



جامعة الإمام عبد الرحمن بن فيصل  
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

عمادة خدمة المجتمع والتنمية المستدامة  
Deanship of Community Service and Sustainable Development



SDG 6.3.1

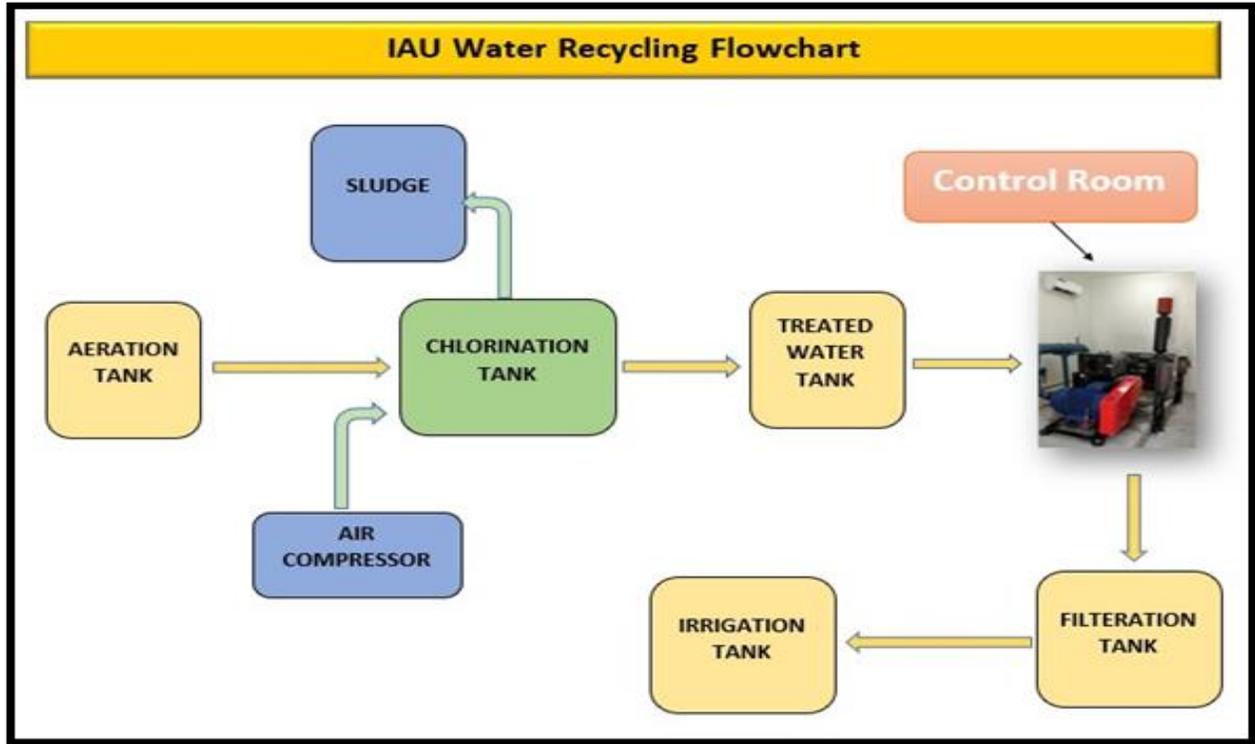
Wastewater Treatment

2024-2025

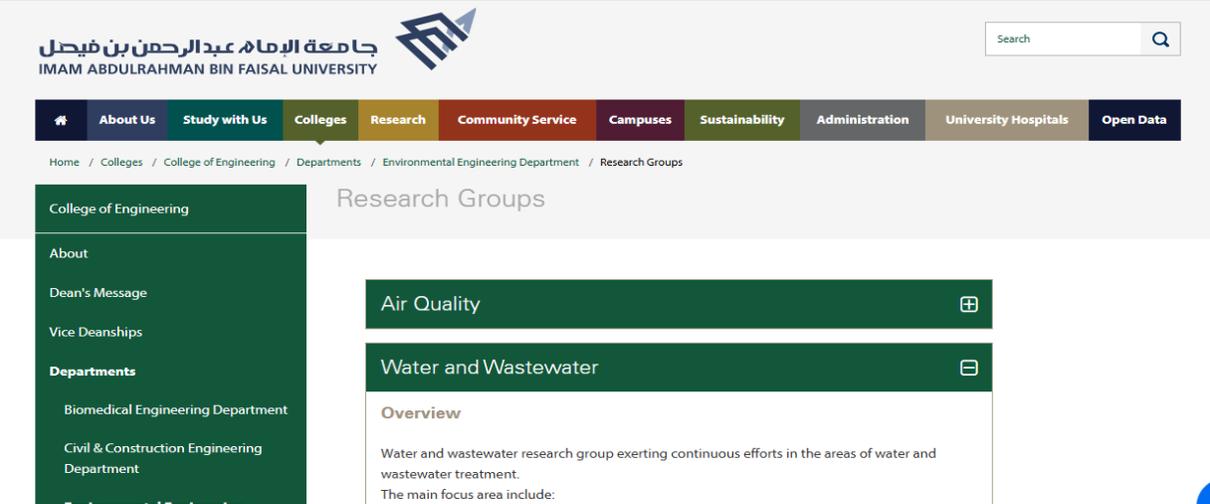
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## 1. Water Recycling Flow Chart



## 2. Research Groups on Wastewater at IAU



The screenshot shows the website interface for Imam Abdulrahman Bin Faisal University. The navigation menu includes: About Us, Study with Us, Colleges, Research, Community Service, Campuses, Sustainability, Administration, University Hospitals, and Open Data. The breadcrumb trail is: Home / Colleges / College of Engineering / Departments / Environmental Engineering Department / Research Groups. The main content area is titled "Research Groups" and lists "Air Quality" and "Water and Wastewater". The "Water and Wastewater" group is expanded to show an "Overview" section with the text: "Water and wastewater research group exerting continuous efforts in the areas of water and wastewater treatment. The main focus area include:"

<https://www.iau.edu.sa/en/colleges/college-of-engineering/departments/environmental-engineering-department/research-groups>

### 3. Periodic Inspection and Repair of Water Pipes at IAU

IAU periodically inspects the water pipes and timely responds to the water leakage issues across the campus with enough equipment and workforce to prevent water pollution.



