



Template for Evidence(s) UI GreenMetric Questionnaire

University : Alexandria University

Country : Egypt

Web Address : https://alexu.edu.eg/

[4] Water (WR)

[4.5] Water pollution control in campus area



Accreditation Certificate No. (218028A

Arab Republic of Egypt Egyptian Accreditation Council (EGAC)

Certifies that

Central Laboratory - Faculty of Science

Alexandria University

1 Baghdad Street - Moharam Bey

Alexandria Governorate - Egypt

Has been accredited by EGAC in compliance with the requirements of ISO/IEC 17025:2017

In Some Physical and Chemical Tests for Water

The scope of accreditation is described in the attached schedule No. (218028 B)

Scope Issue No. (2)

Issue No. (2): January 06, 2020

Valid to: February 27, 2023

Subject to continued compliance to the above standard and the requirements of EGAC

 $EGAC\ is\ an\ ILAC\ MRA\ Signatory\ in\ the\ Field\ of\ Calibration,\ Testing,\ Medical\ Labs,$

Proficiency Testing Providers and Inspection Bodies Accreditation

1st Accreditation Date: February 28, 2019

Eng. Hany El Desouki

Hany So Desouk

EGAC Executive Director

Nevein Gamea

.....Nevein Gamea.....

Chairman of EGAC

Minister of Trade and Industry

Water quality analysis and monitoring at Alexandria University

Accreditation Certificate of Central Laboratory – Faculty of Science (Alexandria University)





Ministry of Trade and Industry **Egyptian Accreditation Council EGAC**



وزارة التجارة والصناعة المجلس الوطني للإعتماد إيجاك

Schedule of Accreditation for Testing Laboratory According to ISO/IEC 17025 Issued To

Central - Laboratory
Faculty of science Alexandria university
1 Baghdad street, Moharam Bey-Alexandria
1" Accreditation date: February 28, 2019

Schedule No.: 218028B Issue No.(2): January 06, 2020 Revision No. (1): Valid to: February 27, 2023

Materials / Products Tested Water	Types of Tests / PropertiesMeasured / Range of Measurements (%)	Standard Specifications / Techniques Used		
	Determination of pH	SMWW, 4500 H+:2017	pH Meter Model: HAC/HQ11D S.N. 170100010026 Code: CLS-03	
	Determination of Turbidity	SMWW, 2130:2017	Turbidity Meter Model: PRIMELAB S.N. 110679, Code: CLS - 05	
	Determination of Conductivity	SMWW, 2510:2017	Conductivity Meter, Model HAC/HQ14D S.N. 170100009834, Code: CLS - 04	
	Determination of Phosphorus (LOQ= 0.03mg/L)	SMWW, 4500-P D:2017	Spectrophotometer, Model DR 3900 S.N. 1654957, Code: CLS-02 Balance Model: AS220R2 S.N. 509939, Code: CLS - 07	

Kornish El-Maadi, Riad El-Maadi Tower 1 - Cairo - Egyp Tel.: (202) 25275220/5/6/7

کورنیش المعادی – برج ریاض المعادی۱ – ال تلیفون : ۲۰۲/۰/۰/۲۲۰۲۰ (۲۰۲)

Fax: (202) 25275224

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الصفحة الرسمية خريطة الاستثمار الصناعي في مصر: Industrial Investment Map: http://invegvpt.com

Scope of Accreditation of Central Laboratory – Faculty of Science (Alexandria University)

Ministry of Trade and Industry **Egyptian Accreditation Council EGAC**



وزارة التجارة والصناعة المجلس الوطنى للإعتماد

Schedule of Accreditation for Testing Laboratory According to ISO/IEC 17025 **Issued To** Central - Laboratory

Faculty of science Alexandria university 1 Baghdad street, Moharam Bey-Alexandria 1st Accreditation date: February 28, 2019

Schedule No.: 218028B

Issue No.(2): January 06, 2020

Revision No. (1): Valid to: February 27, 2023

Materials / Products Tested	Types of Tests / PropertiesMeasured / Range of Measurements (%)		Standard Specifications / Techniques Used	
Water & Waste water	Element	LOQ (mg/L)	SMWW, 3111:2017	Atomic Absorption,
	Cu	0.10		Model: Agilent contra AA300
	Zn	0.10		S.N. 1600494, Code: CLS – 01
	Cr	0.05		Balance-RADWAG, AS 220.R2, Poland, S.N.
	Mn	0.05		509939, Code: CLS-07
	Ni	0.10		
	Fe	0.10		
	Organochlorine pesticides	LOQ (ppb)	SMWW 6630:2017	Gas Chromatography
	P,P'-DDD	0.1		Model Perkin Elmer (Clarus 580)
	Alpha Hexachlorocyclohexane (HCH)	0.1	1	SN: 580S17101902, CLS - 06
	Delta Hexachlorocyclohexane (HCH)	0.1	1	D. L BADWAG
	Lindane (Gamma HCH)	0.1		Balance RADWAG Model: AS 220.R2 S.N. 509939, Code: CLS - 07

