



مَعْرِفَةُ البَحْوثِ الصِّنَاعِيَّةِ

INDUSTRIAL RESEARCH INSTITUTE
INSTITUT DE RECHERCHE INDUSTRIELLE

ANNUAL REPORT 2025

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Vision of the Industrial Research Institute: Strength and Resilience for Lebanon

Message from
Dr. Bassam Frenn,
Director General

Challenges continue to intensify year after year, requiring the Industrial Research Institute (IRI) to remain fully prepared to fulfill its mission and pioneering role in supporting the national economy.

Despite the tragedies and war that struck the country, we remained hopeful throughout 2024. We did not let anyone down, upholding our commitments and ensuring the continuity of operations under the harshest circumstances, despite the damage sustained by the Institute during the war.

With the beginning of 2025, and following the election of General Joseph Aoun as President of the Republic, we looked forward with optimism to the new approach outlined in the President's Oath of Office, particularly with regard to the independence of the judiciary, the separation of authorities, the review of laws and decrees that do not serve the public interest, and the restructuring of public administration through a more rational and efficient framework.

These efforts were further reinforced by the appointment of Prime Minister Judge Nawaf Salam and the adoption of a ministerial declaration that confirms and complements the principles set out in the inaugural speech.

Accordingly, the Institute regained its momentum through a solid, modern, and advanced dynamic, marked by constant readiness, integrated activity,



and a strong and sustained presence.

As is now widely recognized, IRI operates across several complementary tracks: research and innovation, laboratory services, and consultancy. These tracks converge in support of productive sectors, including industry, which complement and integrate with one another.

At the same time, the Institute continues to expand and modernize its facilities, while equipping its new building with modern laboratories and advanced research and development departments.

The dedication of the staff members who risked their lives by continuing to carry out their duties without interruption is also deeply appreciated.

The Institute has built strong partnerships with ministries, public administrations, military agencies, economic and academic institutions, as well as the Order of Engineers. It has earned their trust through the competence, expertise, objectivity, and transparency that guide its work, driven by a forward-looking vision aligned with the modernization of similar international institutes.

Despite the economic downturn, the Institute's activity this year surpassed that of the previous year, reflecting the growing need for its role across various sectors.

Together, such cooperation and integration remain a source of strength and resilience for Lebanon.

IRI: ITS PURPOSE & FUNCTION

The Industrial Research Institute is a Lebanese institution for studies, industrial research, and scientific testing and analysis. IRI is a non-profit, non-commercial, public utility organization having an independent legal personality with the right to own, purchase, sell, insure, accept donations, take loans, and engage in litigation and similar activities. IRI was founded in 1953 as per an international agreement and was linked to the Ministry of Industry pursuant to Article 3 of Law n° 642 of June 2, 1997. IRI is governed by private law, and its bylaws and internal and financial regulations.

IRI enjoys financial and administrative independence and is subject to post-auditing by the Court of Accounts in what concerns the contributions of the government to IRI.

IRI's headquarters are located in Hadat, and it is entitled to establish branches in all parts of the Lebanese Republic and abroad.

IRI is an independent national research center, and combines:

- Knowledge, expertise, and specialization
- Scientific material and equipment
- Data and technical documents.

IRI offers specialist scientifically reliable services to the national economy as well as existing industry and those which can be established with the aim of industrial development. The services include:

- Consultations
- Studies and research
- Testing, metrology, and analysis.

IRI, through its activities and operations, seeks to achieve the following goals:

- Conducting research and studies to enable the establishment of new industries
- Conducting research and studies on various materials and items to learn their properties and determine their uses and applications
- Offering specialist consultations on technological, administrative, and economic matters related to existing industry with the aim of industrial development and encouraging the creation of new industries
- Offering internationally accredited services in testing, analysis, and metrology related to materials and items, and issuing certificates of quality and conformity certificates
- Collaborating with national and international official bodies, and economic institutions and trade unions with the goal of fostering economic development.

IRI brings together a reliable body of experts, specialists, and engineers in many fields to carry out its activities, supported by another body of administrators, accountants, and clerks who undertake administrative tasks and other internal services.

OUR ETHICAL STANDARDS

In carrying out its functions, the Institute adheres to ethical and professional standards whereby it safeguards the clients best interests. Furthermore, IRI regards as the client's property any information, processes, patent or techniques developed during work with the client and safeguards such matters in complete secrecy.



GENERAL PUBLIC ACTIVITIES



The focus of the Industrial Research Institute's administration on developing its capabilities and services and keeping pace with modernization, has increasingly enabled it to contribute to strengthening the economy and meeting the demands of industrialists, as well as other productive and institutional sectors.

This policy, adopted over the past 30 years, has led the State to rely on the Institute in many matters and complex issues, the resolution of which is credited to it.

The Industrial Research Institute (IRI) has reported a series of significant achievements in 2025, most notably, the twentieth anniversary of obtaining international accreditation, which strengthened its position as a research reference at local, Arab, and regional levels.

DEVELOPMENT OF RELATIONS BETWEEN INDUSTRIAL RESEARCH INSTITUTE, UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION: BETWEEN DR FRENN, MR KALENZI

Dr. Bassam Frenn, Director General of the Industrial Research Institute (IRI), received Emmanuel Kalenzi, representative of the United Nations Industrial Development Organization (UNIDO) in Lebanon, presenting to him a comprehensive overview of the Institute and the development of the work across its various directorates, research centers, departments, and laboratories.

They discussed the ongoing and effective cooperation between the Institute and the international organization.

Furthermore, they reviewed ways to support the Institute in providing services to the Lebanese economic and industrial sector, with the aim of modernizing Lebanon's primary production



Dr Bassam Frenn accompanied by Mr. Emmanuel Kalenzi, Mr. Selim Kfoury and Mrs. Ghinwa Wafra

sector.

Dr. Frenn then organized a field tour for Kalenzi around the Institute, including its departments, and laboratories, which cover all specialized analyses and quality control.

INDUSTRY MINISTER JOE ISSA-EL-KHOURY VISITS INDUSTRIAL RESEARCH INSTITUTE

The Minister of Industry, Engineer Joe Issa-El-Khoury, visited the Industrial Research Institute (IRI), where he was received by the Institute's Director General, Dr. Bassam Frenn, in the presence of a number of departments and specialized centers directors, and division heads at the Institute.

Dr. Frenn warmly welcomed the Ministry of Industry, wishing him success in his ministerial duties.

He also emphasized the Institute's full readiness to cooperate with the Industry Ministry, thus contributing effectively to the development of the national economy and the modernization of the industrial sector.

The visit began with a meeting in the conference room, during which

the Minister had the opportunity to meet with the directors of departments and specialized centers, and division heads.

Moreover, he learned about the Institute's



Dr Bassam Frenn accompanied by Minister of Industry, Eng. Joe Issa El Khoury

structure and work team, and received a detailed overview of its functions.

Dr. Frenn then delivered a comprehensive presentation on the Institute's history and its development stages, which included the screening of a documentary about

the major achievements and the key moments of the Institute through its scientific and research journey.

Thereafter, the Deputy Director General, Mr. Selim Kfoury, presented an introductory overview of the Institute.

This was followed by a presentation from Engineer Antoine Fayçal, Customs Files, Inspection and Certification Director, on the implementation of the BRIDGE System.

In addition, Mr. Naji Abi Zeid, Director of the Euro-Lebanese Center for Industrial Modernization (ELCIM) and the Center for Innovation and Technology (CIT), provided an introduction around the two specialized centers, highlighting their missions and fields of work.

On his part, Minister Issa-El-Khoury expressed his appreciation over the Institute's high level of advancement.



Dr Bassam Frenn, Minister of Industry, Eng. Joe Issa El Khoury. From the right, Eng. Chantal Akl, and from the left, Mr Selim Kfoury and Eng. Maroun Saikaly

He underlined the importance of supporting quality infrastructure in Lebanon as a fundamental pillar for achieving sustainable development, enhancing economic and social security, and boosting the competitiveness of national industry.

The Industry Minister also mentioned his full readiness to support the Institute and offer assistance in order to address the challenges or obstacles it faces.

The visit concluded with a field tour across the Institute's various departments, including numerous laboratories.

Moreover, Dr. Imad Hage Chahadeh, Technology and Development Director, and Dr. Joseph Matta, Applied Research and Testing Director, each provided detailed explanations of the equipment and technologies in use, clarifying their functions and key role in supporting national industry and protecting the Lebanese consumer.



