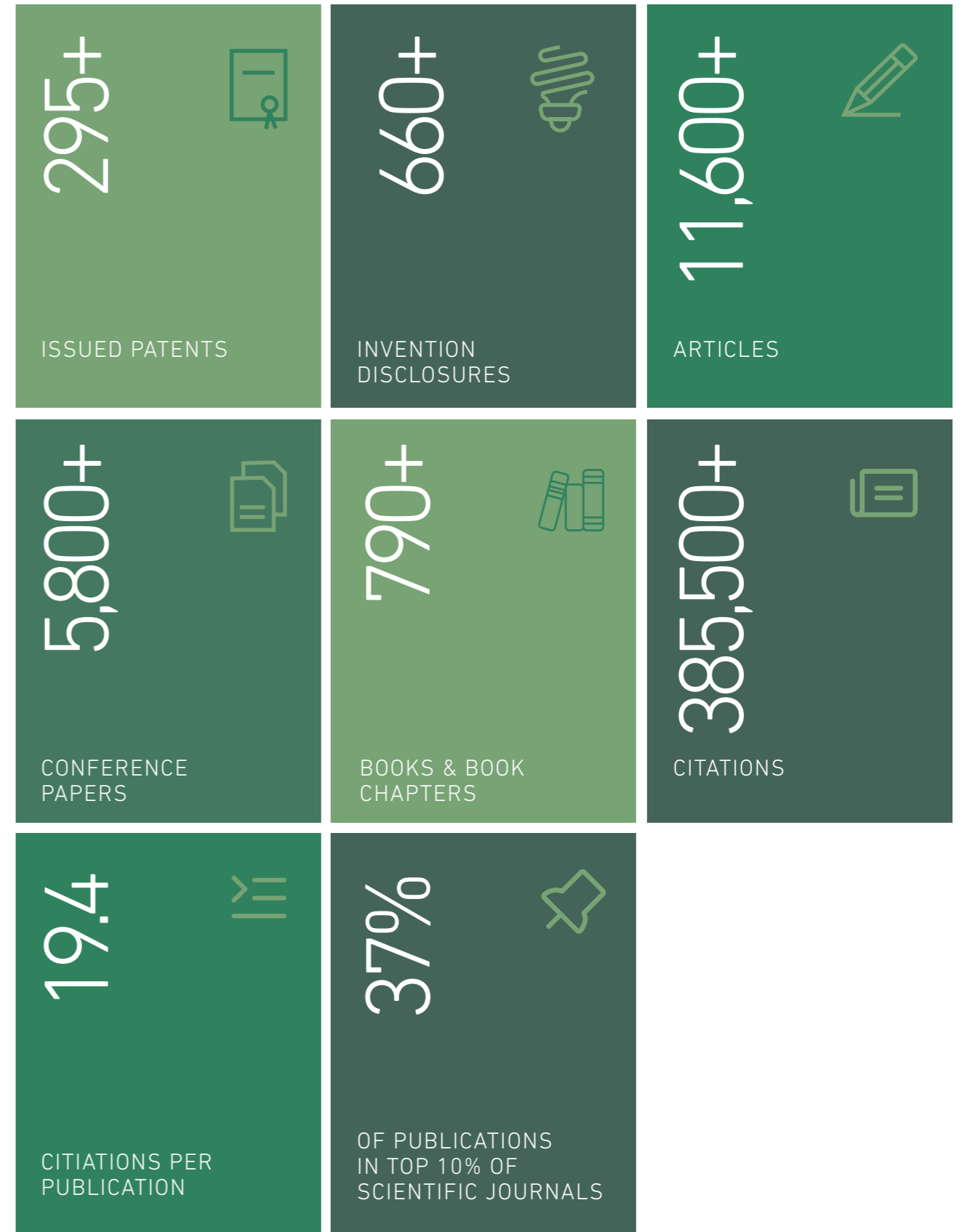


8TH

IN PETROLEUM ENGINEERING IN THE WORLD

99TH

IN ELECTRICAL AND ELECTRONICS ENGINEERING IN THE WORLD



KU IN NUMBERS

STUDENTS



ENROLLMENT COUNT



4,366

STUDENTS
IN FALL 2023

STUDENTS IN POSTGRADUATE	1,059		24%
STUDENTS IN UNDERGRADUATE	3,239		74%
STUDENTS IN PREPARATORY	68		2%

GENDER DISTRIBUTION

MALE	1,930		44%
FEMALE	2,436		56%

NATIONALITY DISTRIBUTION

INTERNATIONAL	1,265		29%
NATIONAL	3,101		71%

GRADUATION COUNT



685

GRADUATES IN THE
ACADEMIC YEAR 2022/23
[FALL 2022, SPRING 2023, AND SUMMER 2023]

LEVEL DISTRIBUTION

399 BACHELORS (58%)	210 MASTERS (31%)	47 PHD (7%)	29 MD (4%)
---------------------------	-------------------------	-------------------	------------------

GENDER DISTRIBUTION

MALE	331		48%
FEMALE	354		52%

NATIONALITY DISTRIBUTION

INTERNATIONAL	238		35%
NATIONAL	447		65%



FACULTY



FACULTY COUNT



379 FACULTY IN FALL 2023

GENDER DISTRIBUTION

MALE	316		83%
FEMALE	63		17%

NATIONAL DISTRIBUTION

INTERNATIONAL	332		88%
NATIONAL	47		12%

STUDENT TO FACULTY RATIO



4,366 STUDENTS

379 NUMBER OF FACULTY



11.5 STUDENTS / FACULTY RATIO

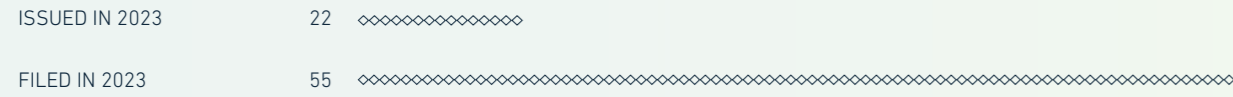
R & D



FACULTY RESEARCH PRODUCTIVITY (AS OF MARCH 13, 2024)



PATENTS



296
TOTAL NUMBER OF
ISSUED PATENTS



665
TOTAL NUMBER OF
INVENTION DISCLOSURES

STARTUPS

10

TOTAL NUMBER* OF START-UP
COMPANIES THAT HAVE SPUN OUT OF
KU PROJECTS/RESEARCH

KU active start-ups as at the End of 2023.
Closed start-ups from previous years are
excluded.



SCHOLARSHIP

STUDENT COUNT BY GENDER

MALE	1903	44%
FEMALE	2410	56%

STUDENT COUNT BY NATIONALITY

NATIONAL	3088	72%
INTERNATIONAL	1225	28%

STUDENT COUNT BY DEGREE AND GENDER

PHD	MALE	357	60%
	FEMALE	236	40%
DOCTOR OF MEDICINE	MALE	32	34%
	FEMALE	62	66%
MASTER'S	MALE	167	50%
	FEMALE	167	50%
UNDERGRADUATE	MALE	1347	41%
	FEMALE	1945	59%

KU COLLEGES

COLLEGE OF ENGINEERING & PHYSICAL SCIENCES (CEPS)

A sustainable knowledge-based economy is one of the key pillars of Abu Dhabi's social, political, and economic future, as stated in the Abu Dhabi Vision 2030. Working towards this objective via the advancement of new knowledge discovery, its dissemination and exploitation is the main goal of the College of Engineering and Physical Sciences at Khalifa University of Science and Technology. The College is distinguishing itself as a major contributor towards economic diversification within Abu Dhabi and the region, particularly through its close alignment with growing regional industries in key themes such as energy, aerospace, water security, advanced materials, transportation, petrochemicals, robotics and environment.

The College of Engineering and Physical Sciences is a thriving community of academic scholars, students, and staff committed to engineering and science education and innovation for the greater good of society. The College empowers students with a great sense of purposeful academic curiosity of the physical world and appreciation of the social and environmental context within a rapidly changing world.

DEAN'S MESSAGE



DR. EHAB FAHMY EL-SADAANY,
DEAN OF COLLEGE OF ENGINEERING AND PHYSICAL SCIENCES

As the Dean of the College of Engineering and Physical Sciences at Khalifa University, I am delighted to extend a warm welcome to you, inviting you to explore the vibrant community that thrives within our academic walls. Our College stands as a port for an exceptional gathering of students, faculty, and staff, each contributing to the rich textile of knowledge and innovation. I encourage you to explore the web pages of our academic departments and research centers, where you'll discover the diverse array of majors and minors we offer. These educational pathways are designed not just to impart knowledge but to implant in our students a deep sense of purpose—what we proudly refer to as 'engineering with a purpose'. This attitude guides our entire academic community, driving us

to go beyond the conventional and make a tangible impact on the world through our work. Currently, the College of Engineering and Physical Sciences is home to over 2200 undergraduate students, 400 graduate students, 130 dedicated researchers and staff, and a faculty comprising of 200 accomplished educators. This diverse and dynamic community forms the backbone of our institution, creating an environment where curiosity is cultivated, ideas flourish, and innovation thrives.

OUR FACULTY AND RESEARCHERS LEAD IN GENERATING VITAL KNOWLEDGE FOR SOCIETAL SUSTAINABILITY, FOCUSING ON THEMATIC RESEARCH IN ENERGY, WATER, ENVIRONMENT, AND SUPPLY CHAIN, WHICH IS UNDERPINNED BY OUR FUNDAMENTAL STRENGTH IN ADVANCED MATERIALS, MANUFACTURING, ROBOTICS AND AI.

Our students drive holistic solutions through collaborative efforts, showcasing creativity in projects such as freshman design, innovation, and capstone projects. Graduate students excel at the forefront of innovation in diverse engineering and science disciplines, leveraging our state-of-the-art research environment. Together, we strive for impactful contributions to address current challenges and shape a sustainable future.

In the College of Engineering and Physical Sciences, we serve as a dynamic force for economic development in the Emirate of Abu Dhabi, the UAE, and beyond. Through the continual creation and dissemination of knowledge, coupled with strong and robust engagement with industry and stakeholders, we act as a catalyst, driving innovation and progress to contribute significantly to regional and global economic development.



BSC PROGRAMS

10



PHD PROGRAM

4

2023 CEPS ACHIEVEMENTS

- 01 The college has surpassed the set target for publication quality by having more than 80% of its publications in Q1 journals.
- 02 The college ranking, according to QS 2024, has been improving with one program ranked 13 (PE), one ranked 106 (EE) and three programs ranked in the 150-200 bracket (CEE, CHE, ME).
- 03 The college led the development of the BSc in Robotics and AI as well as the MSc program in Robotics and Autonomous Systems
- 04 The college Developed of new Masters in Medical Physics.
- 05 Newly discovered planet has been named after a faculty member from the CEPS (Dr. Mohamed Elmaarry)
- 06 Khalifa University's student chapter of the Institute of Industrial and Systems Engineers (IISE) honored with the institute's Gold Award.



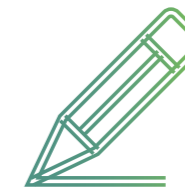
ACADEMIC DEPARTMENTS

9



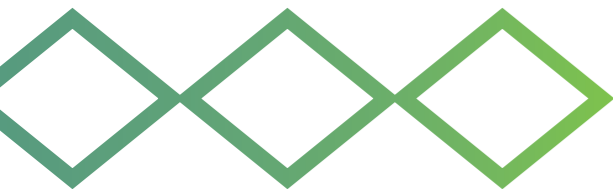
MSc PROGRAMS

14



PHD ENGINEERING CONCENTRATIONS

11



COLLEGE OF COMPUTING AND MATHEMATICAL SCIENCES (CCMS)

The objective of the College of Computing and Mathematical Sciences at Khalifa University of Science and Technology is the development, teaching and exploitation of new knowledge, leading to the harmonic synergy between human talent and machine intelligence outlined in the Abu Dhabi Vision 2030. The College aims to help boosting the economic development of Abu Dhabi and of the region, providing the strong conceptual foundations, the innovative ideas and the talent pool that local industries need to grow in highly competitive areas such as intelligent devices, human-machine assistive collaboration, mobile networks and complex systems management.

The College of Computing and Mathematical Sciences is a highly interconnected community of top scholars, students and staff who are dedicated to deliver innovation and research-driven education in the key disciplines underlying the digital transformation, for the ultimate benefit of human society. The College is actively involved in supporting UAE national initiatives of talent pool development in all types of digital skills.

DEAN'S MESSAGE



DR. ERNESTO DAMIANI,
ACTING DEAN OF COLLEGE OF COMPUTING AND MATHEMATICAL SCIENCES

As Dean of the College of Computing and Mathematical Sciences, it gives me great pleasure to welcome you to our College, the fulcrum of computer and mathematical science disciplines at Khalifa University. The College strives for excellence in research, teaching, and technology transfer services in the core disciplines of Computer Engineering, Computer Science, Mathematics, Statistics, Artificial Intelligence and Autonomous Systems and Networks.