**Repair of Water Leakage on Pipes to prevent Water Pollution at IAU**



**Water pipes Repairs for preventing leakages and water pollution at IAU**



Repair of Water Leakage on Pipes to prevent Water Pollution at IAU



**Intensive and Immediate Measures by IAU to prevent Water Pollution from Water leakage**



Recycled Water sprinklers repaired and pipes examined and replaced periodically



**Water Pipes periodically inspected and repaired for any leaks or worn outs**

## 4. Implementation of Water Recycling Program at IAU



**Brakish water well Reverse osmosis desalination, IAU, KSA**



**Water recycling at full swing in IAU Campuses**





Wastewater collection and processing plant



Waste water treatment plant at IAU

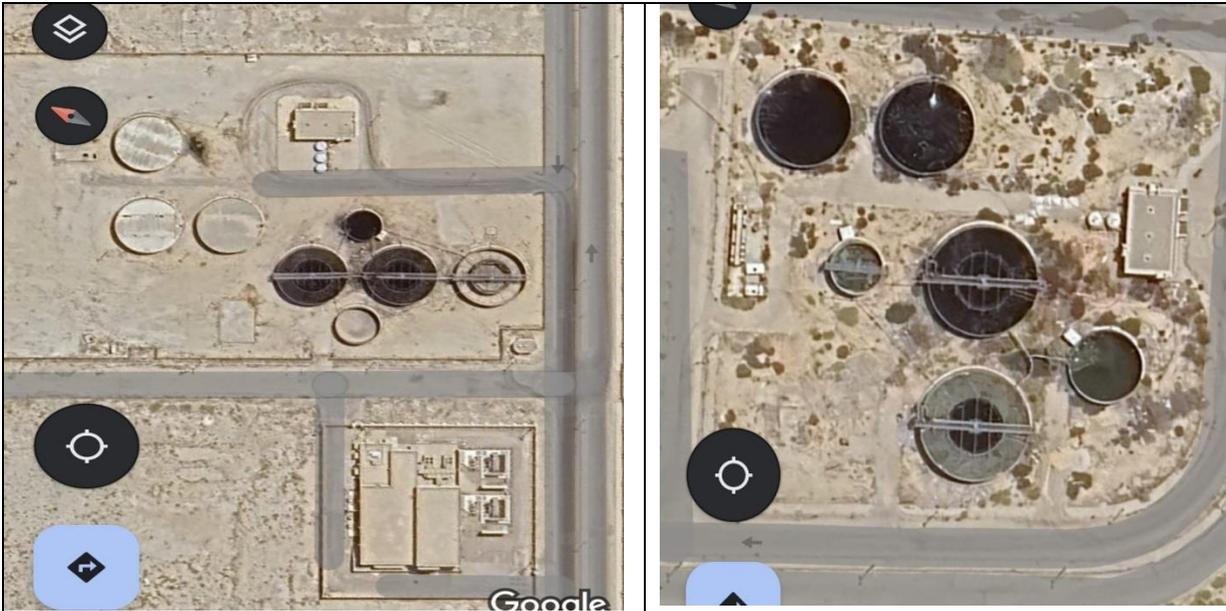


**Water Desalination plant at IAU**



**Water treatment plants**

## 5. Drone Views of Water Recycling Tanks at IAU



**On campus biological water treatment plant at IAU**



**Monitoring Water pipes regularly for preventing leakages and water pollution**

## 6. IAU Active Involvement in Water Management

Wastewater/Organic Analysis Lab
☰

**Supervisors**

**Dr. Ismail Anil**  
**Email:** ianil@iau.edu.sa  
**Location:** College of Engineering, A13 Building

**Equipment/Service**

- Gas chromatography coupled with mass spectrometry (GC-MS)
- Ion chromatography
- High-performance liquid chromatography (HPLC)
- Radioactivity Meter
- Solid phase extraction system
- Furnace
- Rotary evaporator
- Automatic titration unit

Laboratory Analysis & Environmental Services Price List
📄

**Wastewater / Organic Analysis Lab at IAU**

<https://www.iau.edu.sa/en/colleges/college-of-engineering/labs-and-equipment/environmental-engineering-laboratories>

E-SERVICES EMAIL STUDENTS HUMAN RESOURCES ALUMNI LIBRARY ADMISSION NEWS EVENTS JOB DIRECTORY CONTACT عربي



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Home / Administration / Centers / Basic and Applied Scientific Research Center / Specific Units / Water Desalination and Treatment Unit

Basic and Applied Scientific Research Center

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About

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Director's Message

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Organizational Structure

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Specific Units

- Biotechnology Unit
- Catalysis Unit
- Ecology and Environmental Biology Unit
- Mathematical Studies of Real-Life Problems Unit

## Water Desalination and Treatment Unit

The problem of supplying the population with freshwater is one of the significant issues facing Saudi Arabia, as mentioned in Vision 2030, which includes preserving natural resources by reducing water consumption and reuse it. Various trials occurred to produce freshwater from saline water; this is termed the desalination of water. The unit aims to treat water and find desalination methods using biodegradable and non-consumer energy polymeric materials. Since the polymeric materials are matrices, they act as scavengers of the cations and the anions dissolved in water. Also, the use of the synthesized copolymers as heavy metal adsorbents will be checked for the water product treatment. The polymeric materials are manufactured to display disinfection efficiency to keep the freshwater free from any bacterial growth during and after the desalination process. Exhibiting disinfection efficiency, the synthesized copolymers, as an incoming goal, will be used in the RO dialysate membrane. Moreover, the regeneration of the metal ion from the polymeric matrix and its reduction to the zero state is also our goal challenge. The planning goal of our unit is its use of the synthesized polymeric materials in the agriculture of sand soil as hydrogels.

### Water Desalination and Treatment Unit

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<https://www.iau.edu.sa/en/administration/centers/basic-and-applied-scientific-research-center/specific-units/water-desalination-and-treatment-unit>



**Field Visit to the Marine Pollution Control Department at Aramco by IAU Faculty and Students**

I had the honor of organizing a field visit to the Marine Pollution Control Department at Aramco - Tanura Opinion. Many thanks to Aramco for allowing the future engineers to have this unique experience and wonderful organization.