Dr Bassam Frenn and the Minister of Industry, Eng. Joe Issa El Khoury during their meeting with the institute's staff

MEETING OF THE BOARD OF DIRECTORS OF THE INDUSTRIAL RESEARCH INSTITUTE

The Minister of Industry, Joe Issa-El-Khoury, chaired the Board of Directors Meeting of the Industrial Research Institute, in the presence of the Institute's Director General, Dr. Bassam Frenn.

The meeting was attended by the following members: President of the Association of Lebanese Industrialists, Mr. Selim Zeenni; President of the Federation of Chambers of Commerce, Industry and Agriculture, former Minister Mohammad Choucair; Representative of the Order of Engineers, Engineer Adnan Hassan Alayan; Mr. Sarkis Boudakian; Dr. Jean Chamoun; in addition to the Institute's Legal Advisor, Attorney André Nader; and Deputy Director General and Administration and Financial Director, Mr. Selim Kfoury.

The meeting included a comprehensive presentation on the current state of the Institute

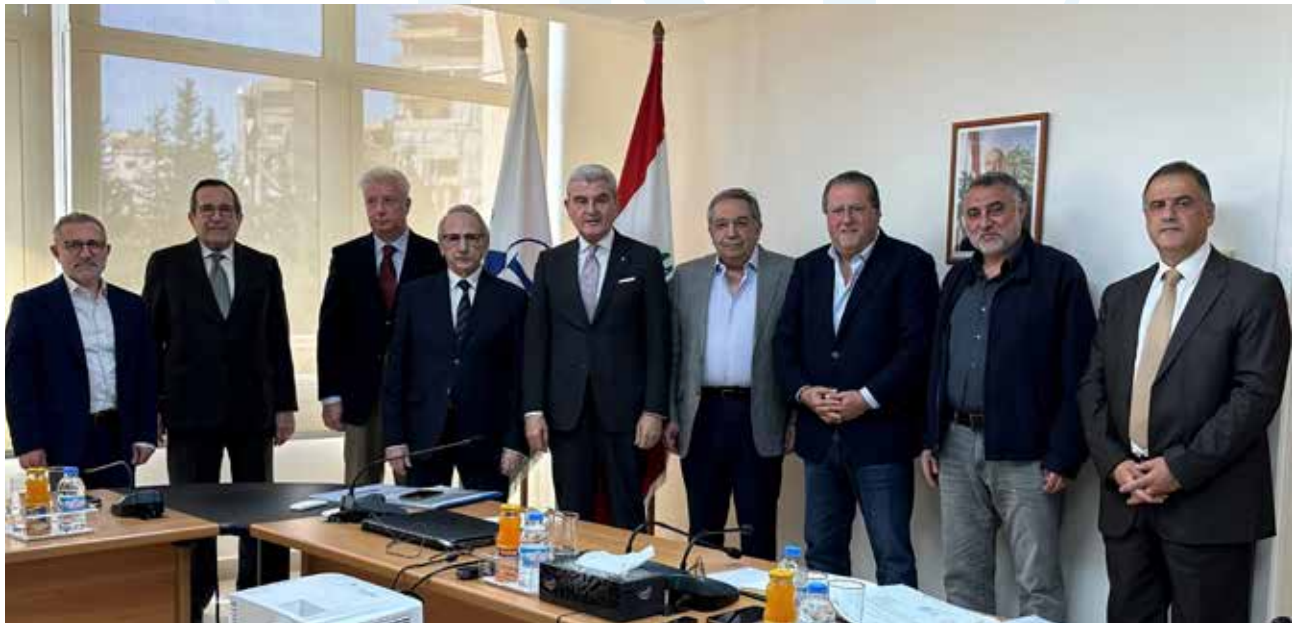
and the damages it sustained as a result of the recent war, followed by a discussion of the financial situation and the challenges facing the Institute in this regard.

Attendees also addressed issues related to personnel and administrative developments, and explored ways to enhance the Institute's performance and expand its services.

The discussion also covered the Institute's strategic plan for the coming years.

This year holds exceptional significance, as it marks the twentieth anniversary of the Institute's achievement in obtaining international accreditation, a milestone that made it the first research institute in the Arab world to receive international recognition.

This accomplishment has reinforced its position as a trusted and reliable national and regional scientific and industrial reference.



From right to left: Mr Selim Kfoury - Eng. Adnan Hassan Alayan - Min. Mohamad Choucair - Mr. Selim Zeenni - Minister of Industry, Eng. Joe Issa El Khoury - Dr. Bassam Frenn - Mr. Sarkis Boudakian - Attorney André Nader - Dr Jean Chamoun

ANNUAL MANAGEMENT REVIEW MEETING FOR 2024

10/04/2025

Dr. Bassam Frenn, Director General of the Industrial Research Institute (IRI), chaired the Annual Management Review

Meeting for 2024, attended by department directors and key executives.

The discussion focused on key aspects of the management system, including the evaluation of objectives, the identification of non-conformities,



Dr Bassam Frenn during the meeting with department directors and key executives

and an overview of national-level accreditation. The meeting aimed to emphasize the progress made throughout the year and ensure continuous improvement in the management system.

VISIT OF THE BEKAA INDUSTRIALISTS ASSOCIATION

27/03/2025

Dr. Bassam Frenn, Director General of the Industrial Research Institute (IRI), received Mr. Nicolas Abou Fayssal, President of the Association of Bekaa Industrialists, in the presence of members of the Association and staff from the Institute.

They discussed the obstacles faced by industrialists, as well as the available means of cooperation and ways to benefit from the institute's capabilities and resources.



From left to right: Mr. Hussein Kadamani - Mrs. Rindala Kassem Kaban - Mr. Nicolas Abou Fayssal - Dr. Bassam Frenn - Mr. Selim Kfoury - Dr. Joseph Matta - Dr. Imad Hage Chehadeh - Eng. Antoine Fayçal - Eng. Elias Maalouf



**LABORATORY SERVICES,
OBSERVATIONS &
ACTVITIES**



The well-deserved trust earned by the Industrial Research Institute has contributed to economic growth and encouraged the private sector to increase investments and expand operations, both domestically and internationally, by leveraging the Institute's laboratories, its workforce, and the administration's expansionary vision.

The following are the laboratories' key activities:

The Institute's tests, examinations, and verifications were distributed as follows:

- In 2025, the institute's laboratories conducted 315,015 conformity testing and analysis procedures, reflecting an increase of 52,414 procedures compared to 2024, approximately a 20% rise. Additionally, external inspections totaled 1,431, along with 918,886 domestically manufactured gas cylinders.
- Standardization and calibration tests amounted to 42,981 assessments conducted on 3,535 samples.

- The institute reviewed 46,487 files to verify the compliance of imported goods at Lebanese border entry points with mandatory specifications.

The institute reinforces its role as a scientific institution capable of meeting the needs of both the public and the private sectors, ensuring the completion of scientific and technical tests across various fields with precision and expertise. Additionally, it remains committed to conducting economic research and studies in all relevant sectors.

Tests and Analyses

Despite challenging conditions, the institute successfully increased the volume of tests and analyses conducted throughout 2025.

This achievement further underscores the dedication of the Director General, whose guidance has helped foster a highly committed and diligent team.

As a result, the institute's laboratory activities saw a 20% increase compared to 2024.

The electrical laboratories experienced the highest growth, with a 31% increase, representing 40% of total tests conducted.

Furthermore, activity in chemical laboratories achieved growth of 7.8%, they accounted for 28% of total analyses.

They were followed by the Civil Engineering

and Soil Laboratories and the Microbiology Laboratories, each accounting for 11% of total operations.

The Petroleum and Paint Laboratories and the Central Laboratory for Grain, Flour and Bread Research, each accounted for 3%, while textile and leather laboratories contributed 2% of the total tests.

A total of 50,674 samples of various types were analyzed.

Moreover, the welding laboratory continued to play a key role by conducting 4,617 tests, further reflecting the Institute's broad range of testing across vital sectors.

The 2025 laboratory activity according to statistical tables was as follows:

Chemistry and Physical Chemistry:

The total number of tests in Chemical and Physical Chemistry laboratories was 89,500 tests, with an increase of 6,500 or 7.8%, representing around 28% of the total laboratory activities.

Microbiology:

The number of tests conducted in the Microbiology laboratory was 34,000, representing around 11% of total tests.

Textile, Leather and Rubber:

Tests and analyses in these laboratories witnessed significant growth, with an increase of 64.4%, reaching 4,900 tests and accounting for approximately 2% of the total.

Petroleum Derivatives Laboratory:

The activity at the Paint and petroleum laboratory increased by 1,200 tests, or 14.1%, and amounted to 9,700 tests representing around 3% of the total number of tests.

Civil Engineering Laboratory:

The activity at the Civil Engineering and Soil laboratory increased by 9.6% to reach 35,451 tests compared to 32,330 tests the previous year, and represented 11% of the total laboratory activity.