OUR FACULTY ARE AMONG THE BEST WORLDWIDE AND HAVE CONTRIBUTED TO THE DEVELOPMENT OF THEIR FIELDS AT BOTH THE GLOBAL AND LOCAL LEVEL. OUR COLLECTIVE VISION IS TO CREATE AN INTERDISCIPLINARY, COLLABORATIVE ATMOSPHERE TO FOSTER CUTTING EDGE RESEARCH AND PROMOTE A SUCCESSFUL TRANSITION TO A KNOWLEDGE SOCIETY, WITH A POSITIVE IMPACT ON HUMANITY AND THE ENVIRONMENT.

Besides doing world-class foundational research, the College engages with industry and government stakeholders to offer applied research, directly addressing contemporary challenges in the areas of information technology, secure cyber-physical systems, complex system modeling, and several other areas.

Such collaborations have resulted in the development and upgrade of a cutting-edge research infrastructure that puts the academic units in the College at the forefront of their research domains and provides students with a unique educational experience.

I hope that, as you navigate this website, you will soon agree with me that our College offers some of the best opportunities for a fledging career in both fundamental and applied computing and mathematical sciences.



BSC PROGRAMS

3



PHD PROGRAMS

2



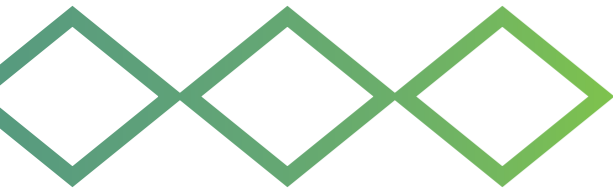
ACADEMIC DEPARTMENTS

2



MSC PROGRAMS

5



COLLEGE OF MEDICINE AND HEALTH SCIENCES (CMHS)

At the College of Medicine and Health Sciences at Khalifa University, our overarching vision is to be a global leader in transformative education, innovative research, and healthcare excellence. We envision a dynamic academic community that inspires a lifelong passion for learning, producing healthcare professionals known for their exceptional skills, compassion, and commitment to advancing healthcare on both local and global fronts.

Our commitment to cutting-edge research and interdisciplinary collaboration positions us at the forefront of medical and health sciences. We aspire to shape the future of medicine, address the evolving needs of diverse communities, and contribute significantly to healthcare advancements. Beyond traditional education, we foster a culture of innovation, resilience, and social responsibility, striving to build a healthier and more equitable world.

Grounded in a commitment to excellence, integrity, and the continuous pursuit of knowledge, our vision positions the College of Medicine and Health Sciences at Khalifa University as a beacon of innovation, a hub for transformative education, and a driving force behind the advancement of healthcare for generations to come.

DEAN'S MESSAGE



PROFESSOR HABIBA AL SAFAR,
DEAN, COLLEGE OF MEDICINE AND HEALTH SCIENCES

It is with great pleasure that I extend a warm welcome to you on behalf of the College of Medicine and Health Sciences at Khalifa University.

I am delighted to share with you the exciting developments and future trajectory of our esteemed College. We are undergoing a transformative journey that involves a strategic shift in our academic programs, reflecting our commitment to staying at the forefront of healthcare education and research.



I am privileged to announce an exciting expansion of our College, marked by the establishment of four distinct departments. These departments represent a commitment to excellence in education, research, and innovation across a spectrum of disciplines—from the advancement of biological sciences to groundbreaking innovations at the intersection of bioengineering and biotechnology, dedicated efforts in epidemiology and public health, and specialized education in medical science. Aligned with our vision for the future of healthcare and medicine, these focused departments will not only pave the way for groundbreaking advancements but will also introduce advanced degree programs. As a significant enhancement, I am pleased to announce the introduction of Masters and Ph.D. programs, offering students opportunities for in-depth research, specialization, and advanced training.

AS WE EMBARK ON THIS EXCITING JOURNEY, YOUR ENTHUSIASM, EXPERTISE, AND DEDICATION ARE INTEGRAL TO OUR SUCCESS. WE LOOK FORWARD TO YOUR ACTIVE ENGAGEMENT AS WE WORK TOGETHER TO MAKE A LASTING IMPACT ON THE FIELD OF HEALTH AND LIFE SCIENCES.

Thank you for being a crucial part of the College of Medicine and Health Sciences at Khalifa University. I encourage you to explore the unique programs we offer and discover how we can support you in achieving your academic and professional aspirations.



BSC PROGRAMS

2



PHD PROGRAM

1



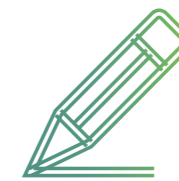
ACADEMIC DEPARTMENTS

4



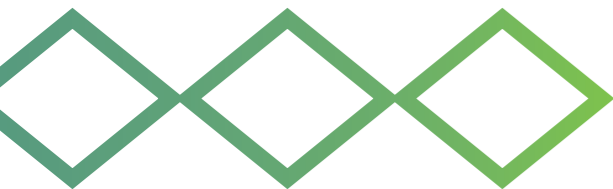
MSC PROGRAMS

3



MD PROGRAM

1



UG PROGRAMS



UNDERGRADUATE PROGRAMS (UG)

COLLEGE OF ENGINEERING & PHYSICAL SCIENCES*

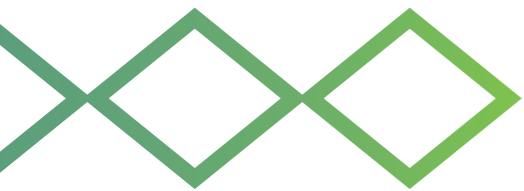
- Bachelor of Science in Aerospace Engineering
- Bachelor of Science in Chemical Engineering
- Bachelor of Science in Chemistry
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Earth and Planetary Sciences
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Industrial and Systems Engineering
- Bachelor of Science in Mechanical Engineering
- Bachelor of Science in Petroleum Engineering
- Bachelor of Science in Physics

COLLEGE OF COMPUTING AND MATHEMATICAL SCIENCES*

- Bachelor of Science in Applied Mathematics and Statistics
- Bachelor of Science in Computer Engineering
- Bachelor of Science in Computer Science

COLLEGE OF MEDICINE AND HEALTH SCIENCES

- Bachelor of Science in Biomedical Engineering
- Bachelor of Science in Cell and Molecular Biology



PG PROGRAMS



GRADUATE PROGRAMS (PG)

COLLEGE OF ENGINEERING & PHYSICAL SCIENCES*

Master Degrees:

- Master of Engineering in Health, Safety and Environmental Engineering
- Master of Science in Aerospace Engineering
- Master of Science in Applied Chemistry
- Master of Science in Chemical Engineering
- Master of Science in Civil and infrastructural Engineering
- Master of Science in Engineering Systems and Management
- Master of Science in Materials Science and Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Medical Physics
- Master of Science in Nuclear Engineering
- Master of Science in Petroleum Engineering
- Master of Science in Petroleum Geosciences
- Master of Science in Sustainable Critical infrastructure
- Master of Science in Water and Environmental Engineering

PhD Degrees:

- Doctor of Philosophy in Engineering
 - Aerospace Engineering
 - Biomedical Engineering
 - Chemical Engineering
 - Civil Infrastructure and Environmental Engineering
 - Electrical and Computer Engineering
 - Engineering Systems and Management
 - Material Science and Engineering
 - Mechanical Engineering
 - Nuclear Engineering (for UAE and Saudi nationals only)
 - Petroleum Engineering
 - Robotics
- Doctor of Philosophy in Chemistry
- Doctor of Philosophy in Earth Sciences
- Doctor of Philosophy in Physics

COLLEGE OF COMPUTING AND MATHEMATICAL SCIENCES*

Master Degrees:

- Master of Science in Applied Mathematics
- Master of Science in Computational Data Science
- Master of Science in Computer Science
- Master of Science in Cyber Security
- Master of Science in Electrical and Computer Engineering

PhD Degrees:

- Doctor of Philosophy in Mathematics
- Doctor of Philosophy in Engineering

COLLEGE OF MEDICINE & HEALTH SCIENCES*

Doctor of Medicine (MD)

Master Degrees:

- Master of Science in Biomedical Engineering
- Master of Science in Health Systems Management
- Master of Science in Molecular Life Sciences

PhD Degrees:

- Doctor of Philosophy in Molecular Life Science

* Phased out programs excluded from the list



ACADEMIC NEWS 2023



KHALIFA UNIVERSITY LAUNCHES MENA REGION'S FIRST PERMANENT 'BODY MUSEUM' AT ITS COLLEGE OF MEDICINE AND HEALTH SCIENCES IN MAIN CAMPUS, ABU DHABI

Under the patronage of His Highness Sheikh Hamed bin Zayed Al Nahyan, Chairman of Khalifa University Board of Trustees, and Member of the Abu Dhabi Executive Council, Khalifa University launched the 'Body Museum' at its College of Medicine and Health Sciences (CMHS) on the Main Campus. This is the only Body Museum in the Middle East and North Africa (MENA) region and one of the largest in the world, outside Germany.



KHALIFA UNIVERSITY INAUGURATES REGION'S FIRST-EVER ADVANCED LAB FOR MARINE STUDIES AND RESEARCH

Khalifa University inaugurated the Marine Studies and Research Lab, the region's first-ever advanced robotics research facility equipped with wave and stream generation facilities. The Center for Autonomous Robotic Systems (KUCARS) and Stanford University also announced they have entered into a collaboration to explore the use of marine robotics for sustainable ocean ecosystems, including removal of plastics to curb pollution.

KHALIFA UNIVERSITY AND ADIA DEVELOP MASTER'S PROGRAM IN COMPUTATIONAL DATA SCIENCE

Khalifa University and the Abu Dhabi Investment Authority (ADIA) jointly developed a Master's program in Computational Data Science. Designed in collaboration with the Quantitative Research & Development team at ADIA, the program enables students to develop their skills in areas such as data analytics and machine learning, while keeping pace with the latest advancements in various fields.

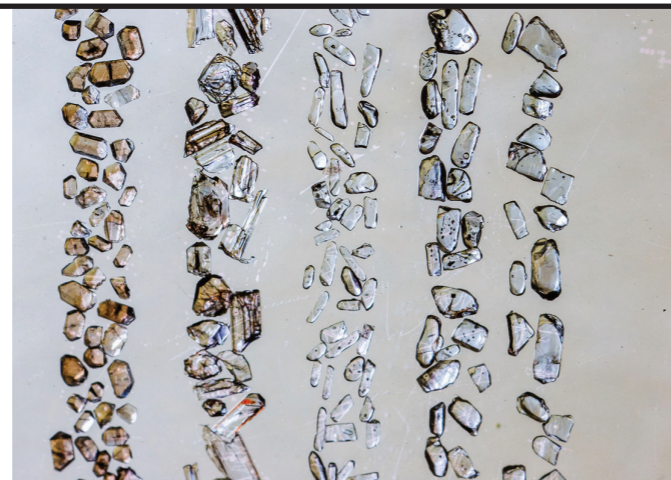


ADNOC PARTNERS WITH KHALIFA UNIVERSITY TO LAUNCH MINOR IN ENERGY TRANSITION' PROGRAM

Khalifa University and ADNOC, launched a 'Minor in Energy Transition' academic program for undergraduate students to provide an insight into the challenges and opportunities in transitioning from fossil-based conventional energy sources to more sustainable and lower-carbon alternatives, as well as to support the UAE Energy Strategy 2050.

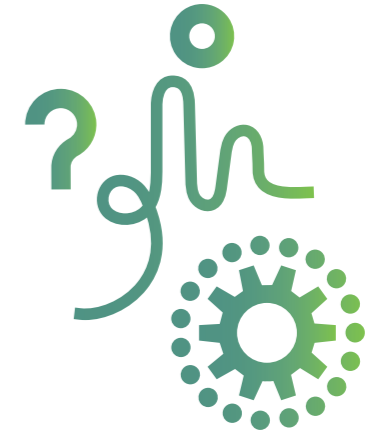
ANCIENT CRYSTALS SUGGEST EARLY EARTH HAD LAND AND FRESHWATER

Khalifa University has found evidences for the discovery of fresh water and dry land as early as 4 billion years ago from the oxygen isotopic evidence from Jack Hill zircon crystals, which suggests the first presence of freshwater interacted with crustal magma systems (dry land) four billion years ago and therefore the hydrological cycle began at or prior to this time.



KHALIFA UNIVERSITY STUDENTS PRESENT 54 ENGINEERING PROJECTS TO STAKEHOLDERS ON 'INNOVATION DAY 2023'

A total of 54 senior design projects from six engineering disciplines were showcased on Khalifa University Innovation Day 2023, the annual exhibition highlighting the creative excellence of senior graduating students. The project concepts ranged from Aerospace Engineering and Biomedical Engineering to Civil Infrastructure and Environmental Engineering and Electrical Engineering and Computer Science, Industrial and Systems Engineering, as well as Mechanical Engineering.