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كورنيش المعادي – برج رياض المعادي ١ - القاهرة – م تليفون : ۲۰۲۱/۵/۰۲۲ (۲۰۲)

فاكس: ۲۰۲۲۵۲۲۲۱ (۲۰۲)

الصفحة الرسمية لحريطة الاستثمار الصناعي في مصر:Industrial Investment Map: http://invegypt.com

Scope of Accreditation of Central Laboratory – Faculty of Science (Alexandria University)





Ministry of Trade and Industry Egyptian Accreditation Council **EGAC**



وزارة التجارة والصناعة المجلس الوطني للإعتماد إيجاك

Schedule of Accreditation for Testing Laboratory According to ISO/IEC 17025 Issued To

ISSUEU 10
Central - Laboratory
Faculty of science Alexandria university
1 Baghdad street, Moharam Bey-Alexandria
1" Accreditation date: February 28, 2019

le No.: 218028B Issue No.		t, Moharam Bey-Ale Accreditation date: Februa		Revision No. (1): Valid to: February 27, 2023	
terials / Products Tested	Types of Tests / PropertiesMes Measurements (Standard Specifications / Techniques Used		
& Waste water	Organochlorine pesticides	LOQ (ppb)	SMWW 6630:2017	Gas Chromatography Model: Perkin Elmer (Clarus 580)	
	Alpha Endosulphan	0.1		SN: 580S17101902, CLS - 06	
	Beta Endosulphan	0.1		Balance-RADWAG,	
	Cis-Chlordane	0.1		Model :AS 220.R2, Poland, S.N. 509939,	
	Trans-Chlordane	0.1		Code: CLS-07	

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Page 3 of 3 الصفحة الرحمية خريطة الاستثمار الصناعي في مصر:Industrial Investment Map: http://invegvpt.com

کورنیش المعادی – برج ریاض المعادی۱ – الفاه تلیفون : ۲۰۲۱/۵/۱۲ ۲۵۲۷۵۲ (۲۰۲)

فاكس: ٢٠١١ (٢٠١)

Scope of Accreditation of Central Laboratory – Faculty of Science (Alexandria University)

Ministry of Trade and Industry Egyptian Accreditation Council **EGAC**



وزارة التجارة والصناعة المجلس الوطنسي للإعتماد إيجاك

Schedule of Accreditation for Testing Laboratory According to ISO/IEC 17025 Issued to

ICP-OES Labaratory

Institute of Graduate Studies and Research Alexandria University

(163) Horryia Avenue Shatby
Alexandria Governerate – Egypt
Issue No. (1): July 29, 2022 Revision No. (-):

Schedule No.:0222210B

1st Accreditation date: July 29, 2022

Valid to: July 28, 2026

Materials / Products Tested	Types of Tests / PropertiesMeasured / Range of Measurements		Standard Specifications / Techniques Used	
Water	Element	LOQ (ppb)	EPA method 200.7:2001	Inductivity Coupled Plasma
	Al	26.6	EPA method 6010 C:2007	Optical Emission Spectrometer (ICP-
	As	73.4		OES)
	Ag	4.00		Model 5100 ICP-OES VDV
	Ba	4.32		S.N AU16020119
	Co	7.13		
	Cr	4.40		
	Cu	6.94		
	Fe	24.0		
	Mo	19.0		
	Ni	22.5		
	Pb	28.2		
	Zn	- 104		
	Sb	42.9		
	Se	101		
	Sr	7.93		
	K	25.9		
	Na	66.6		
	Cd	4.00		
	Mn	2.97		
	Ma	18.9		

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1 / Dec 2018

كورنيش المعادي - برج رياض المعادي١ - القاهرة - مصر

تليفون : ٧/٦/٥/٠٢١٥٢٢ (٢٠٢)

فاكس: ۲۰۲۲۵۲۲۴ (۲۰۲)

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الصفحة الرسمية لخريطة الاستثمار الصناعي في مصر: Industrial Investment Map: http://invegypt.com

Scope of Accreditation of Institute of Graduate Studies and Research (Alexandria University)





Ministry of Trade and Industry Egyptian Accreditation Council **EGAC**



وزارة التجارة والصناعة المجلس الوطنسي للإعتم

Schedule of Accreditation

for Testing Laboratory According to ISO/IEC 17025

Issued to

ICP-OES Labaratory

Institute of Graduate Studies and Research Alexandria Univeristy
(163) Horryia Avenue Shatby
Alexandria Governerate – Egypt
ation date: July 29, 2022 Issue No. (1): July 29, 2022 Revision No. (-):

1st Accreditation date: July 29, 2022 Schedule No.:0222210B

Revision No. (-):