Electrical Laboratory:

The activity at the Electrical Laboratory increased by 29,726 tests to reach 126,054 tests,

representing growth of 31%, and accounting for the largest share of total tests, at 40%.

Central Laboratory for Grains, Flour and Bread Research:

Due to the close collaboration between the Ministry of Economy and Trade and the Industrial Research Institute, the laboratory conducts testing on imported wheat on behalf of the ministry. Additionally, it performs various analyses on most imported and locally manufactured products. The number of tests conducted at the Central Laboratory for Grain, Flour, and Bread Research reached 9,345, reflecting a slight decrease of 551 tests, which accounted for approximately 3% of the total tests.

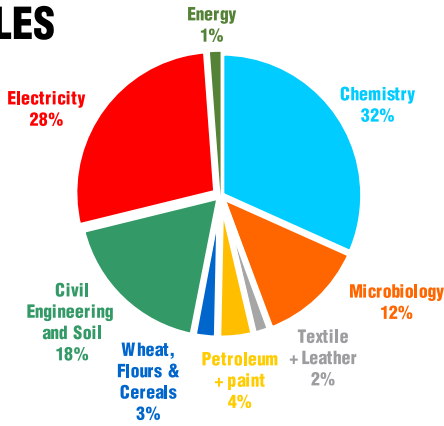
Lebanese Welding Center

Inspections on welding reached 4,617 inspections.

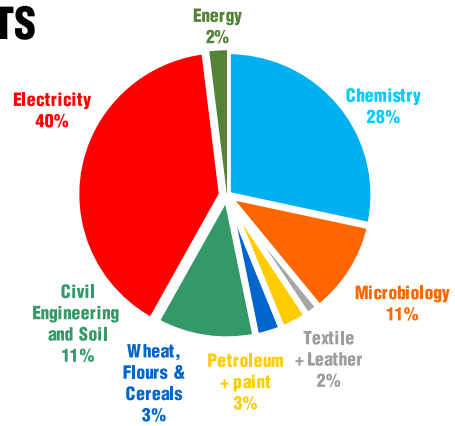
NUMBER OF TESTS BY LABORATORY

Year	2025	2024	2023	2022	2021	2020	2019
Chemical and Physical Chemistry	89500	83000	81600	63750	69840	74270	81500
Microbiology	34000	26000	27100	27750	27750	29250	33500
Textile - leather - rubber	4900	2980	3070	2250	2850	3430	5900
Paint - Petroleum	9700	8500	9980	8300	8640	9540	16500
Central Laboratory for Grains, Bread and Flour Research	9345	9896	7900	7604	11194	13853	13879
Civil Engineering	35451	32330	32019	40011	35345	29325	60010
Electrical	126054	96328	87376	70182	56500	28092	118484
Energy	6065	3567	-	-	-	-	-
Total	315015	262601	249045	219847	212120	189653	332076
Welding	4617	1803	2364	670	1315	1893	2303

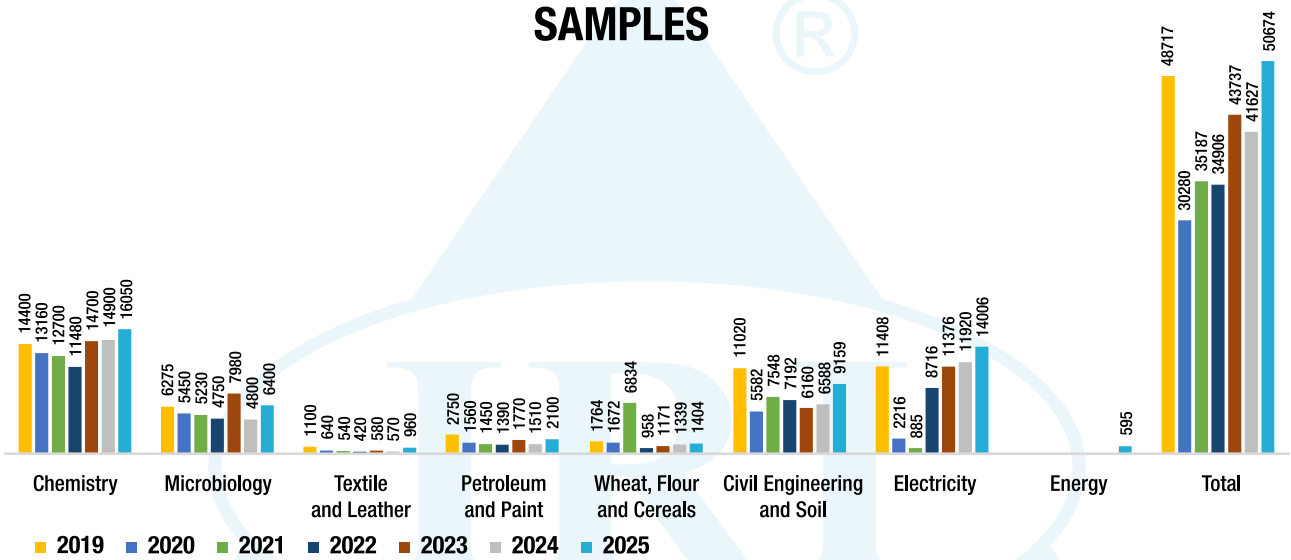
SAMPLES



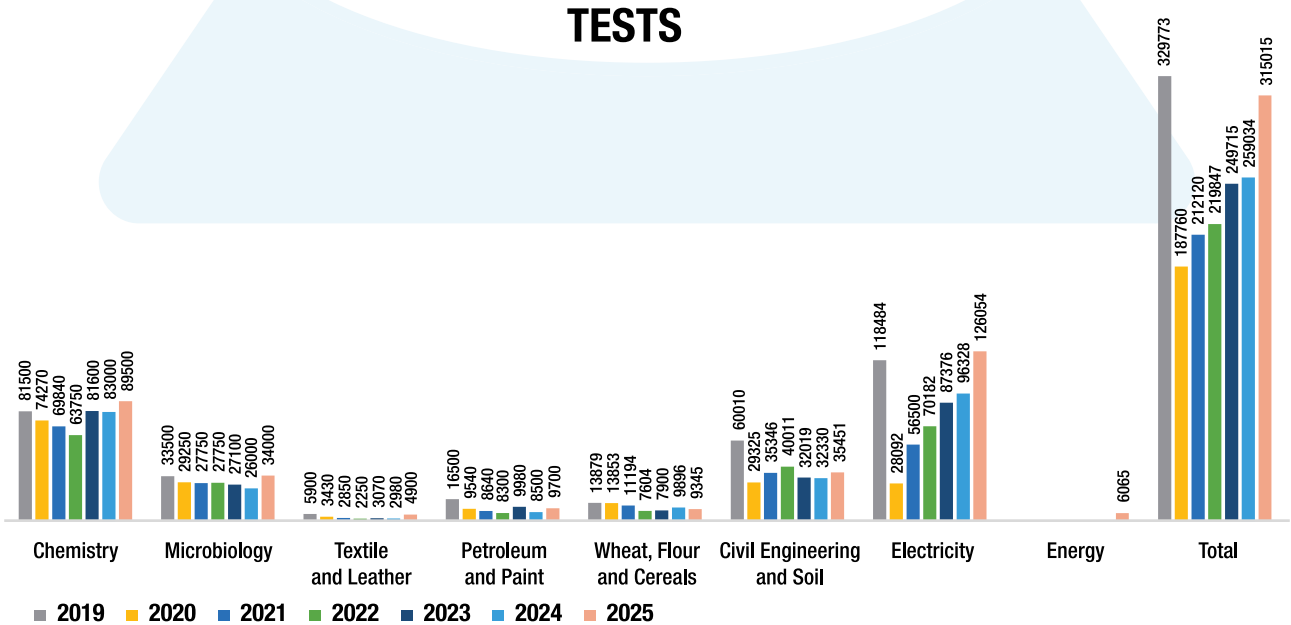
TESTS



SAMPLES



TESTS



Metrology and Calibration Laboratories

The activity of various measurement and calibration laboratories (metrology) witnessed significant growth during 2025, with the total number of tests increasing by 33.3% compared with the previous year, reaching 42,981 tests, compared with 32,244 tests in 2024.

These laboratories received 3,535 measurement devices.

The tests were distributed across the fields of temperature, pressure, force, mass, dimensions, and electricity.

The development of these laboratories' activity is as follows:

Temperature

The temperature laboratory received 910 devices, on which 12,992 tests were conducted, recording a significant increase of 5,342 tests, representing a growth rate of 69.8%.