54

SENIOR DESIGN PROJECTS

KHALIFA UNIVERSITY LAUNCHES METAVERSITY HACKATHON SUPPORTED BY MICROSOFT UAE AND HEVOLUS INNOVATION



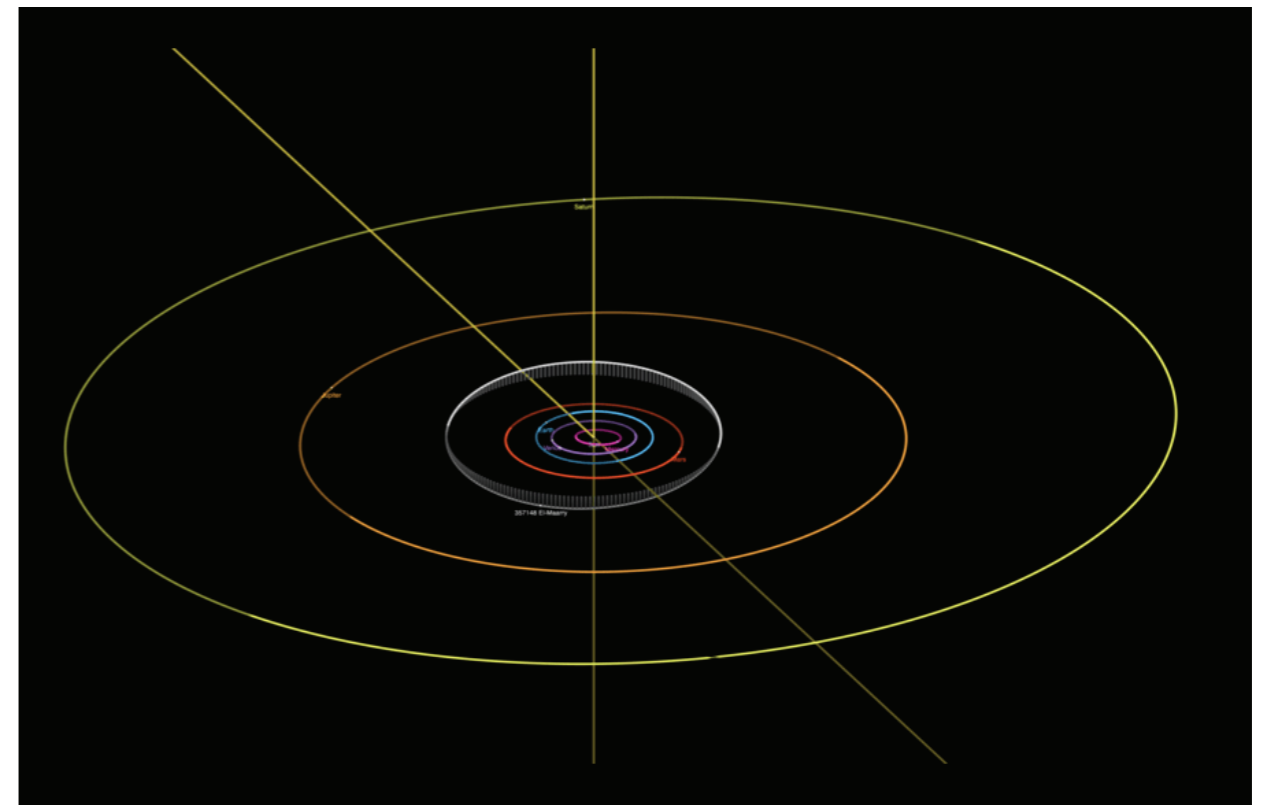
Khalifa University launched AED50,000 - 'Metaversity Hackathon' supported by Microsoft UAE and Hevolus Innovation through which students will have an opportunity to learn about building a mixed reality (MR) application for Microsoft HoloLens 2 – an ergonomic, untethered MR holographic device.



AED50,000

HIGH CALIBER FACULTY

Khalifa University faculty excel in not only academic affairs but also in steering, leading and guiding the university's research collaboration initiatives, because of their prior associations with globally leading industry and corporate brands. Thus, our list of collaborations with industry continues to expand and cover major strategic areas relevant to the UAE and the region. The inclusion of several Khalifa University faculty members in the notable Stanford Rankings marks another milestone for us and is a testament to the University's commitment to attracting and retaining high-caliber researchers, who in turn help the University achieve its goal of fueling the UAE's knowledge-economy transformation.



ASTEROID NAMED AFTER KHALIFA UNIVERSITY FACULTY BY INTERNATIONAL ASTRONOMICAL UNION

The International Astronomical Union (IAU) has named an asteroid after Khalifa University faculty Dr. Mohamed Ramy El-Maarry, Director of the Space and Planetary Science Center and Associate Professor of Planetary Science in the Earth Sciences department. The asteroid that once bore the designation of 2002 CZ has now been named (357148) El-Maarry.

STUDENT EXPERIENCE

Khalifa University strongly believes in the active participation of students in the governance of the institute. Every student on campus, undergraduate or graduate, is eligible to serve on the Student Council.

The elected student body follows the mandate of advocating for and liaising between students and University management in campus life.

The Khalifa University Student Council promotes student advocacy, leadership skills and contributes to enriching campus life. The Student Council encourages active participation in University governance, events, representation in committees, student town hall meetings and many student activities.

Khalifa University is committed to promoting a campus environment that fosters the intellectual, social, ethical, and personal development of students, preparing them to become engaged and constructive members of a diverse, dynamic, and global society in and out of the University. Student-led 28 clubs are an integral part of the University learning process. The academic experience is enriched by participation in extracurricular activities that allow students to pursue their personal interests beyond the classroom. Students can choose from over 20 student clubs covering arts, culture, science, sports and social service.



STUDENT CLUBS

- ◆ NIPPON CLUB
- ♁ ASTRONOMY CLUB
- ⚙️ JJANG(KOREAN) CLUB
- 📖 LITERATURE CLUB
- 👥 VOLUNTEERING CLUB
- 🌿 ENVIRONMENT CLUB
- ✍️ JOURNALISM CLUB
- 🎙️ KU PODCAST
- 🇨🇳 CHINESE CLUB
- 🔍 RATTTEL

- ☾ RED CRESCENT CLUB
- 👤 THE CULTURAL DIVERSITY AND TOLERANCE CLUB
- 🌐 KU SHARE CHAPTER
- 💓 HEALTHY LIFE CLUB
- 🧠 PHILOSOPHERS' CLUB
- 💰 TECHNOLOGY AND THE ECONOMY CLUB
- ✉️ PALESTINIAN CULTURE CLUB
- 👥 THE DESI CLUB
- 🎮 ROV CLUB
- 📺 ENTERTAINMENT CLUB
- ⚽ SPORTS CLUB
- 🎮 ELECTRONIC SPORTS CLUB
- 🇦🇪 UAE CLUB
- 🗣️ DEBATE CLUB
- 🎵 ART AND MUSIC CLUB
- 📷 KU PHOTOGRAPHY CLUB
- 🎭 THEATER CLUB
- ⚗️ KU PHYSICS CLUB

STUDENT PROFESSIONAL CHAPTERS

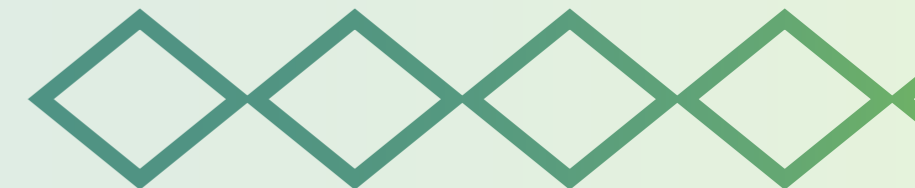
- ASCE (AMERICAN SOCIETY OF CIVIL ENGINEERS)
- ASME (AMERICAN SOCIETY OF MECHANICAL ENGINEERS)
- IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)
- SPE (SOCIETY OF PETROLEUM ENGINEERS)
- AICHE (AMERICAN INSTITUTE OF CHEMICAL ENGINEERS)
- IISE (INSTITUTE OF INDUSTRIAL AND SYSTEMS ENGINEERS)
- AAPG (AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS)
- ACS (AMERICAN CHEMICAL SOCIETY)
- AIAA (AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS)

SOCIAL ACTIVITIES

Khalifa University's Student Services Office supports students to lead events and activities such as the new students Orientation Day, Career Fair, Majors Day, and non-academic recognition award ceremonies. KU students actively participate in local and international competitions, conferences, workshops and events.

Students can also enjoy a range of activities, such as National Day Celebration, Bazaar Day, Global Day and KU Film Festivals, Ramadan gatherings, and more, which enhance their social and cultural experiences.

Throughout the academic year, students are invited on trips to historical and cultural trips such as Qasr Al Watan, Qasr Al Hosn, Louvre Abu Dhabi, Sheikh Zayed Mosque, Global Village and Museum of the Future in Dubai.



◆ STUDENT NEWS 2023

STUDENT SUCCESS

Khalifa University Students, selected among the top 5 winners in the 2nd edition of the "University Challenge," organized by United Arab Emirates University (UAEU) in partnership with the Sharjah Government Communication Award in 2023 :

1ST
JASSEM AL HAMADI

2ND
FAHAD ALRASHED

3RD
MOHAMMAD HASSAN

This year's competition theme centred on sustainable development, aligning with the Year of Sustainability and COP28.



Khalifa University won first place at the UAE Zero Robotics Programming Challenge, where participants wrote codes to operate a robot aboard the ISS under the supervision of astronaut Sultan alneyadi.



Khalifa University four graduates who were part of the Emirates Lunar Mission.

HAMAD AL MARZOUQI,
Director of the Emirates Project for Lunar Exploration (KU PhD in Electrical Engineering)

AMNA BOUSAOUUD,
Design and Mobility Officer (BSc in Mechanical Engineering)

MOHAMMED AL ZAABI,
Lunar Operations Officer (PhD in Computer Engineering)

SARAH AL MUAINI,
Communication Systems Administrator and Scientific Team (PhD in Telecommunications Engineering)



Khalifa University students for winning 2nd place in the UAE Imagine Cup 2023 competition!

Khalid Abdalla AlHosani, Mohammed Ebrahim Almansoori, Abdulla Fahad Alkaabi, and Rashed Zayed Al Jasmi for their innovative project, Swift Ambulance Interrelations System.

Students who participated in the Emirates Technology and Innovation Competition (ETIC) and emerged victorious in the categories of AI and Programming:

In the Programming category

1ST
RAWDA HAMAD KHAMIS HAMAD ALSAMAHY AND MAHRAH RASHED ALI AHMED ALYAMMAHI

2ND
HUMAIID ABDALLA AHMED ABDALLA ALHAMMADI AND AHMED MOHAMED SHABAN MOUSA SAJWANI

In the AI category

1ST
ABDULRAHMAN HASAN ALI ABDULWAHAB ALMARZOOQI AND ABDULLA HASAN ALI ABDULWAHAB ALMARZOOQI

2ND
ALYAZIAH HAMAD HAMDAN KHALEEFA ALYAHYAAE AND MEERA NASER ALI BIN NASER ALTENEIJI

3RD
OMAR ABDELAZIZ AAUD ABDELAZIZ ALAQEEDI AND FARES TALAL KHALID ALJAWDAR

PhD student Sara Ishaq Alkhoori was awarded as one of the 2022 L'Oréal-UNESCO for Women in Science Middle East Regional Young Talents Program



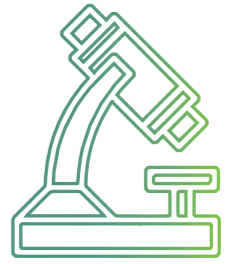
STUDENT (CAMPUS) ACTIVITIES

Khalifa University believes student-led clubs are an integral part of the learning process, enriched by extracurricular activities allowing students to pursue their personal interests in arts, science, culture, history or social, and other interests. There are 16 student clubs that organize various events and activities. In addition, these chapters are also involved in organizing and hosting events and conferences. Apart from these, Khalifa University offers fun competitive and recreational programs for students to get involved in off-campus, as well as Health and Wellness campaigns.





OUR INFLUENTIAL RESEARCH



RESEARCH CENTERS

The internationally top-ranked Khalifa University of Science and Technology is the one university in the UAE with the research programs that address the entire range of strategic, scientific and industrial challenges facing the UAE's knowledge economy transformation and our rapidly evolving world.