Valid to: July 28, 2026

Materials / Products Tested	Types of Tests / PropertiesMeasured / Range of Measurements		Standard Specifications / Techniques Used	
Soil	Element	LOQ (ppb)	EPA method 200.7:2001	Inductivity Coupled Plasma
	Ag	43.2	EPA Method 3051 A:2007	Optical Emission Spectrometer (ICP-
	As	52.8	EPA Method 6010 C:2007	OES)
	Ba	11.1		Model 5100 ICP-OES VDV
	Cd	12.3		S.N AU16020119
	Co	8.78	•	
	Cr	42.8		
	Cu	12.7		
	Mg	48.5		
	Mn	12.6		
	Mo	18.5		
	Ni	46.5	1	
	Pb	29.1	1	
	Zn	30.5		
	Se	21.8		
	Sr	2.31	·	
	Sb	46.5		
	Ti	15.6		
	Na	228		
	Fe	202		

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Tel.: (202) 25275220/5/6/7 Fax: (202) 25275224

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فاكس: ۲۰۲۲۵۲۲۴ (۲۰۲)

الصفحة الرسمية لخريطة الاستثمار الصناعي في مصر: http://invegypt.com

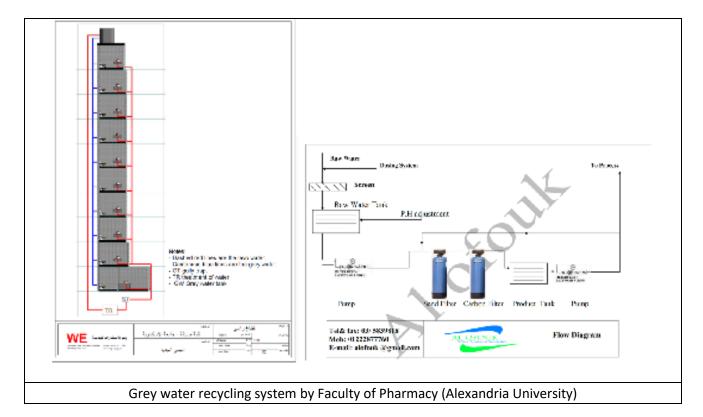
Scope of Accreditation of Institute of Graduate Studies and Research (Alexandria University)



The sewage water will be treated and reused in the irrigation of green areas in the project (Alexandria University)







Description:

The campus water pollution control to prevent polluted water from entering the water system is performed. Alexandria University has two accredited laboratories for the regular check water quality (Physical, Chemical parameters) on your campus. I addition, the biological parameters are analyzed by the Microbiology Professor and staff members regularly.

Water quality analysis and monitoring at Alexandria University.

- Accreditation Certificate of Central Laboratory Faculty of Science (Alexandria University).
- Scope of accreditation of Central Laboratory Faculty of Science (Alexandria University)

Link: https://egac.gov.eg/en/entity-details/?tc=oKRMg7QVNpwrc2AcXP2REMBXozjKAU3KA86qpAl9

• Scope of Accreditation of Institute of Graduate Studies and Research (Alexandria University)

Link: https://egac.gov.eg/en/entity-details/?tc=fPqxMfYxY7MHFifwTbSpi9CWwRe8hCq25J2IFNG0

Wastewater Treatment

Alexandria University has a system to prevent polluted water to enter the water system through Water quality analysis and monitoring.

The recycled irrigated water supplied to the fish farm at the Agriculture Experimental Research Station of the Faculty of Agriculture, is analyzed before using it to irrigate the crops, vegetables, and fruits of the land farm. In addition, the recycled water is used for crops culturing in the adjacent agriculture research center in Abis.

Guideline standard

Standard Methods for the Examination of Water and wastewater 22 edition (APHA).





Elements of Green Building Implementation as Reflected in all new construction and renovation policies in the new buildings in Abis campus:

- The area of the project is 160 acres, a general site for educational buildings, and 120 acres are complementary activities. The percentage of green areas and lake is about 52% in addition to 25% streets and lanes.
- Water-saving plots are used, which will reduce water consumption by about 30%. The sewage water will be treated and reused in the irrigation of green areas in the project.
- Rainwater is collected in the main lake and used for irrigation.
- The use of plants with few water rationed plants to reduce irrigation needs in addition to absorbing quantities of rainwater to reduce the severity of rain spells.

Green Cycle project in the Faculty of Pharmacy - Alexandria University

The project began in October 2022 by organizing a number of events in cooperation between the Community Service and Environmental Development Committee, ASPSA, and the Alexandria Rotary Clubs, under the supervision and organization of Faculty of Pharmacy - Alexandria University.

Also, the faculty is seriously seeking to implement a gray water (wastewater) recycling system that depends on reusing wastewater from sewage basins only (without using wastewater from laboratory basins) by re-pumping it into the flushing bins in the toilets after work. Filtration and primary treatment. The gray water recycling initiative has a significant impact on rationalizing water use.

Also, taking advantage of rainwater for use in irrigation and regulatory operations.

Alexandria University have generalized this initiative in some of the faculties of Alexandria University in gradual stages.

Link for Green Cycle Project:

https://fb.watch/mzqhBHazV4/?mibextid=j8LeHn