Pressure

The number of pressure testing devices delivered was 55, with a total of 440 tests performed, an average of 8 tests per device.

Force

The Force measurement laboratory received 3 devices for testing their force, with 24 tests conducted, averaging 8 tests per device.

Mass

A total of 2,164 mass units were tested, and underwent 25,941 tests, an average of approximately 12 tests per unit.

Dimensions

The number of dimension units reached 306, and the number of tests were 2,448, averaging 8 tests per unit.

Electricity

Tests on Electrical equipment declined in 2025 to 78 devices, with 984 tests conducted, an average of 12.6 tests per device.

Miscellaneous Tests

Miscellaneous tests amounted to 152 tests across 19 devices.

MEASUREMENT AND CALIBRATION

TOTAL ACTIVITY	2025		2024		2023		2022		2021		2020		2019	
	Units	Tests	Units	Tests	Units	Tests	Units	Tests	Units	Tests	Units	Tests	Units	Tests
Temperature	910	12992	691	7650	927	9270	617	6150	437	4356	440	4400	533	5330
Pressure	55	440	61	488	47	376	64	512	25	200	29	232	18	144
Force	3	24	5	48	5	48	5	40	2	16	5	60	9	108
Mass	2164	25941	1962	19822	2155	21824	1599	15420	1269	11883	996	9288	1228	11532
Dimensions	306	2448	334	2664	370	2960	273	2184	186	1488	143	1144	187	1496
Electricity	78	984	183	1464	257	2056	79	632	39	380	51	408	38	304
Other tests	19	152	6	48	6	48	3	40	17	136	24	192	38	304
Total	3535	42981	3242	32244	3768	36582	2642	25048	1975	18459	1688	15724	2051	19218

EXTERNAL INSPECTION

ACTIVITY	YEAR	2025	2024	2023	2022	2021	2020	2019
LPG Storage Tanks Inspection/Verification		37	82	126	247	120	126	79
Fuel Tanks Inspection and Calibration		102	102	188	102	121	137	161
Boiler Inspection		24	6	0	0	0	0	0
Fuel Station		7	13	0	0	0	0	0
Accessories (Valves, Regulators)		1431	228	291	368	279	308	279
Accessories (Valves, regulators, ie...)		1431	228	291	368	279	308	279
LPG Cylinders Locally Manufactured		918,886	654,426	580,262	555,409	85,267	424,168	672,262
LPG Cylinders Imported		0	0	0	0	0	0	0
LPG Cylinders Exported		175,803	83,999	110,928	115,821	0	0	0

VERIFICATION OF CONFORMITY ACTIVITIES INCREASES TO 46,487 FILES IN 2025

Conformity assessment activities continued to rise in 2025 compared to 2024, indicating the institute’s efficiency, speed, and competence across various border checkpoints. This rise was reflected in the number of customs files subject to conformity assessment by the institute, reaching 46,487 files, up from 34,250 files in 2024, an increase of 12,2370 files, equivalent to 35.7%. The evaluation activities were distributed according to the types of imported products as

follows:

- The number of conformity-assessed customs files in the country of origin under the institute’s mechanism reached 355 files.
- The number of files subjected to conformity assessment totaled 33,260, while files exempt from mandatory standards after review amounted to 13,227.
- Non-compliant files numbered 905, of which 864 were corrected, while 41 were rejected.

FILES BY SECTOR

Distribution of Files by Type of Imported Goods based on their significance as follows:

Chemical Materials:

A total of 7,751 files were recorded in 2025, compared to 5,866 in 2024, an increase of 1,885 files (32%). These files account for approximately 16.67% of the total.

Photovoltaic Systems:

The number of photovoltaic system files reached 1,030, representing about 2.21% of the total.

Electrical Equipment:

This category accounted for 22% of the total customs files, with 10,657 files, marking an increase of 2769 files (35%).

Medical Equipment:

Representing about 13.5% of the total, the number of medical equipment files rose to 6,296 in 2025 from 5,005 in 2024, an increase of 1,291 files (25.8%).

Construction Material Files:

These files rose from 1,719 in 2024 to 2,524 in 2025, an increase of 46.8%. They represent 5.4% of the total.

Textile Files:

The number of customs files for textile imports reached 3,299 in 2025, compared to 2,204 in 2024, an increase of 1095 files (49.7%). This category accounts for 7.1% of total customs files.

Paint Files:

A total of 2,322 files were recorded, making up 5% of the total. Compared with 1,843 files in 2024, this category increased by 479 files, approximately 26%.

Common Files:

The number of common files increased from 4,449 in 2024 to 6,820 in 2025, an increase of 2,371 files (53.3%), representing 14.6% of total customs files.

Other file categories include:

Vehicles: 1,522 files (3.3%), Mechanical Equipment: 895 files (1.9%), Approved Files from Country of Origin: 355 files (0.7%), Energy: 59 files, Elevators: 361 files, Pressure Equipment: 234 files.

CUSTOMS FILES BY SECTOR

Types of files	Pre-shipment assessment	Chemistry	Photovoltaic systems	Electricity	Furniture	Medical Devices	Elevators	Mechanic	Power	Paint	Pressure equipment	Civil Engineering	Textiles	Transport vehicles	Welding	Shared Files	Grand Total
Total	355	7751	1030	10657	2291	6296	361	895	59	2322	234	2524	3299	1522	71	6820	46487
Subject	355	5223	878	6379	1727	5336	140	528	56	721	154	2437	2557	1243	54	5472	33260
Not Subject	0	2528	152	4278	564	960	221	367	3	1601	80	87	742	279	17	1348	13227
Percent non-subject %	0.00	32.62	14.76	40.14	24.62	15.25	61.22	41.01	5.08	68.95	34.19	3.45	22.49	18.33	23.94	19.77	28.45
Non-conforming	0	110	16	588	21	17	0	0	0	9	7	87	18	0	32	0	905
Precent non-conforming %	0.00	1.42	1.55	5.52	0.92	0.27	0.00	0.00	0.00	0.39	2.99	3.45	0.55	0.00	45.07	0.00	1.95
Corrective Action	0	85	16	584	21	13	0	0	0	7	4	87	15	0	32	0	864
Rejected	0	25	0	4	0	4	0	0	0	2	3	0	3	0	0	0	41

BORDER CROSSING ACTIVITY

Beirut Port accounted for 61.7% and the Airport 25%.

Beirut Port

28,687 files processed in 2025, compared to 22,122 in 2024, an increase of 6,565 files (29.67%). These files represent 61.7% of the total.

Tripoli Port:

Customs files assessed for conformity in Tripoli port increased to 3,079 in 2025 from 2,233 in 2024, an increase of 846 files (37.9%), accounting for 6.6% of the total.

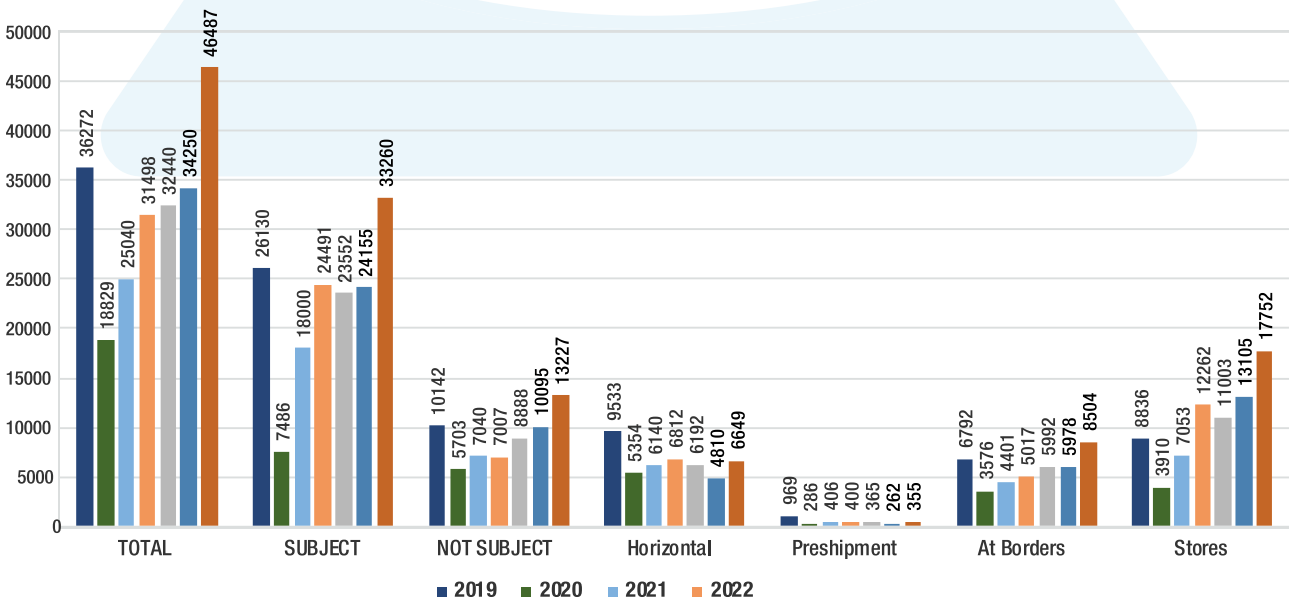
Beirut-Rafic Hariri International Airport:

The number of files assessed for conformity and arriving via Beirut Airport totaled 11,644 in 2025, compared to 8,642 in 2024, an increase of 3,002 files (34.73%), representing around 25% of the total.