Khalifa University is home to the UAE's leading research centers, many of which are housed in the University's research institutes. Khalifa University's three flagship research institutes include the Masdar Institute, the Petroleum Institute, and the Robotics and Intelligent Systems Institute. The Institutes serve as interdisciplinary research units focused on long-term strategic priorities. KU research centers address regional and global challenges in a systematic and targeted manner via engagement of world-class researchers and facilities. These research centers are at the heart of KU's global leadership in use-inspired research. Following is a list of reasearch centers :

14

RESEACH CENTERS

AMCC
ADVANCED MATERIALS CHEMISTRY CENTER

APEC
ADVANCED POWER AND ENERGY CENTER

ARIC
ADVANCED RESEARCH AND INNOVATION CENTER

BTC
CENTER FOR BIOTECHNOLOGY

CECAS
CENTER FOR CATALYSIS AND SEPARATION

C2PS
CENTER FOR CYBER-PHYSICAL SYSTEMS

CMAT
CENTER FOR MEMBRANES AND ADVANCED WATER TECHNOLOGY

EBTIC
EMIRATES ICT INNOVATION CENTER (EBTIC)

ENTC
EMIRATES NUCLEAR TECHNOLOGY CENTER

KUCARS
KU CENTER FOR AUTONOMOUS ROBOTIC SYSTEMS

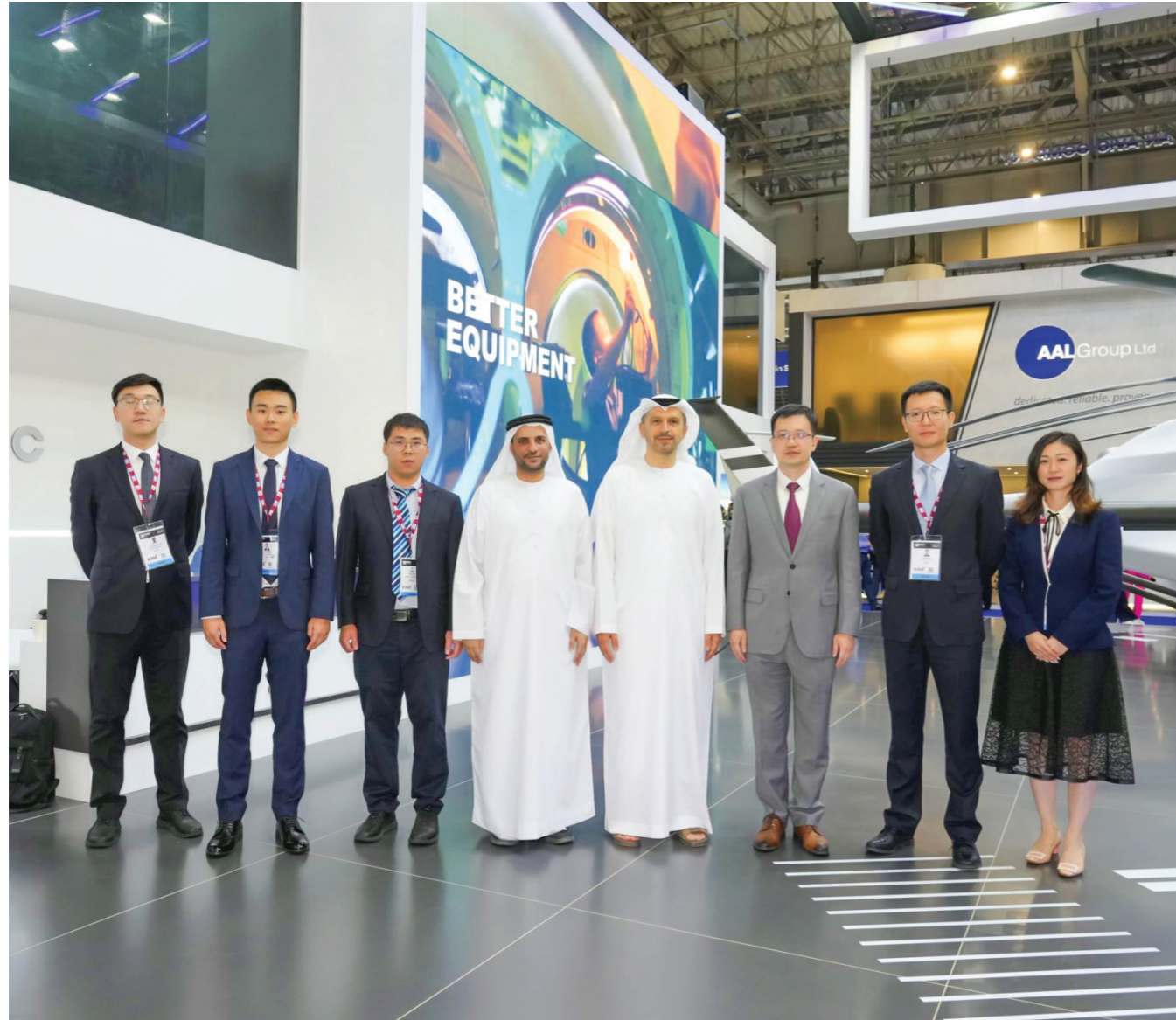
KUSTIC
KHALIFA UNIVERSITY SPACE TECHNOLOGY AND INNOVATION CENTER

RICH
RESEARCH AND INNOVATION CENTER ON CO2 AND HYDROGEN

RIC2D
RESEARCH & INNOVATION CENTER FOR GRAPHENE AND 2D MATERIALS

6G CENTER
6G RESEARCH CENTER

RESEARCH NEWS 2023

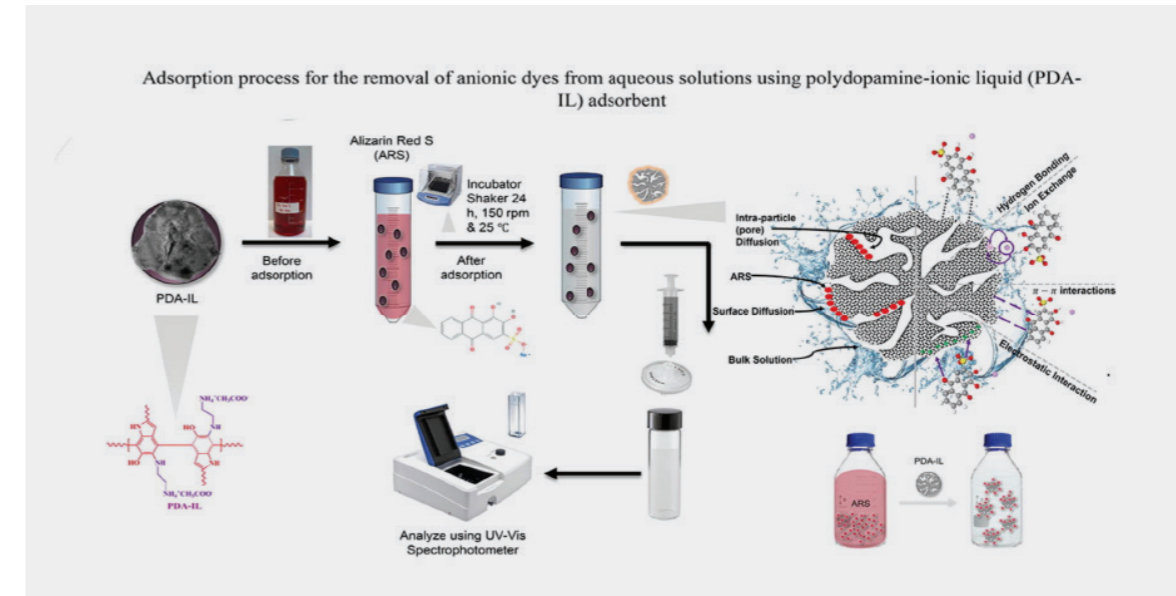


SANAD AND LUFTHANSA TECHNIK MIDDLE EAST SPEARHEAD AVIATION INDUSTRY INNOVATION WITH KHALIFA UNIVERSITY'S EXPERTISE

Khalifa University, in collaboration with Sanad, the global aerospace engineering and leasing solutions leader wholly owned by Mubadala Investment Company PJSC (Mubadala), and Lufthansa Technik Middle East (LTME), world-renowned provider of maintenance, repair and overhaul (MRO) services, have announced the development of cutting-edge digital solutions to transform components repair turnaround time (TAT).

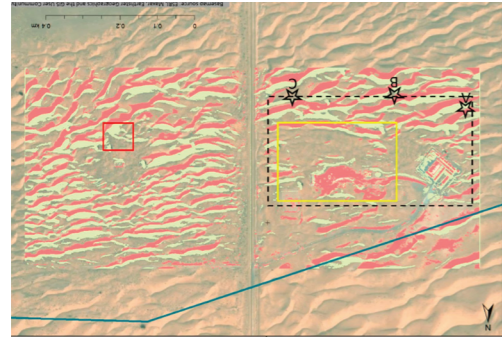
NEW MATERIAL INSPIRED BY MUSSELS TO CLEAN POLLUTANTS FROM WATER

A team of researchers from Khalifa University has developed a new material that can remove dyes from industrial wastewater. Inspired by mussels, this novel, highly-selective adsorbent material is made from a polymer called polydopamine, modified with an ionic liquid, which remove anionic pollutants, enhancing water treatment.



A NEW APPROACH TO MAPPING FRACTURES IN ABU DHABI'S OILFIELDS

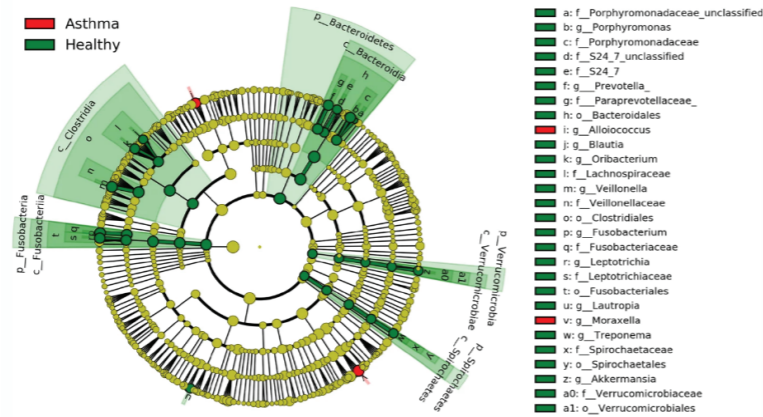
A team of researchers from Khalifa University has developed a cost-effective analysis tool for detecting fractures in geological reservoirs and determining their orientation. Fractured carbonate reservoirs are of great interest to the oil and gas industry because of their potential for high fluid flow rates. The fractures often serve as pathways for the movement of oil, gas, and water, leading to enhanced permeability and optimal energy extraction.



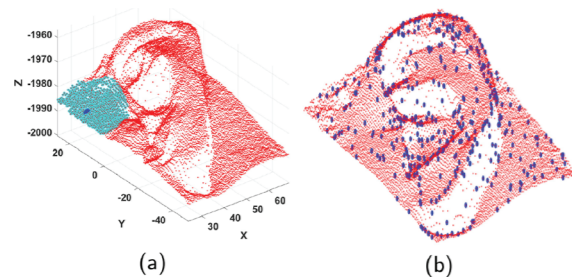
IN THE SANDS OF TIME: KHALIFA UNIVERSITY MACHINE LEARNING TECHNIQUE REVOLUTIONIZES ARCHAEOLOGY IN ARID ENVIRONMENTS

A new technique from Khalifa University researchers combines satellite imagery with machine learning to automate and improve the detection and mapping of archaeological features in the UAE and other desert regions. At Saruq Al-Hadid, an archaeological site tucked into the Rub' Al-Khali desert in Dubai, researchers are pioneering sophisticated techniques that could revolutionize how we discover and study remnants of bygone eras.

KU RESEARCH USES MACHINE LEARNING TO IDENTIFY POTENTIAL BIOMARKERS FOR RESPIRATORY DISEASE



Harnessing the power of machine learning Khalifa University researcher to identify 57 biomarkers for asthma, promising novel avenues for personalized asthma management. The research team hopes this discovery of the respiratory microbiota associated with asthma, could lead to valuable applications for individualized asthma care in an era of precision medicine.



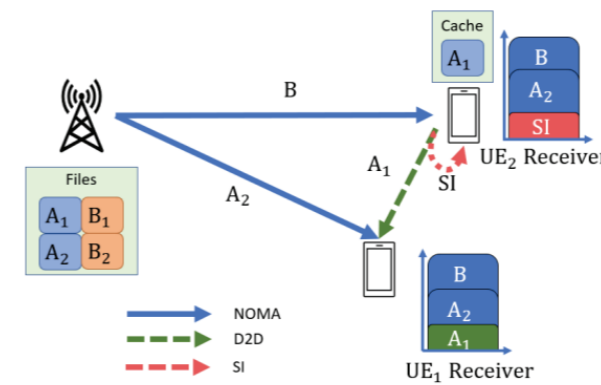
NOVEL HUMAN EAR-BASED BIOMETRIC IDENTIFICATION TECHNIQUE

A team of researchers from Khalifa University has helped to develop a technique that uses 2D and 3D images of people's ears for a biometric authentication method. It is the first study of its kind to combine both texture and geometrical information to create such a technique.