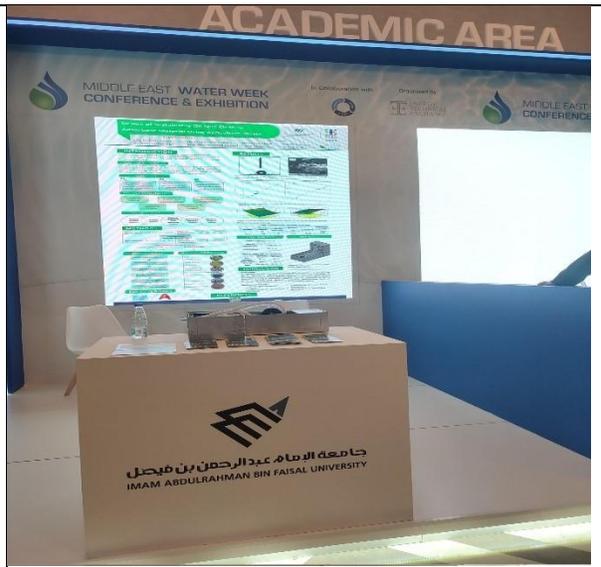
<https://twitter.com/Omer2AGA/status/1755169090157637914>



### **Participation of IAU Engineering College Students in the EnviroSpill Conference and Exhibition at Bahrain**

Part of the participation of College of Engineering students of IAU in the conference sessions specialized in combating pollution through the EnviroSpill Conference and Exhibition, which was held in the Kingdom of Bahrain to learn about the latest technologies in combating oil spills under the patronage and attendance of His Excellency the Minister of Oil and Environment in Bahrain.

[https://twitter.com/IAU\\_KSA/status/1582358003483029504](https://twitter.com/IAU_KSA/status/1582358003483029504)



### IAU Participation in the Middle East Water Week Conference and Exhibition

The Environmental Engineering section of Faculty of Engineering Imam Abdulrahman Bin Faisal University participated in the Middle East Water Week Conference and Exhibition and presented a number of projects aimed at treating water.

[https://twitter.com/CE\\_IAU\\_SA/status/1736717131863962024](https://twitter.com/CE_IAU_SA/status/1736717131863962024)





### Visit of the Delegation of the Saline Water Conversion Corporation to IAU

Part of the visit of the delegation of the Saline Water Conversion Corporation to Imam Abdulrahman Bin Faisal University, which included a tour of: 1) Research Center, Faculty of Science, 2) Faculty of Computer Science and Information Technology, 3) Faculty of Engineering  
[https://twitter.com/IAU\\_KSA/status/1604581022351368192](https://twitter.com/IAU_KSA/status/1604581022351368192)



جامعة الإمام عبد الرحمن بن فيصل  
 IMAM ABDURRAHMAN BIN FAISAL UNIVERSITY  
 مركز التعليم المستمر  
 Continuing Education Center

Kids | الأكاديمية السعودية للمياه  
 SAUDI WATER ACADEMY

## برنامج أجيال الصيفي

يسم مركز التعليم المستمر بجامعة الإمام عبد الرحمن بن فيصل وبالتعاون الأكاديمية السعودية للمياه عن إطلاق برنامج أجيال الصيفي

### الأنشطة التدريبية

- الرمجة باستخدام روبوت كويو
- قياس الرقم الهيدروجيني في السائل
- تحدي القيادة باستخدام اللجج
- روبوت اسفيرو وملعب كرة القدم
- بطارية الليمون من بأسكو
- الواقع الافتراضي وللعزز
- للاخضر

**التسجيل والتعارف**  
 للتسجيل والتعارف  


**موقع التدريب**  
 جامعة الإمام عبد الرحمن بن فيصل - مركز التعليم المستمر - 679

**سعر البرنامج**  
 350 ريال  
 للطلاب من 7 - 12 سنوات

**الفترة المستهدفة**  
 الأطفال من 7 - 12 سنوات

**موعد البرنامج**  
 14 يوليو 2024  
 9:00AM - 12:00PM  
 15 ساعة تدريبية

الهيئة السعودية للمياه  
 Saudi Water Authority

SAUDIWACD | WWW.SWACADEMY.COM

### IAU in cooperation with the Saudi Water Academy for “Generations Summer Program”

The Continuing Education Center is pleased to #Imam\_AbdulRahman\_Bin\_Faisal\_University In cooperation with the Saudi Water Academy. The announcement of the launch of “Generations Summer Program”. The Target group is Children from (7 years to 12 years).

[https://twitter.com/IAU\\_KSA/status/1808112744589070344](https://twitter.com/IAU_KSA/status/1808112744589070344)