Masnaa Border Crossing:

A total of 3,070 files were evaluated in 2025, up from 1,173 in 2024, an increase of 1,897 files (262.7%), representing 66% of the total.

As for the remaining gateways, the processed customs files passing through them amounted to 7 files at the Port of Sidon.



CUSTOMS FILES BY BORDERS ENTRY

Types of files	Pre shipment	Chemical	PV systems	Electrical	Furniture	Medical	Elevators	Mechanical	Energy	Paint	Pressure	Soil	Textile	Vehicle	Welding	Common Files	Totals
Masnaa	0	474	181	433	133	3	0	191	0	306	34	144	669	62	0	440	3070
Arida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beirut	355	4832	682	6576	1631	1349	249	642	55	1650	161	2206	2382	1293	63	4561	28687
SAIDA	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0	0	7
Tripoli	0	187	69	898	298	18	8	17	4	131	7	137	150	104	2	1049	3079
Airport	0	2258	98	2750	228	4926	104	45	0	235	32	37	92	63	6	770	11644
Aboudiye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	355	7751	1030	10657	2291	6296	361	895	59	2322	234	2524	3299	1522	71	6820	46487
Average / Day	1.48	32.30	4.29	44.40	9.55	26.23	1.50	1.50	0.25	9.68	0.98	10.52	13.75	6.34	0.30	28.42	193.70

ACCREDITATION CERTIFICATES

The Industrial Research Institute continues to enhance and support Lebanon’s industrial sector. By the end of 2025, it had granted:

- 7 industrial institutions the ISO 9001 quality management certification
- one institution the ISO 14001 environmental management system certification
- 3 institutions the ISO 13485 medical device quality system certification
- one HACCP certification
- one ISO 22000 certification

PRODUCT CERTIFICATION

A total of 35 products received quality certifications from the Industrial Research

Institute, distributed across 11 manufacturing companies.

LEBANESE WELDING CENTER CERTIFICATIONS

In accordance to Law No. 423/2002, which “designates the Industrial Research Institute as the accreditation body authorized to issue conformity certificates in all forms of welding,” the institute granted 247 competency

certificates for welding through the Lebanese Welding Center, 10 trainees completed welding training courses, and 1 certification in Non-Destructive Testing (NDT) was issued to an inspector who completed the relevant course.

NEW EQUIPMENTS 2025

The Petroleum Laboratory New Equipment

Energy Dispersive X-Ray Fluorescence (EDXRF) analyzer

The Petroleum Laboratory received and commissioned in 2025 a new Energy Dispersive X-Ray Fluorescence (EDXRF) analyzer dedicated to low sulfur determination, in accordance with ASTM D7220 and ISO 13032 standard test methods.

With the installation of this state-of-the-art equipment, the laboratory is now fully equipped to cover all parameters required under the applicable Lebanese standards, particularly the recently issued NL 794:2024 “Residual Fuel Oil for Stationary Diesel Engines”, made mandatory under Decree No. 2037 dated 18/12/2025, in addition to relevant international standards and technical specifications for low-sulfur petroleum products, including ultra-low sulfur levels below 0.5 ppm.

This acquisition represents a major enhancement of the Petroleum Laboratory’s analytical capabilities, reinforcing its ability to ensure full compliance with regulatory, technical, and quality requirements while supporting the monitoring and control of cleaner fuel products.



The Metrology Laboratory New Equipment

Climatic Chamber

The KK 190 climatic chamber is a reference instrument used for the calibration of air temperature and relative humidity sensors.



Mobile Calibration Laboratory

A mobile calibration laboratory has been established to deliver on-site calibration services for a broad range of measuring instruments, including temperature, pressure, and electrical instruments, in addition to weighing scales with capacities up to 1 ton, at clients' premises.



The Central Laboratory for grains, flour and bread research

Supporting Lebanon Wheat value chain.

A Mobile Laboratory Specialized in Wheat Testing

The Central Laboratory for grains, flour and bread research has been the backbone of quality assessment of the wheat chain in Lebanon. Through its accredited testing and R&D facilities, it serves the agricultural wheat-producing sector, the industrial wheat milling sector as well as the governmental ministries and agencies.

Taking into consideration the huge challenges that the grain sector is facing in Lebanon since 2019, the Industrial Research Institute acquired, modified and equipped a mobile laboratory with the latest technologies in wheat testing equipment.

This Mobile Unit is capable of reaching wheat-growing areas, warehouses, border transit areas with the aim of facilitating wheat grading/testing and certification for trade and export.





IRI'S INVESTMENTS

EXPANSION OF THE INSTITUTE'S INVESTMENTS IN 2025

While most Lebanese institutions adopted austerity measures and reduced spending due to the difficult circumstances facing the country, the Industrial Research Institute successfully overcame this phase thanks to the effectiveness of its policies. The Institute promptly repaired a substantial portion of the direct damages resulting from the Israeli aggression at the end of 2024, estimated at approximately USD 95,000, in addition to the indirect damages incurred. Despite these challenges, it continued to expand its investments throughout 2025.

The most notable investments undertaken during the year included:

- Purchasing equipment for the Petroleum and Derivatives Laboratory at a cost of approximately USD 80,000.
- Outfitting a mobile laboratory for the Central Laboratory for Grain, Flour and Bread Research at the Institute, at a cost of approximately USD 28,000.
- Upgrading the Metrology Laboratory with modern equipment and providing it with a mobile metrology laboratory, at a total cost of approximately USD 70,000.



**INTERNATIONAL
ACCREDITATION**

IRI IN FIGURES 1000 DOCUMENTS, 31 INDICATORS, 43 AUDITORS AND 489 MAN-DAYS OF AUDIT.

IRI CONDUCTED SINCE INITIAL ACCREDITATION IN 2004 MORE THAN 2726 PT TESTS FOR 1300 PARAMETERS WITH A SUCCESSFUL RATIO OF 97%

Quality management overview

The quality management section personnel, assisted by 43 trained auditors, keep and maintain a sound quality management system in accordance with ISO 17025 (testing and calibration) & ISO 17020 (inspection) requirements.

With 1000 controlled documents, 31 Key Performance Indicators continuously monitored and 489 man-days of audits and assessments performed, the competence of IRI was recognized from the most rigorous accreditation bodies in the world (successively DAKKS and ANAB).

Both accreditation bodies mentioned above are full members of the Global Accreditation

Cooperation Incorporated (Global ACI), the single international accreditation organization established following the merger of IAF and ILAC in 2026. Through its global mutual recognition arrangement, Global ACI ensures that the institute's reports and results are trustable and recognized all over the world.

Also, the Industrial Research Institute is a stakeholder member in Global ACI as it was a stakeholder member of ILAC since 2014.

Moreover, IRI regularly participates in international proficiency testing rounds to validate its results. To date, 2726 tests were

The screenshot shows the Global ACI website interface. At the top left is the Global ACI logo. To its right are social media icons for CertSearch, X, LinkedIn, Twitter, and YouTube, along with a Login button. Below this is a dark blue navigation bar with links: Home, About, Members, Global ACI MRA, MRA Signatories, Publications, Media Centre, FAQ, Contact Us, and a search icon. The main content area is titled 'Member Details' and features a large blue banner. Below the banner, there is a white box containing the IRI logo and the text 'Stakeholder Member'. To the right of this box, there is a dropdown menu with options: News, Events, and About Industrial Research Institute. Below the banner, the member details for IRI (Industrial Research Institute) are displayed, including the Code of Conduct Adopted: 18 Feb 2026, the website URL https://www.iri.org.lb, and the location Lebanon.

INTERNATIONAL ACCREDITATION

done for 1300 parameters with a successful ratio of 97%.