KHALIFA UNIVERSITY TEAM DEVELOP SMART GLASSES FOR DEMENTIA, REACH NEXT STAGE IN LONGITUDE PRIZE ON DEMENTIA

A team of researchers from Khalifa University has been named a semi-finalist Discovery Award winner for the Longitude Prize on Dementia. The team's iMAGIC smart glasses solution offers assistive features including facial recognition, reminders and alerts, zooming in and out to facilitate navigation, phone calls to loved ones, and vital-sign monitoring. The first team from the MENA region to reach the semi-finals has been awarded a grant for further development and progress to the next stage of the coveted international competition. The grant received from the Longitude Prize on Dementia will help the team to design prototypes of the smart glasses, and test the prototypes in a group of people living with dementia.



KU RESEARCH HELPS REVOLUTIONIZE MOBILE DATA EXCHANGE WITH D2D COMMUNICATIONS

A research team led by faculty from Khalifa University of Science and Technology has developed a method where device-to-device (D2D) communications, combined with caching and non-orthogonal multiple access (NOMA) – a multiple access technique used for 5G cellular wireless networks – can reduce mobile network congestion and make data transfer faster, thus revolutionizing mobile data exchange.



RESEARCHERS AT KHALIFA UNIVERSITY DEVELOP HUMAN-POWERED WEARABLE TECHNOLOGY

A team of researchers from Khalifa University has helped to develop a technique that uses 2D and 3D images of people's ears for a biometric authentication method. It is the first study of its kind to combine both texture and geometrical information to create such a technique.

PATENTS

The Office of Technology Management & Innovation is responsible for the protection, management and commercialization of the University's research discoveries. Closely working with faculty, researchers and students to identify transformational inventions and translate these inventions into viable business opportunities and commercial products through the formation of startups and/or technology licensing to industry partners. The entrepreneurial research-driven innovation ecosystem supports to actively contribute to UAE's knowledge-based economy



KU AS A CATALYST FOR UAE ECONOMIC DEVELOPMENT

KHALIFA INNOVATION CENTER

The KIC is an incubation center that supports the commercialization of local high-tech technologies, nurturing them into successful startups.

KIC runs bootcamp and incubation programs tailored to provide participants with the necessary entrepreneurial skills and knowledge to push research discoveries from laboratory to market. This involves focused training on understanding the market, development of business models, assessing financial plans, product development, startup organization, investment models, team role and pitching to investors, and much more to support launch of successful startups.

19

NUMBER OF ACTIVE STARTUPS UNDER KIC



KIC BOARD MEMBERS



DR. ARIF SULTAN AL HAMMADI
EXECUTIVE VICE PRESIDENT,
KHALIFA UNIVERSITY



HE ALIA AL MAZROUEI
ACTING CHIEF EXECUTIVE
OFFICER, KHALIFA FUND



HE MR. YASSER AL GERGAWI,
DIRECTOR -GENERAL,
SANDOOQ AL WATAN



DR. YEHYA AL-MARZOUQI,
EXECUTIVE DIRECTOR OF
STRATEGY, TAWAZUN ECONOMIC
COUNCIL



DR. ABDELQADER
ABUSAFIEH
HEAD OF R&D
MUBADALA AEROSPACE



APPLICATION
RECEIVED

98



NUMBER OF
BOOTCAMP STARTUPS

17



NUMBER OF
INCUBATEE STARTUPS

07



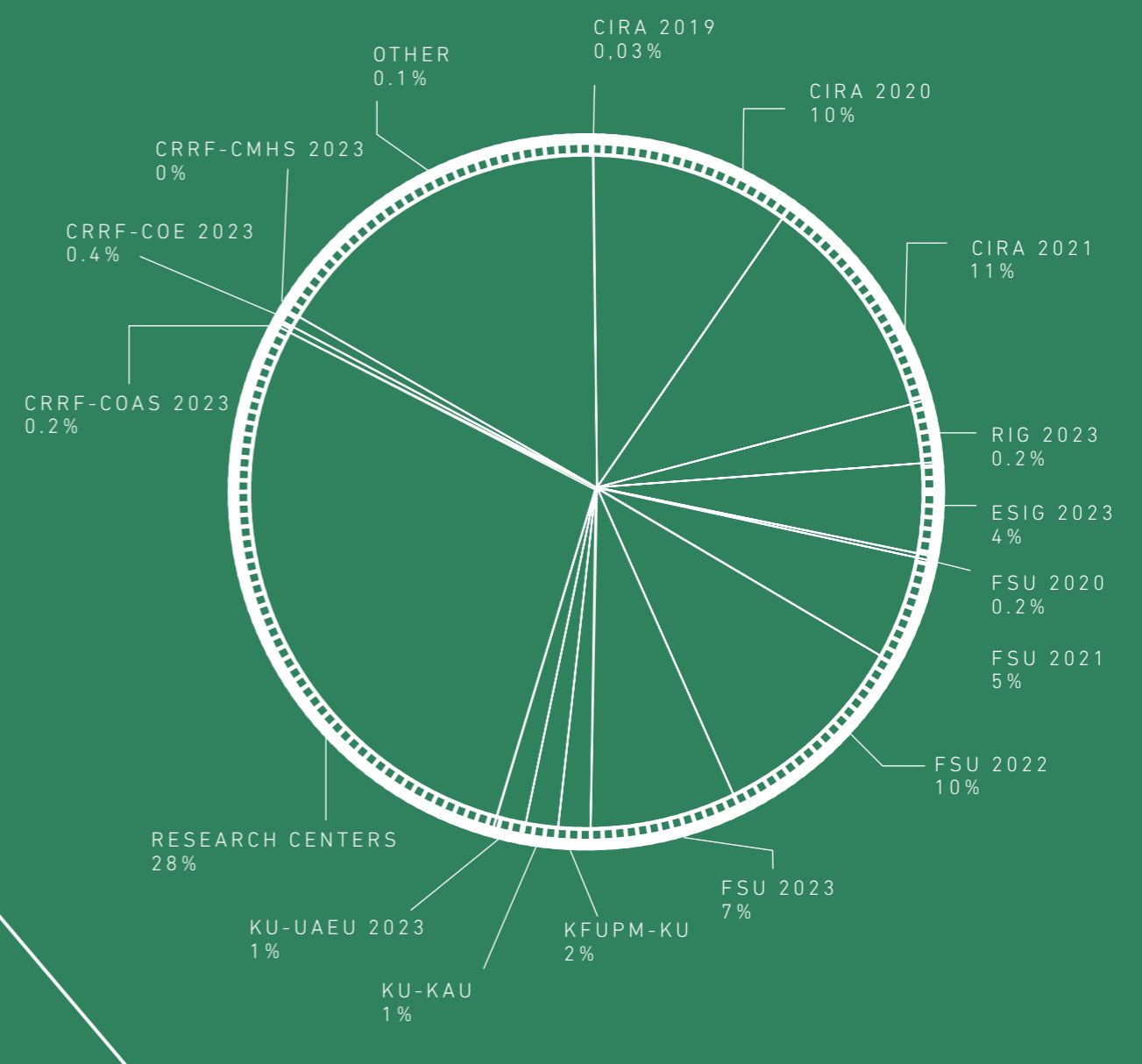
THE SUCCESS STORY 2023

217

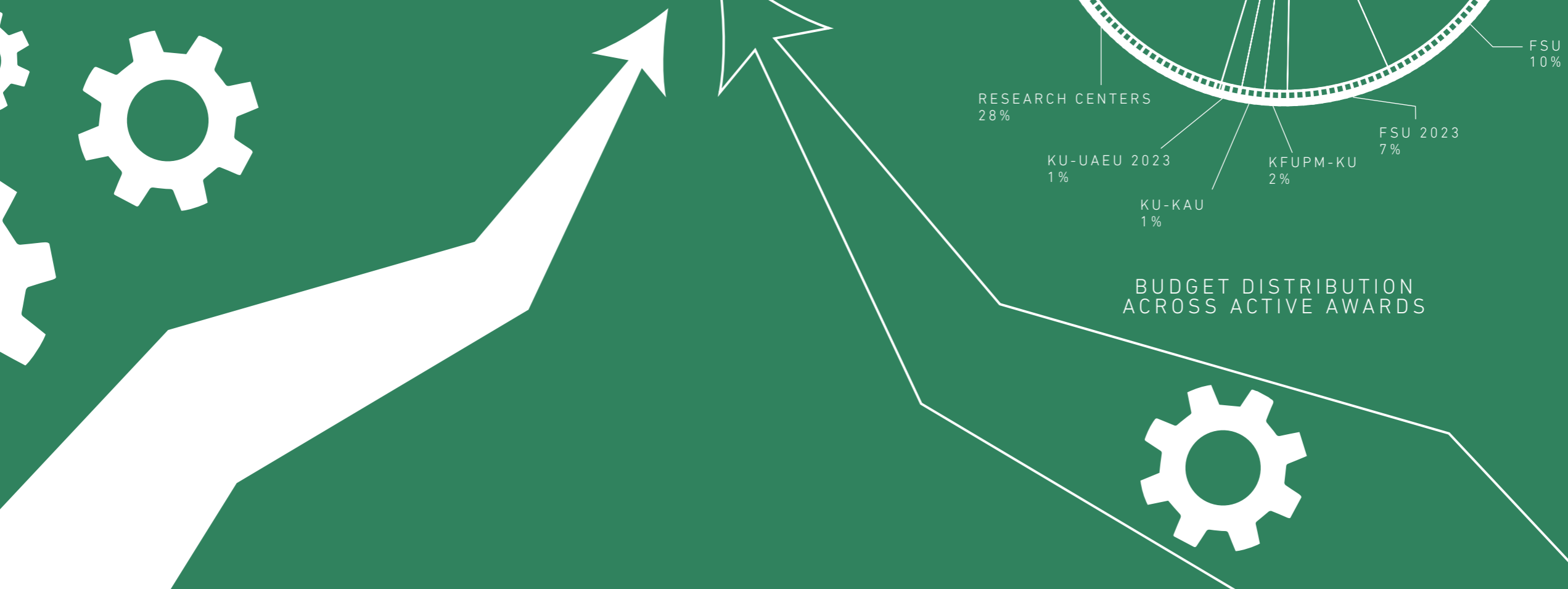
ACTIVE INTERNAL PROJECT AWARDS

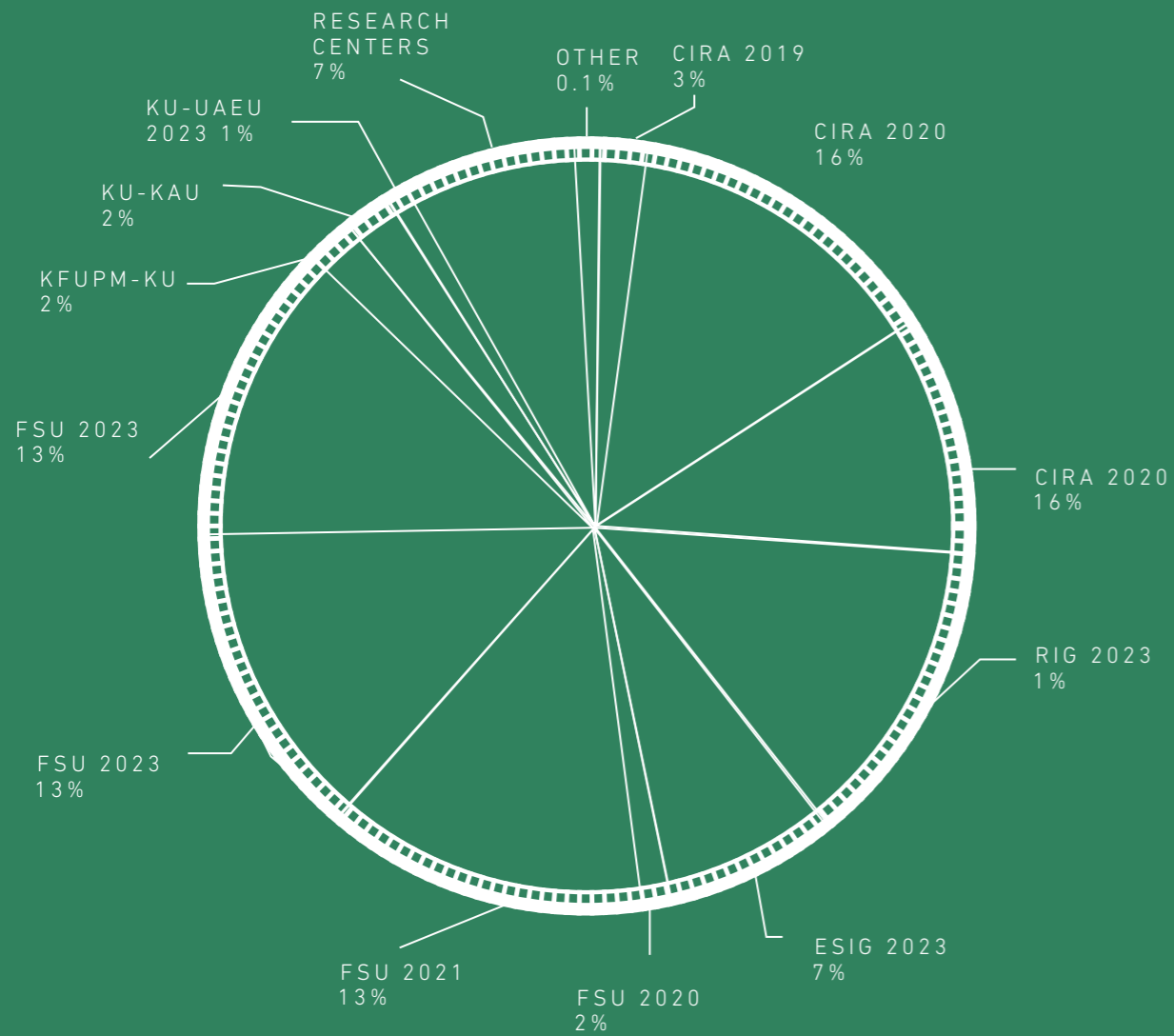
Internal awards are the allocations from funds received by KU from Department of Finance to run research projects and centers. These include research centers, Faculty Startup grants (FSU), Research Investigator Grants (RIG), College Research Funds (CRRF) and Competitive Individual Research Awards (CIRA). In addition, the internal awards also fund projects run in collaboration with other universities such as KFUPM, KAU, and UAEU.