This robust quality management system enabled the Industrial Research Institute to become accredited according to ISO 17025 (since 2004) & ISO 17020 (since 2017) requirements. This helped the Institute to be a key player in the National Quality Infrastructure and earn the confidence of the most prestigious national and international organizations thus enhancing its network of partnership. Furthermore, the Institute is working towards achieving accreditation

according to ISO 17065 (product certification) requirements.

Details of the scopes of accreditations are available on the website: <http://iri.org.lb> in the accreditation section and on the ANAB accreditation body website: <http://anab.ansi.org>

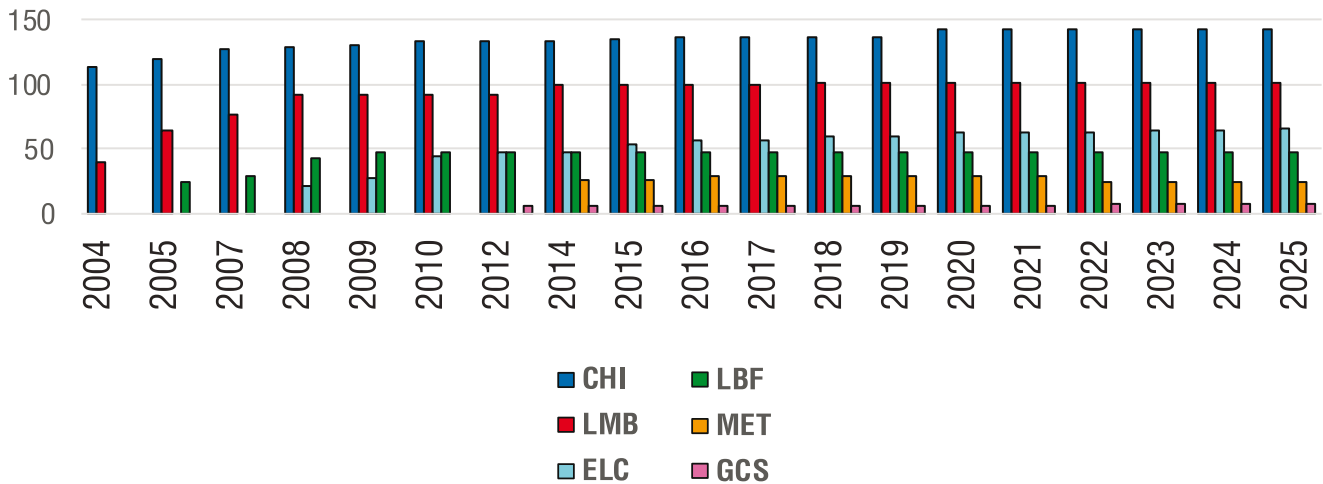
The scope of accreditation according to ISO 17020 requirements covers the inspection of imported goods subject to National decrees, inspection of goods for export as well as inspections according to customers' specific requirements. It covers the following:

Items, Materials OR Products Inspected	Type and Range of Inspection	Methods and Procedures
Electrical Appliances Food Ceramic Tile Sanitary Wares Oil Cosmetic Glass Diapers Notebook Medical Items Solar Water Heaters Fire Extinguishers Gas Cylinders New Boilers Tires Photovoltaic	Qualitative and /or Quantitative Inspection of New Products	Internal Procedures: PR/CFM/03 IT/CFM/04 IMP/CFM-e/01 to 04 IMP/CFM-h/01 to 39 IMP/CFM-s/02 & 03 IMP/CFM-n/01 to 03 IMP/CFM-r/01 to 07 & 09 IMP/CFM-v/01 IMP/CFM-d/01 to 03 Customer-Provided Inspection Requirements

The scope of accreditation according to ISO 17025 requirements covers over 386 test methods in different fields as detailed below:

- **Chemical, physico-chemical and microbiological** testing of food and animal feeding stuff, vegetable oils, water for human consumption & waste water, cosmetics, wet wipes & baby diapers,
- **Electrical** testing of household appliances, electrical products, luminaires, lamps, lead acid batteries, circuit breakers & energy meters,
- **Physico-chemical and rheological** testing of grain, flour, cereals, pulses, feed, milled products & by products in bulk and sacs,
- **Mechanical calibration** of conventional masses (class E2 & lower), balances (on-site & in permanent laboratories) and temperature.
- **Physico-mechanical** testing of cement and ceramic tiles.

Distribution of accredited test methods by laboratory per year





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Industrial Research Institute
Lebanese University Campus, IRI Building,
Hadath (Baabda) Beirut, Lebanon 11-2806

Fulfills the requirements of

ISO/IEC 17025:2017

In the fields of

TESTING and CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.



Jason Stine, Vice President
Expiry Date: 29 August 2026
Certificate Number: ACT-1898





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

**Industrial Research Institute
Lebanese University Campus, IRI Building,
Hadath (Baabda)
Beirut, Lebanon 11-2806**

Fulfills the requirements of

ISO/IEC 17020:2012

In the field of

INSPECTION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.



Jason Stine, Vice President
Expiry Date: 29 August 2027
Certificate Number: AI-2499



An inspection body's fulfilment of the requirements of ISO/IEC 17020:2012 means the inspection body meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid inspection results (refer to joint ISO-ILAC-IAF Communiqué dated Sept 2013).



**INTERNAL
& EXTERNAL ACTIVITIES**



The year 2025 was marked by a wide range of internal and external activities in which the Industrial Research Institute (IRI) played an active and influential role, whether as an organizer, sponsor, participant, or through the designation of representatives to attend various events.

The Institute's presence at these occasions provided valuable opportunities for knowledge sharing and exchange of expertise.

Despite the challenges and developments that took place throughout the year, the Institute maintained its momentum and continued to fulfill its national, economic and industrial responsibilities.

FIFTH MEETING OF THE INDUSTRIAL DEVELOPMENT ADVISORY COMMITTEE

10–12 September 2025

Mr. Selim Kfoury, Deputy Director General, represented the Industrial Research Institute at the Fifth Meeting of the Advisory Committee on Industrial Development, held at the headquarters of the Arab Industrial Development, Standardization and Mining Organization (AIDSMO) in Rabat, Kingdom of Morocco, from 10 to 12 September 2025 via videoconference.

The meetings resulted in the issuance of the report and recommendations as follows:

PDF files: Report and Recommendations – List of Participants

FIFTH MEETING OF THE ADVISORY COMMITTEE ON INDUSTRIAL DEVELOPMENT RABAT – KINGDOM OF MOROCCO 10-12 SEPTEMBER 2025

REPORT AND RECOMMENDATIONS OF THE FIFTH MEETING OF THE ADVISORY COMMITTEE ON INDUSTRIAL DEVELOPMENT RABAT, KINGDOM OF MOROCCO, 10 – 12 SEPTEMBER 2025

The Advisory Committee on Industrial Development held its fifth meeting at the headquarters of the Arab Industrial Development, Standardization and Mining Organization (AIDSMO) in Rabat, Kingdom of Morocco, during the period from September 10 to 12, 2025. The meeting took place both in person and via remote communication, with the participation of representatives from the following countries:

- Ministry of Industry, Trade and Supply – Hashemite Kingdom of Jordan (via remote participation)
- Ministry of Industry and Advanced Technology – United Arab Emirates
- Ministry of Industry and Commerce – Kingdom of Bahrain (via remote participation)
- Ministry of Economy and Finance in charge of Industry – Republic of Djibouti
- Ministry of Industry and Mineral Resources – Kingdom of Saudi Arabia
- Ministry of Industry and Trade – Republic of the Sudan (via remote participation)
- Ministry of Economy and Industry – Syrian Arab Republic (via remote participation)
- Ministry of Commerce and Industry – Federal Republic of Somalia (via remote participation)
- Ministry of Industry and Minerals – Republic of Iraq
- Ministry of Commerce, Industry and Investment Promotion – Sultanate of Oman
- Ministry of Industry – State of Palestine (via remote participation)
- Ministry of Commerce and Industry – State of Qatar

- Ministry of Commerce and Industry / Public Authority for Industry – State of Kuwait
- Ministry of Industry – Lebanese Republic (via remote participation)
- Ministry of Industry and Minerals – State of Libya
- Ministry of Industry / Industrial Development Authority (IDA) –

- Arab Republic of Egypt (via remote participation)
- Ministry of Industry and Trade – Kingdom of Morocco
- Ministry of Mines and Industry – Islamic Republic of Mauritania
- Ministry of Industry and Trade – Republic of Yemen

The meeting was also attended by representatives from the Gulf Organization for Industrial Consulting, along with the Arab Organization for Industrial Development, Standardization, and Mining (the committee's rapporteur).

(Attached, list of participants)

1. Opening Session
2. Formation of the Drafting Committee
3. Adoption of the Agenda
4. Discussion of the Agenda Items

The Committee discussed the items included in the agenda and adopted the following recommendations:

Item 1:

Follow-up on the implementation of recommendations from the fourth meeting of the advisory committee

Item 2:

Presentation of related decisions issued during the 67th session of the organization's executive council

Dr. Amir Al-Rifai

Head of Industrial Development Department
Arab Industrial Development,
Standardization and Mining Organization
Meeting Rapporteur

Item 3:

Review of the Arab Products Index Platform (Apip.online), the Arab platform for industrial and mining products supply and demand.

Item 4:

Follow-up on the progress of the Arab Industrial Integration Strategy project during the period between the fourth and fifth meetings of the Committee.

Item 5:

Presentation of the final version of the Arab Industrial Integration Strategy.

Item 6:

Presentation of the work guide of the technical team on research, development and innovation in the industrial sector in the Arab states.

Item 7:

Determination of the date and location of the sixth meeting of the Advisory Committee on Industrial Development.

Engineer Al-Badr bin Adel Foudeh

Acting Deputy of the Ministry for Industrial Development
And General Supervisor
on the Industrial Empowerment Agency
Ministry of Industry and Mineral Resources
Kingdom of Saudi Arabia
Meeting Chairman

Approved

Eng. Adel Sakr El-Sakr

Director General
Arab Industrial Development,
Standardization and Mining Organization

WORLD STANDARDS DAY 2025

9 June 2025

Mr. Selim Kfoury, Deputy Director General, represented IRI Director General Dr. Bassam Frenn at the World Standards Day 2025 event, organized by the Lebanese Standards Institution (LIBNOR) in partnership with the Order of Engineers and Architects - Beirut, at the Order's headquarters in Beirut.

In his intervention, Mr. Kfoury highlighted the fundamental role played by IRI in the field of standardization in Lebanon, beginning with its contribution to the establishment and support of LIBNOR and continuing through the ongoing cooperation between both entities.

Moreover, he mentioned that approximately 800 national standards were developed by the Institute on behalf of LIBNOR during the period

from 1998 to 2004.

He then emphasized that the Institute maintains continuous representation on all technical committees to which it is invited by LIBNOR as part of the national standards development and issuance process.

Panel 1

World Standards Day 2025
A Standard Vision for a Better World

STANDARDS AS A FOUNDATION FOR PUBLIC POLICIES

OCTOBER 23RD | OEA BEIRUT
9:50 - 10:50

Moderator
ENG. LENA DARGHAM
Director General - LIBNOR

MP DR. INAYA EZZEDDINE
MP, Chair of the Parliamentary Committee on Women & Children, Chair of the SDG 2030 Agenda Parliamentary Commission

MS. GRACIA EL AZZI
Member of the Higher Council for Customs

DR. BASSAM FRENN
Director General, Industrial Research Institute - IRI

DR. MOHAMAD BOU HAIDAR
Director General, Ministry of Economy and Trade

ENG. FADI HANNA
President, Order of Engineers and Architects - Beirut



KICK-OFF MEETING FOR THE REVIEW AND UPDATE OF THE NATIONAL IMPLEMENTATION PLAN FOR THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS (POPS) IN LEBANON

5 February 2025

Dr. Joseph Matta, Director of Applied Research and Testing, represented the Industrial Research Institute at the kick-off meeting on the “Review and Update of the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Lebanon”, held on 5 February 2025 at the Environment Ministry.

The meeting was organized within the framework of the project “Reduction of Unintentional Persistent Organic Pollutants (UPOPs) through Waste Management in a Circular Economy”, which aims to reduce emissions of these pollutants resulting from waste disposal practices and open burning, while mitigating their impact on public health and environmental risks.

FIRST MEETING OF THE NATIONAL COMMITTEE FOR WINE, ARAK, AND ALCOHOLIC BEVERAGES

5 May 2025

Dr. Joseph Matta represented IRI at the opening of the First Meeting of the National Committee for Wine, Arak, and Alcoholic Beverages, held at the Agriculture Ministry as part of the implementation of Decision No. 1/196 issued on 22 April 2025, establishing the Committee with the objective of developing this vital sector and strengthening its presence both locally and internationally.



The Committee includes representatives from:

- Industrial Research Institute (IRI)
- National Institute of Vine and Wine
- Lebanese Agricultural Research Institute (LARI)
- Lebanese Standards Institution (LIBNOR)
- Federation of Chambers of Commerce, Industry and Agriculture in Lebanon (FCCIAL)
- Chamber of Commerce, Industry and Agriculture of Zahle and the Bekaa
- Faculty of Agronomy , Lebanese University
- School of Mediterranean Agricultural Engineering (ESIAM)
- Faculty of Agricultural and Food Sciences, Holy Spirit University of Kaslik (USEK)
- Union Vinicole du Liban (UVL)
- Lebanon’s union of wine producers
- Syndicate of Traders and Importers of Alcoholic Beverages in Lebanon

HEALTH SECTOR STAKEHOLDER CONSULTATION WORKSHOP

30 May 2025

Dr Joseph Matta represented the Director General Dr Bassam Frenn in the Health Sector Stakeholder Consultation Workshop taking place on 30th of May 2025.

Practical reform pathways for strengthening the sector's resilience, regulatory coherence and innovation capacity were discussed. Updates on recent legal and institutional developments in the health sector were also shared and opportunities to strengthen pharmaceutical quality control, policy enforcement and regulatory alignment were explored.

STRENGTHENING REGIONAL STANDARDS AND CONFORMITY ASSESSMENT FRAMEWORKS

Throughout 2025, Engineer Antoine Fayçal, Customs Files, Inspection & Certification Director, actively participated in regional standardization and conformity assessment initiatives organized by AIDSMO. Through his involvement in technical committees, working groups, and specialized workshops, he contributed to the development and finalization of cosmetics safety regulations, the establishment of harmonized conformity assessment frameworks, and the preparation of implementation guidelines for various sectors. These activities strengthened Lebanon's technical contribution to Arab standardization efforts, enhanced regional cooperation, and supported the development of the expertise and institutional capacity required for the effective implementation of newly adopted standards and conformity assessment procedures.

Key activities in 2025 included:

- 13th Arab Conformity Assessment Committee Meeting – 23 January 2025.
- 6th Working Group Meeting on Cosmetics Safety Regulations – 14 January 2025.
- 7th Working Group Meeting on Cosmetics Safety Regulations – 11 February 2025.
- 8th Working Group Meeting on Cosmetics Safety Regulations – 11 March 2025.
- 2nd Working Group Meeting on the General Arab Conformity Models Regulation – 24 July 2025.
- Workshop on Personal Protective Equipment – 24 November 2025.
- Workshop on Gas Appliances – 27 November 2025.
- Workshop on Conformity Models – 9 December 2025.

Through these activities, Engineer Fayçal contributed to the refinement of cosmetics safety requirements, the development of a unified conformity assessment framework for Arab technical regulations, and the dissemination of implementation guidance covering testing, certification, and compliance procedures. His participation also supported regional capacity-building efforts and helped prepare Lebanese industries, testing laboratories, and certification bodies for the implementation of new standards and conformity assessment requirements in 2026 and beyond.

SEMINAR ON THE LATEST INNOVATIONS AND DEVELOPMENTS OF S&AS LEBANON

20 November 2025

In the field of industrial support, in terms of the capabilities and expertise provided by the Industrial Research Institute, the division head of the Electrical and Renewable Energy participated in a seminar on the latest innovations and developments of the Lebanese company S&AS



in the manufacture and development of elevator control systems, with a detailed look at the new features of VX2 motors, in addition to modern display technologies such as TFT indicators including the integration of Bluetooth in MZ and ASTRA-BLU systems and its innovations, while providing an overview of upcoming developments and future solutions.

CERTIFIED TRAININGS FOR SOLAR PV TECHNICIANS

Despite challenging circumstances and difficult operational conditions, the successful delivery of three additional certified training programs for Solar PV Technicians demonstrated strong commitment to capacity building and workforce development within the renewable energy sector. These training sessions were conducted while maintaining high technical and safety standards, ensuring participants gained both theoretical knowledge and practical competencies aligned with industry best practices. This achievement reflects organizational resilience, adaptability, and continued dedication to empowering technical professionals with the skills required to support the growing demand for reliable and sustainable Photovoltaics solutions.