ACTIVE INTERNAL AWARDS SUMMARY



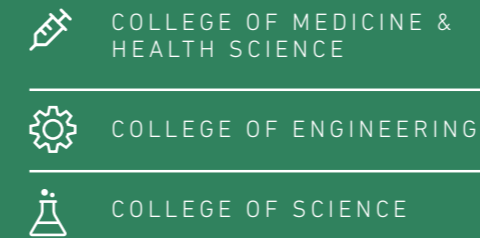
BUDGET DISTRIBUTION ACROSS ACTIVE AWARDS





NO. OF ACTIVE INTERNAL PROJECTS

DISTRIBUTION OF ACTIVE INTERNAL AWARDS BY COLLEGES



DISTRIBUTION OF ACTIVE AWARDS BY LEAD COLLEGE



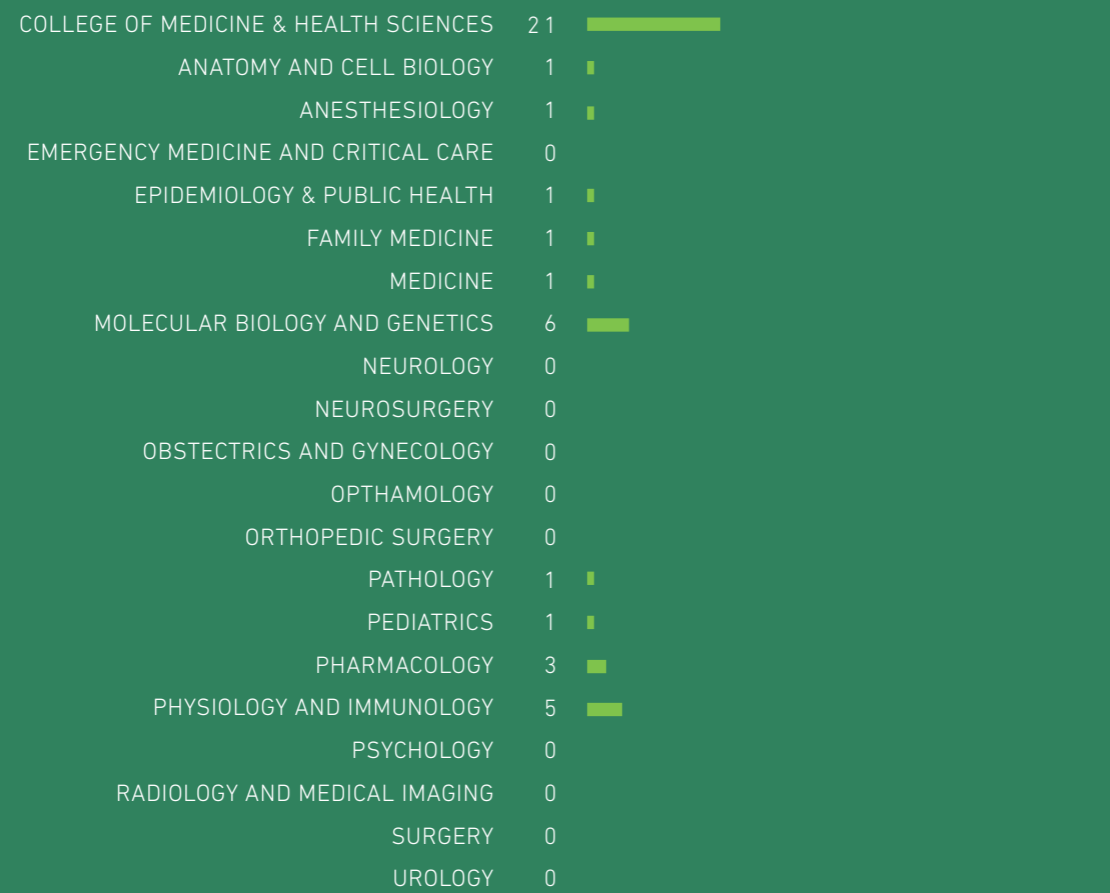
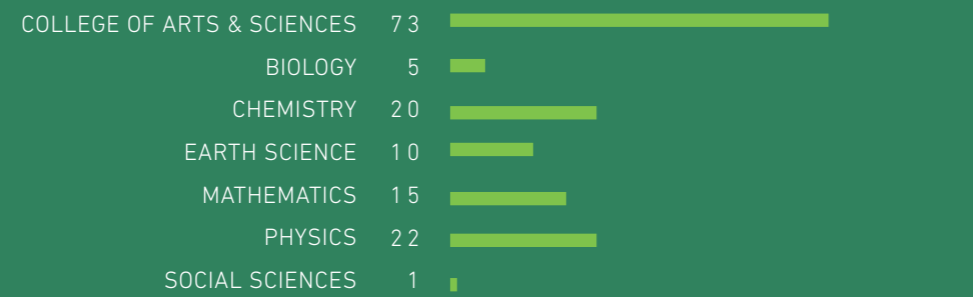
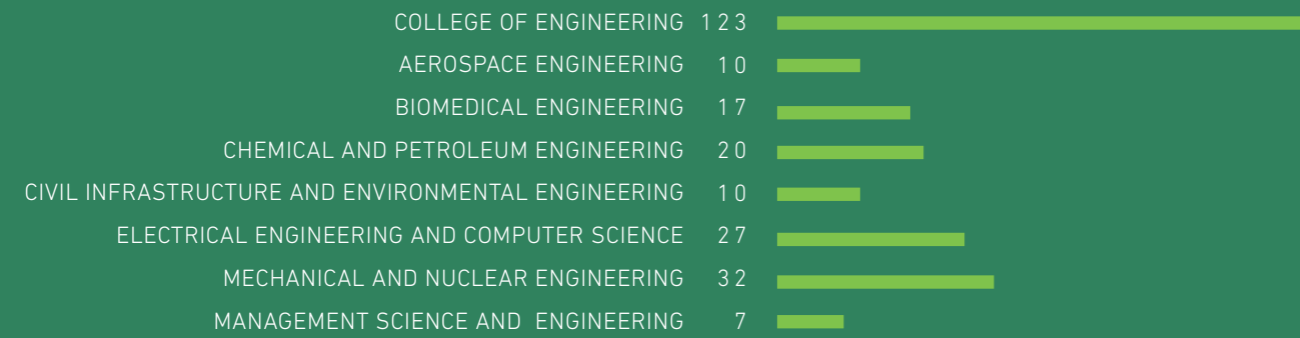
DISTRIBUTION OF ACTIVE AWARDS BY FACULTY ENGAGED



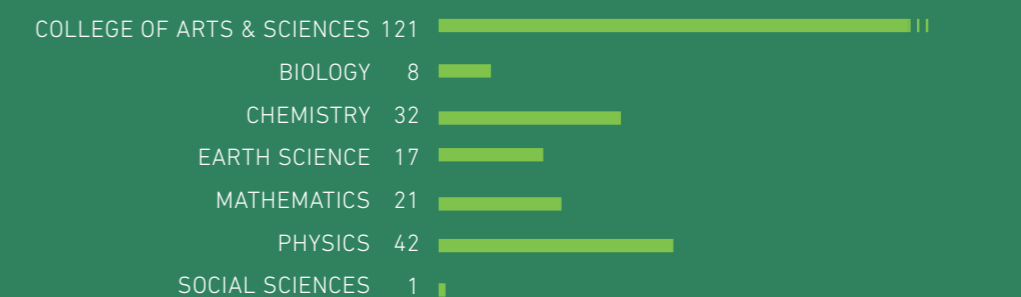
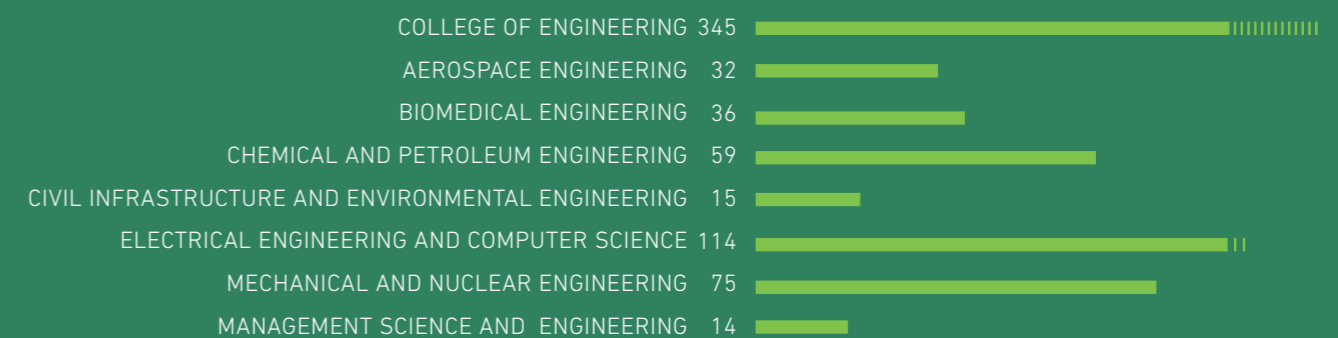
DISTRIBUTION OF ACTIVE AWARDS BY BUDGET SHARE



DISTRIBUTION OF ACTIVE AWARDS
BY NUMBER OF PROJECTS (217)



DISTRIBUTION OF ACTIVE AWARDS
BY FACULTY ENGAGED
(NO. OF PI AND CO-I ROLES ACROSS DEPARTMENTS)





2023 AWARDS AND ACHIEVEMENTS



KHALIFA UNIVERSITY OF SCIENCE AND TECHNOLOGY (KU) IS RANKED 2ND IN THE ARAB UNIVERSITY RANKINGS 2023, AND 1ST IN THE UAE FOR THE 3RD YEAR IN A ROW.



TOP 45TH

IN THE ASIA UNIVERSITY RANKING

Khalifa University ran a Metaversity Hackathon* Competition Supported by Microsoft

Khalifa University's Center for Biotechnology Becomes UAE's First Non-diagnostic Research Laboratory to Receive DoH Accreditation

UAE-Bahraini Nanosatellite Light-1 Launched Successfully into Orbit from International Space Station

#1 UAE IN THE



Khalifa University Signs MoU with CRC to Join UAE National Cybersecurity Center of Excellence and Establish Khalifa University Cybersecurity Academy

Khalifa University and Manchester University Collaborate To Fund Mutual Research In Graphene Innovation

Khalifa University Hosted Siemens Energy Abu Dhabi Innovation Center



WATER FILTRATION AND DESALINATION



ENERGY STORAGE



CONSTRUCTION



LIGHTWEIGHTING OF MATERIALS

75

HIGH-SKILLED JOBS IN ABU DHABI BY 2025

50%

OF THE INTERNS WILL BE EMIRATIS

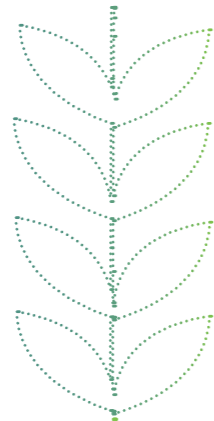
2023 FACULTY RECOGNITIONS

FACULTY RESEARCH EXCELLENCE AWARD

PUBLICATIONS IN TOP 1% JOURNALS AWARD



DR. HAIDER BUTT
ASSOCIATE PROFESSOR



FACULTY RESEARCH EXCELLENCE AWARD



DR. MUHAMMAD ARIF
ASSISTANT PROFESSOR
College of Engineering



DR. HADI OTROK
ASSOCIATE PROFESSOR
College of Engineering



DR. FAWZI BANAT
PROFESSOR
College of Engineering



DR. DINESH SHETTY
ASSISTANT PROFESSOR
College of Arts & Sciences



DR. MOHAMMAD ABU HAIJA
ASSOCIATE PROFESSOR
College of Arts & Sciences



DR. HADI SUSANTO
PROFESSOR
College of Arts & Sciences



DR. PETER CORRIDON
ASSISTANT PROFESSOR
College of Medicine & Health Sciences



FACULTY SERVICE EXCELLENCE AWARD



DR. YAHYA ZWEIRI
ASSOCIATE PROFESSOR
College of Engineering



DR. IOANNIS KOURAKIS
ASSOCIATE PROFESSOR
College of Arts & Sciences



DR. EMAN ALEFISHAT
PROFESSOR
College of Medicine & Health Sciences

LAB STAFF TEACHING EXCELLENCE AWARD



MS. JYOTHI MARY MATHEW
LAB STAFF
College of Arts & Sciences



MS. SUMA RAO
LAB STAFF
College of Engineering



MR. ABIMON M. MOHAMMED
LAB STAFF
College of Medicine & Health Sciences

FACULTY TEACHING EXCELLENCE AWARD



DR. FAWAZ HJOJJ
SENIOR LECTURER
College of Arts & Sciences



DR. KHALIFA AL HOSANI
ASSOCIATE PROFESSOR
College of Engineering



DR. SIOBHAN O'SULLIVAN
ASSISTANT PROFESSOR
College of Medicine & Health Sciences

TA TEACHING EXCELLENCE AWARD



MR. MAJED BIN SAAD
TA
College of Engineering





KHALIFA UNIVERSITY RESEARCHERS NAMED AS WINNERS OF INNOVATORS UNDER 35 MENA

Two researchers from Khalifa University have been selected as part of MIT Technology Review Arabia's 'Innovators under 35 MENA': Ghada Al Hussein, PhD candidate, Biomedical Engineering, and Dhalia Hassan, Research Assistant, were named for their biomedical engineering innovation – a 3D printed prosthetic leg from recycled materials and an app to support patients with osteoporosis.

CONFERENCES AND EVENTS

IEEE INNOVATIVE SMART GRID TECHNOLOGY CONFERENCE (IEEE - ISGT - ME 2023)

DATE: 12-15 MAR 2023

The first conference on innovative smart grid technologies in the Middle East (ISGT ME 2023), sponsored by the IEEE Power & Energy Society (PES) and Khalifa University, was held in Abu Dhabi, UAE on March 12 – 15, 2023 with the theme "Secure and Resilient Smart Grids"

ISGT ME 2023 is a forum to discuss the latest challenges, developments, and innovative technologies for smart resilient grids of the future. The conference featured keynote and plenary sessions, as well as technical papers oral and poster sessions, as well as pre-conference tutorials.



THE 4TH QUANTITATIVE INFRARED THERMOGRAPHY CONFERENCE (QIRT ASIA 2023)

DATE: 30 OCT -3 NOV 2023

It was our privilege to host the fourth Quantitative Infrared Thermography Asian Conference (QIRT-Asia 2023) on October, 30 till November 3, 2023, at Khalifa University, Abu Dhabi, U.A.E. With increasing popularity and usage, the field of Infrared Thermography has seen widespread growth in its applications. This research area is one of truly inter- and multi-disciplinary areas of research and development. As in the previous gatherings, the conference was a great scientific and cultural environment to present, share, and discuss the researches in the field.

1ST MIDDLE EAST CHEMICAL ENGINEERING SYMPOSIUM (MECHES 2023)

DATE: 18-19 OCT 2023

1st Middle East Chemical Engineering Symposium was organized by the Department of Chemical and Petroleum Engineering of Khalifa University on 18-19 October 2023 at Khalifa University Main Campus, Abu Dhabi, UAE.

MEChES 2023 is a prestigious conference brought together researchers, engineers, and practitioners from around the world to exchange knowledge, ideas, and experiences in various fields of food / pharmaceutical, water and environmental engineering, biotechnology / bioprocess, material, reaction engineering and thermodynamics, traditional and emerging energy areas and more. The conference met the set objectives of promoting collaboration among researchers/ industry players in the field of chemical engineering and provides forum for researchers, investors, and industrialists to present and discuss issues or trends in chemical engineering. It also shared the technology application experiences and solutions for the food, energy and water concerns towards commercialization and wealth generation for the nation.



In addition to the main technical program, the conference complemented by one-day short courses, posters sessions, tutorials, exhibition and awards

The Quantitative Infrared Thermography (QIRT) conference is a biannual international conference in which Infrared Thermography (IRT) specialists from industries and academia discuss and present their current interests and novel developments.



CONVERGING PATHS IN COMMODITY AND FINANCIAL MARKETS ANALYSIS CONFERENCE

DATE: 4 – 8 DEC, 2023

The meeting was organized by the Department of Mathematics of the College of Arts and Sciences of Khalifa University, and hosted two well established conferences: "Research in Options" Conference on Dec 4-5, 2023 and 68th Euro Working Group for Commodity and Financial Modelling (EWGCFM) Conference on Dec 6-8, 2023.

REIMAGINE EDUCATION AWARDS & CONFERENCE

DATE: 11-13 DEC, 2023

The Reimagine Education Awards – the 'Oscars' of Education – in 2023 celebrates a decade of rewarding innovative approaches that enhance student learning outcomes and employability. Over the past nine years, this global competition has had the privilege of witnessing remarkable



This is the 1st Abu Dhabi edition of "Research in Options" conference that previously has been held at IMPA and at the Getulio Vargas Foundation (FGV), in Rio de Janeiro, Brazil in the past with a total of seventeen meetings. It included the presence of a large number of scientists, mathematicians, and practitioners working on the interface of mathematics and finance. This time around it will be held at Khalifa University and will be followed up by the meeting in Rio de Janeiro at FGV.

The EURO Working Group for Commodities and Financial Modelling was founded in September 1986 in Lisbon. Since then, the Group has met on a semiannual basis in International Meetings. The primary field of interest for the Working Group is related to the modelling, statistical and mathematical developments that help to formulate and solve decision problems under risk faced by decision makers exposed to financial and commodity markets and operating in firms, intermediaries and the investment community at large.

innovations in education from our respected community and we look forward to reviewing the 2023 submissions.

The Reimagine Education Conference brought together a variety of communities motivated to shape the future of education. The conference has been central to the formation of key partnerships between edtech companies, universities, schools, and educational non-profits worldwide. Join us in 2023 in Abu Dhabi to network, learn, and gain insight with the most innovative minds to discuss the future of teaching and learning.



THE 21ST INTERNATIONAL CONFERENCE ON ADVANCED ROBOTICS (ICAR 2023)

DATE: 5-8 DEC, 2023

The 21st International Conference on Advanced Robotics (ICAR 2023) was held from 5 to 8 December 2023 at Khalifa University, Abu Dhabi, UAE. The International Conference on Advanced Robotics is one of the most established robotics conferences in the world. Since its first edition in 1983, it had a significant impact on the development of robotics. ICAR 2023 is technically co-sponsored by the IEEE Robotics and Automation Society, which ensures that the conference will be a world-class event with a strong technical program and high-quality attendees. In addition, the event was held in person for the first time after the pandemic, making it an ideal opportunity for your company to network with industry leaders and showcase its latest innovations. Sponsors of ICAR 2023 had a unique opportunity to showcase its products and services to a highly engaged audience of researchers, academics, and industry professionals from around the world. The conference featured plenary talks, workshops, and oral presentations from all areas of robotics, including robotics vision, cognitive robotics, humanoid robots, and many more. With original contributions, new ideas and views, ICAR pushes the boundaries of robotics and sets new research areas in robotics science and technology.



17TH WORKSHOP OF THE ILP TASK FORCE ON SDEIMENTARY BASINS

DATE: 5-6 DEC 2023

Khalifa University and the Ministry of Energy and Infrastructure in the United Arab Emirates in partnership with the International Lithosphere Program (ILP) organized the 17th Workshop of the International Lithosphere Program Task Force Sedimentary Basins on December 5th to 6th, 2023 in Abu Dhabi – United Arab Emirates. This meeting was a platform to explore and discuss the different aspects of crustal evolution through different geoscientific approaches. The workshop, which is held annually in distinct geological regions, attracted a substantial number of scientists and specialists from around the world.



THE INTERNATIONAL CONFERENCE ON MICROELECTRONICS (ICM 2023)

DATE: 17-20 DEC, 2023

1st Middle East Chemical Engineering Symposium was organized by the Department of Chemical and Petroleum Engineering of Khalifa University on 18-19 October 2023 at Khalifa University Main Campus, Abu Dhabi, UAE. MEChES 2023 is a prestigious conference brought together researchers, engineers, and practitioners from around the world to exchange knowledge, ideas, and experiences

in various fields of food / pharmaceutical, water and environmental engineering, biotechnology / bioprocess, material, reaction engineering and thermodynamics, traditional and emerging energy areas and more. The conference met the set objectives of promoting collaboration among researchers/ industry players in the field of chemical engineering and provides forum for researchers, investors, and industrialists to present and discuss issues or trends in chemical engineering. It also shared the technology application experiences and solutions for the food, energy and water concerns towards commercialization and wealth generation for the nation.



UPCOMING EVENTS 2024

- Unmanned Systems Simulation & Training (UMEX 2024)
- Arab Health 2024
- The European Robotics Forum (ERF 2024)
- World Future Energy Summit (WFES 2024)
- The 6th IEEE International conference on Artificial Intelligence Circuits and Systems (IEEE AICAS 2024)
- Abu Dhabi International Book Fair (ADBIF 2024)
- Abu Dhabi Global Healthcare Week (ADGHW 2024)
- IEEE International Conference on Robotics and Automation (ICRA 2024)
- The 3rd UAE Anatomy and Cell Biology Conference
- Khalifa University Graduation Ceremony 2024
- The 7th Digital Health Conference
- 20th International Education Show (IES 2024)
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2024)
- GITEX Global 2024
- 17th International Workshop on Variable Structure Systems and Sliding Mode Control
- Najah Abu Dhabi 2024
- IEEE International Conference on Image Processing (ICIP 2024)
- The 9th International Conference on Alzheimer's Disease and Related Disorders in the Middle East
- The International Conference on Nanostructured Materials (NANO 2024)
- The 2nd UAE THERMO-FLUIDS DAY
- ADIPEC 2024
- The 4th International Conference on Technology and Innovation in Learning (TECH-EDU 2024)
- The 11th International Conference on Software Development and Technologies for Enhancing Accessibility (DSAI 2024)
- 1st IEEE International Middle East Conference on Communications and Networking (ComSoc 2024)
- Innovative & Industrial 2D and Advanced Materials Summit
- The 6th International Conference on Smart Power & Internet Energy Systems (SPIES2024)
- IEEE International Conference on Cloud Computing Technology and Science
- IEEE Conference on Data Mining 2024

GRADUATION IN 2023

Under the patronage of His Highness Sheikh Hamed bin Zayed Al Nahyan, Chairman of the Board of Trustees of Khalifa University, the 2023 graduation ceremony celebrated the academic success of 549 male and female students from bachelor's, master's, and doctoral programs in various disciplines. His Excellency Sheikh Nahyan bin Mubarak Al Nahyan, Minister of Tolerance and Coexistence, honored the university's students.



PARTNERSHIPS & COLLABORATIONS

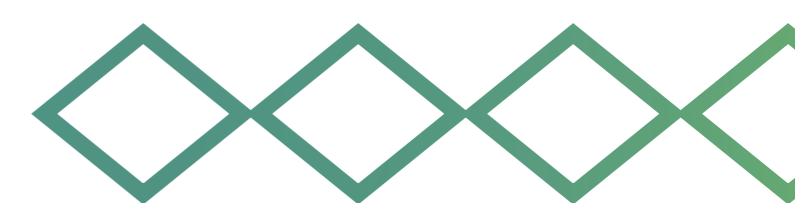


Khalifa University firmly believes collaborations are the best way forward for obtaining sustainable solutions to real-world challenges, especially through research and development. This is one of the reasons why in this year alone, the University has entered into partnerships with a sizeable number of global and regional corporations and institutions. Reflecting our status as a research-intensive academic institution, these collaborations are also multifaceted – focusing on research, technology, entrepreneurship, sustainability and human capital.

Khalifa University currently has over 50 active and strategic partnerships with a number of private, public and academic organizations from around the world. These partnerships provide academic opportunities, such as student exchanges, student sponsorships, and internship programs, and joint research opportunities, such as collaborations.

Collaborations with educational institutions include, but not limited to Georgia Tech, the University of Tokyo, the University of Western Australia, Korea Advanced Institute of Science and Technology (KAIST), Massachusetts Institute of Technology (MIT), Texas A&M University, University of Manchester, Tsinghua University, University of Leuven in Belgium, and the University of Naples Federico II.

Partnerships with government and industry organizations include, but not limited to Abu Dhabi National Oil Company (ADNOC), Mubadala Investments Company, Emirates Global Aluminum, Al Yah Satellite Communications Company (Yahsat), Etihad Airways, Total, International Atomic Energy Agency (IAEA), Boeing, BT, and BP.



RESEARCH & INNOVATION CENTER FOR GRAPHENE AND 2D MATERIALS (RIC2D)

Established in 2022 at Khalifa University, RIC2D is part of a strategic investment by the Government of Abu Dhabi, in the UAE, to advance the scientific development and commercial deployment of technologies derived from graphene and other 2D materials. RIC2D serves as an integral part of an advanced materials innovation ecosystem being developed in Abu Dhabi. The center has been expanding its activities through collaborations, especially a partnership with the pioneering nanomaterials engineering and advanced materials innovation company Graphene Composites (GC), a strategic partnership with France's Grapheal to industrialize and commercialize graphene-based biosensors in the UAE, and an MoU with Graphmatech AB, a leader in the development of graphene-enhanced polymers.

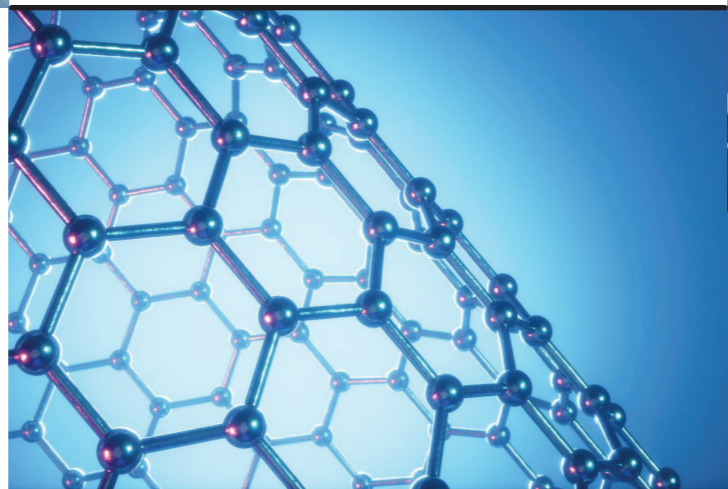


KHALIFA UNIVERSITY AND FRANCE'S DASSAULT AVIATION COLLABORATING TO DEVELOP GRAPHENE-BASED AND 2D MATERIAL TECHNOLOGIES FOR AEROSPACE APPLICATIONS

Within the framework of the MoU signed earlier to establish academic cooperation in developing aeronautical education and related research in the UAE, Khalifa University and Dassault Aviation of France announced the collaboration on developing two new material technologies for aerospace applications with potential for patenting and commercialization.

KHALIFA UNIVERSITY'S RIC2D AND GRAPHENE COMPOSITES FORGE COLLABORATIVE PARTNERSHIP TO ADVANCE GRAPHENE-BASED TECHNOLOGIES

Khalifa University's Research & Innovation Center for Graphene and 2D Materials (RIC2D) has entered into a collaborative partnership with Graphene Composites (GC), to develop cutting-edge graphene-based technologies, shaping the future of materials engineering, identifying opportunities and collaborating on projects that leverage the unique properties of graphene.



KHALIFA UNIVERSITY'S RIC2D AND LOLC ADVANCED TECHNOLOGIES SIGN MOU TO COLLABORATE IN ADVANCED MATERIALS INNOVATION

Khalifa University's Research and Innovation Center for Graphene and 2D Materials (RIC2D) and LOLC Advanced Technologies, part of the Sri Lanka-based LOLC Group, signed a memorandum of understanding (MoU) to cooperate in identifying opportunities in advanced materials innovation and exploring UAE market potential.



RIC2D HIGHLIGHTS COMMERCIALIZATION OF RESEARCH AT GRAPHENE WEEK 2023 IN SWEDEN

Khalifa University's Research and Innovation Center for Graphene and 2D Materials (RIC2D) highlighted the commercialization of research and how challenges from the region are addressed with innovations in construction, health care, aerospace, energy, and water purification, at the second EU-UAE International Workshop at Graphene Week 2023 in Gothenburg, Sweden.



ACADEMIC PARTNERSHIPS / COLLABORATIONS



RESEARCH PARTNERSHIPS / COLLABORATIONS



INDUSTRY PARTNERSHIPS / COLLABORATIONS



◆ PARTNERSHIP AND COLLABORATION NEWS 2023



KHALIFA UNIVERSITY AND CHINA'S AVIATION PRODUCTS AND TECHNOLOGY COMPANY SIGN MOU TO ESTABLISH CATIC-KU JOINT LAB

Khalifa University of Science and Technology and the China National Aero-Technology Import and Export Corporation (CATIC) today announced they have signed a memorandum of understanding (MoU) to establish a 'CATIC-KU Joint Lab' and facilitate talent exchange of researchers and students.

KHALIFA UNIVERSITY AND HAYAT BIOTECH SIGN MOU TO COLLABORATE ON RESEARCH PROJECTS, HUMAN CAPITAL DEVELOPMENT AND CAREER ENHANCEMENT

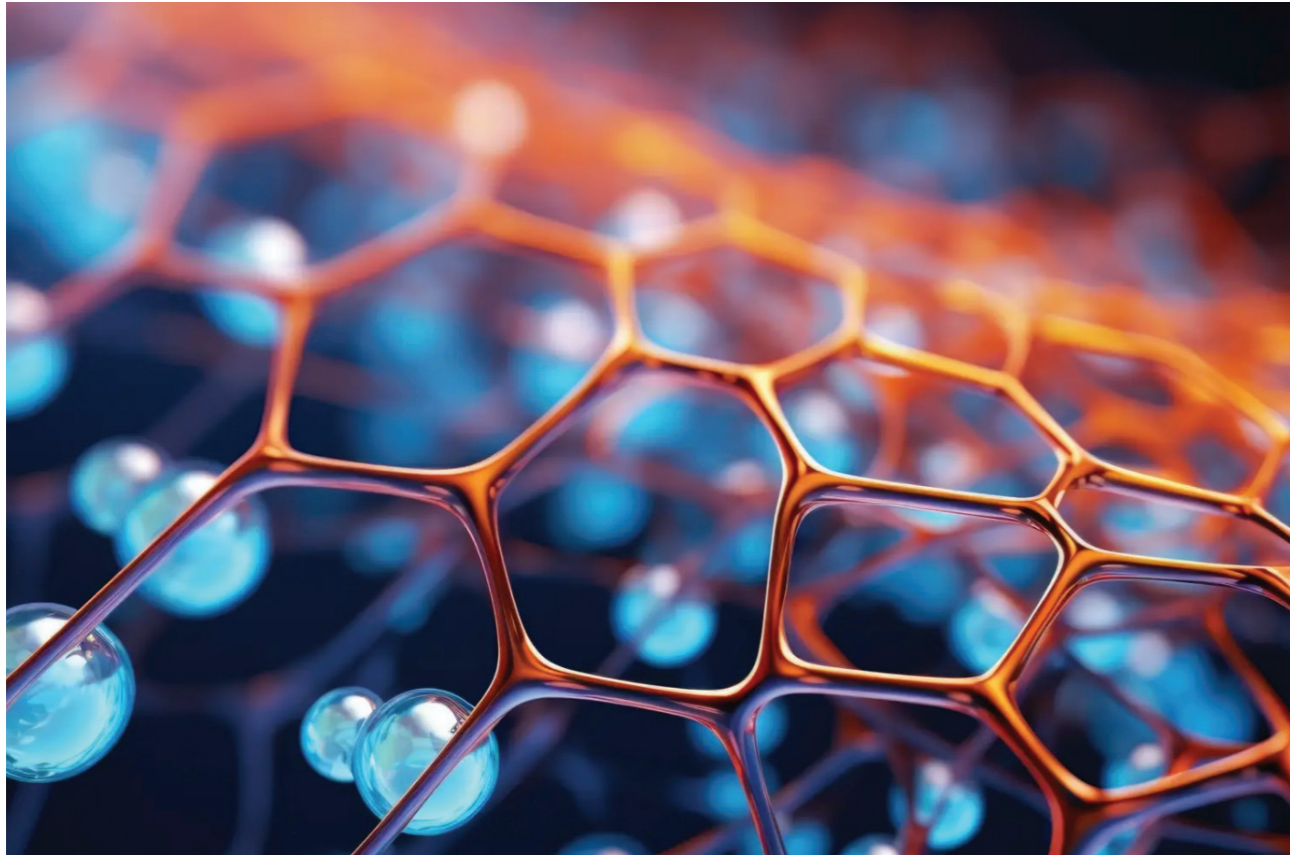
Khalifa University of Science and Technology and Hayat Biotech, the UAE based biotechnology leader, announced the signing of a memorandum of understanding (MoU) to collaborate on research projects, human capital development, and career enhancement.



KHALIFA UNIVERSITY LAUNCHES ATLAS ELEKTRONIK HIGH PRESSURE COMBUSTION CENTER IN COLLABORATION WITH TAWAZUN COUNCIL

Khalifa University of Science and Technology today announced the launch of Atlas Elektronik High Pressure Combustion Center, a state-of-the-art facility, in collaboration with Tawazun Council, the UAE's defense and security acquisitions authority for the Ministry of Defense, Abu Dhabi Police and Security Agencies, and Atlas Elektronik, a global leader in naval and marine electronics, especially integrated sonar systems.





KHALIFA UNIVERSITY'S RIC2D AND CMAT IN PARTNERSHIP WITH FRANCE'S GRAPHEAL ANNOUNCE NEW POINT-OF-CARE DIAGNOSTIC BIOSENSOR PROTOTYPE

Khalifa University of Science and Technology's Research and Innovation Center for Graphene and 2D Materials (RIC2D) and the Center for Membranes and Advanced Water Technologies (CMAT) and France's Grapheal today announced the first step of a strategic partnership to industrialize and commercialize graphene-based biosensors in the UAE, and have officially presented the first Minimal Viable Product (MVP) resulting from this cooperation.



EMIRATES STEEL ARKAN, KHALIFA UNIVERSITY AND OHMIUM INTERNATIONAL COLLABORATE ON GREEN HYDROGEN RESEARCH HUB

Emirates Steel Arkan (ESA), Ohmium International, and Khalifa University signed a strategic collaboration on hydrogen research and development, witnessed by the UAE Ministry of Industry and Advanced Technology (MoIAT). This collaboration will help accelerate adoption of green hydrogen to support low-carbon transformation of the steel sector.



KHALIFA UNIVERSITY'S RIC2D AND GRAPHMATECH SIGN MOU TO COLLABORATE IN ADVANCED GRAPHENE-ENGINEERED MATERIALS AND MANUFACTURING PROCESSES

Khalifa University of Science and Technology's Research and Innovation Center for Graphene and 2D Materials (RIC2D) and Graphmatech AB, a leading company in the development of graphene-enhanced materials, today announced they have signed a memorandum of understanding (MoU), establishing a strategic framework for cooperation in advanced graphene-engineered materials and manufacturing processes.

KHALIFA UNIVERSITY SCIENTISTS JOIN WITH PARTNERS TO CONDUCT ADVANCED TESTING ON PRINTING AND DEPOSITION OF TWO 2D MATERIALS IN SPACE

A team of Khalifa University researchers collaborated with the University of Cambridge, University of Brussels and York University, have successfully conducted advance studies on printing and deposition of two 2D materials as part of the Advanced Research on Liquid Evaporation in Space (ARLES) experiments of the European Space Agency (ESA). Such advanced studies on printing in microgravity are expected to help in the development of knowledge for printing in space, in order to build space manufacturing capabilities that will help future space exploration missions and can play a critical role in human space exploration.





RECOGNITION

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MR. CLARENCE MICHAEL,
English Editor Specialist

VOTE OF THANKS:

Special thanks to colleges, departments, faculty and staff who contributed with their time and inputs to the KU Annual Report 2023.

ENVIRONMENTAL DISCLAIMER:

KU is committed to environmental sustainability and encourages responsible consumption of resources. As part of our commitment, we urge readers to consider the environmental impact of printing this report.



20
23



KU ANNUAL
REPORT

KU.AC.AE