PARTICIPATION IN THE ENERGY EFFICIENCY AND GREEN BUILDING EVENT

3 June 2025

Participation in the Energy Efficiency and Green Building Event held at the Radisson Blu Hotel provided an important platform for exchanging knowledge and engaging with industry leaders, consultants, and sustainability experts in the fields of energy efficiency and environmentally responsible construction. The event highlighted innovative approaches, emerging technologies, and best practices related to sustainable building design, energy management systems, and green infrastructure development. Attendance and active engagement in the event reinforced the organization's commitment to promoting sustainable energy solutions, supporting environmental responsibility, and aligning with modern standards for efficient and resilient building practices.

PARTICIPATION IN THE E-MOTOR SHOW

15 November 2025

The Industrial Research Institute actively participated in the E-Motor Show through the representation of Eng. Mohammad Assaad El Hajjar as an official speaker during the event sessions. The participation highlighted the Institute's vital role in supporting the development of the electric mobility and sustainable transportation sector through technical expertise, testing and certification services, compliance assessment, and the promotion of



quality and safety standards. The presentation also emphasized the Institute's ongoing commitment to fostering innovation, encouraging sustainable technologies, and contributing to the advancement of clean energy solutions and modern transportation infrastructure in Lebanon and the region.

IRI

INDUSTRIAL RESEARCH INSTITUTE PARTICIPATES IN EUROLAB GENERAL ASSEMBLY IN DENMARK



Copenhagen, 28-29 April 2025

The Industrial Research Institute, represented by Dr Joseph Matta, Applied Research and Testing Director, actively participated in the General Assembly of EUROLAB (European Federation of National Associations of Measurement, Testing and Analytical Laboratories), held in Copenhagen, Denmark.

Through this involvement, Lebanon, represented by the Industrial Research Institute, has established a scientific presence on the international stage in this specialized field. This achievement is attributed to the visionary leadership of the Institute's Director General, Dr Bassam Frenn whose strategic foresight continues to elevate its global scientific standing.

TWELFTH GENERAL ASSEMBLY MEETING OF ARAMET AND SEVENTEENTH MEETING OF THE METROLOGY ADVISORY COMMITTEE

KSA, 13 May 2025

Eng. Elias Maalouf, Head of the Metrology Laboratory, represented the Industrial Research Institute (IRI) at the Twelfth General Assembly Meeting of the Arab Metrology Organization (ARAMET) and the Seventeenth



Meeting of the Metrology Advisory Committee, held from 11 to 13 May 2025 at the headquarters of the Saudi Standards, Metrology and Quality Organization (SASO) in the Kingdom of Saudi Arabia. Representatives of the National Metrology Institutes (NMIs) of the Arab countries participated in the meetings, during which the implementation plan of ARAMET was discussed, the participants also reviewed the progress made by implementing the recommendations of the Sixteenth Meeting of the Metrology Advisory Committee.

STRENGTHENING IRI'S INTERNATIONAL PRESENCE IN CEREAL SCIENCE AND TECHNOLOGY

Vienna, 20-25 September 2025

The International Association for Cereal Science and Technology-ICC, the pre-eminent international association in the field of cereal and food science and technology, committed since its establishment to developing standard methods.

Contributing to ICC's focused activity on issues that contribute to improved food quality, food safety and food security for the health and well-being of all people, started three decades ago with Dr. Bassam Frenn. This support from IRI's Director General lead to the election of Eng.



Jbeily as Technical Director of ICC until 2021 and senior technical advisor until 2024. During this period, IRI technically contributed to ICC's activities in "Knowledge dissemination, research projects and the development of future standards and standard methods" that will definitely help researchers, food authorities and decision makers worldwide to produce and monitor the quality and safety of our "Bread" from "Farm to Fork".

In this context, Eng. Amine Jbeily Head of Cereal Science division represented IRI at the Strategic Workshop on the 22nd of September 2025 and the General assembly held during the 21st ICC's Conference in Vienna-Austria from the 23rd to the 25th of September 2025 where future strategies were discussed.

During the Gala Dinner, The Industrial Research Institute-IRI scientific contribution to ICC was recognized and honored by an award received by Eng.Amine representing IRI's Director General Dr. Bassam Frenn.

TRAINING ON THE CALIBRATION OF ELECTRIC HIGH-VOLTAGE MEASURING EQUIPMENT

Cairo, 19-20 February 2025

As part of the cooperation and technical projects with the Arab Industrial Development Standardization and Mining Organization (AIDSMO), Mr. Edgar Shaaya, Head of the Metrology Laboratory, participated in a training on the calibration of electrical high-voltage measuring equipment at the National Institute of Standards (NIS), Cairo, Egypt, from 19–20/02/2025.



**APPLIED RESEARCH
& STUDIES**

THE INSTITUTE PERFORMED 8 ENVIRONMENTAL AND TECHNOLOGICAL STUDIES AND ANALYZES IN 4 FACTORIES

The Industrial Research Institute keeps pace with the current status of industries and factories, especially the ones that received ISO environmental certification from the Institute, and ensures their continuous compliance with the scientific and technological standards required to maintain a healthy environment for human beings and preserve the nature.

The IRI completed 8 studies and analyzes in 4 factories, among which studies in environmental auditing and in environmental analyzes and technical field studies, as follows:

Comprehensive Environmental Analyzes and Technical Field Studies

- Cimenterie Nationale s.a.l.
- Unipak
- Medvision
- Liban Cables s.a.l.





**SCIENTIFIC
PUBLICATIONS**

Because scientific research contributes to the progress and preservation of societies by ensuring a better life, the Industrial Research Institute contributed during the year 2025 to research the results which were published in international scientific publications, and which contributed to the advancement of science and knowledge. Professor Joseph MATTA, Director of Applied Research and Laboratories at the Industrial Research Institute has published scientific papers on health, nutritional and environmental issues.



Article

Occurrence and Health Risk Assessment of Per- and Polyfluoroalkyl Substances in Yogurt Across Lebanese Governorates

Sandra Sarkis ^{1,*}, Maha Hoteit ^{2,3,4,†}, Nikolaos Tzenios ^{5,*}, Tony Tannous ⁶, Mireille Harmouche-Karaki ⁷, Khalil Helou ⁷ and **Joseph Matta** ^{7,8}

¹ Department of Nutrition, Faculty of Pharmacy, Ecole Doctorale Sciences et Santé (EDSS), Medical Sciences Campus, Saint Joseph University of Beirut (USJ), Beirut 1100, Lebanon

² PHENOL Research Group (Public Health Nutrition Program-Lebanon), Faculty of Public Health, Lebanese University, Beirut 1100, Lebanon; m.hoteit@ul.edu.lb

³ Department of Primary Care and Population Health, University of Nicosia Medical School, P.O. Box 24005, Nicosia 1700, Cyprus

⁴ Institut National de Santé Publique, d'Epidémiologie Clinique et de Toxicologie-Liban (INSPECT-LB), Beirut 1100, Lebanon

⁵ Faculty of Public Health, Charisma University, London EC1V 7QE, UK

⁶ Faculty of Arts and Sciences, University of Balamand, Tripoli P.O. Box 100, Lebanon; tony.tannous@balamand.edu.lb

⁷ Department of Nutrition, Faculty of Pharmacy, Saint Joseph University of Beirut (USJ), Beirut 1100, Lebanon; mireille.harmouche@usj.edu.lb (M.H.-K.); khalil.helou@usj.edu.lb (K.H.); joseph.matta@usj.edu.lb (J.M.)

⁸ **Industrial Research Institute**, Lebanese University Campus, Hadat Baabda, Beirut 1100, Lebanon

* Correspondence: sandra.sarkis@net.usj.edu.lb (S.S.); nicolas@trccolleges.com (N.T.)

† These authors contributed equally to this work.

Abstract

Per- and polyfluoroalkyl substances (PFAS) are persistent environmental pollutants of emerging concern due to their widespread use and potential adverse health effects. This study assessed the concentrations of key PFAS compounds in yogurt samples collected from eleven Lebanese governorates. Results revealed notable geographic variability, with the Bekaa region exhibiting the highest PFAS levels, particularly PFHpA, PFOA, PFHxS, PFOS, and PFPeA, while Jbeil showed the lowest concentrations. Health risk assessment using estimated daily intake (EDI), risk quotients (RQ), and cumulative hazard index (HI) indicated all individual compound exposures below established safety thresholds. However, elevated RQs for PFOS and PFOA and an average HI of 0.71 suggest potential chronic exposure concerns in high-burden regions. These findings emphasize the importance of continued monitoring and risk management to protect public health and inform environmental policies addressing PFAS contamination in Lebanon.

Keywords: PFAS; yogurt; food contamination; Lebanon; risk assessment



Article

Heavy Metal Contamination in Yogurt from Lebanon: Evaluating Lead (Pb) and Cadmium (Cd) Concentrations Across Multiple Regions

Sandra Sarkis ^{1,*}, Rayan Kashmar ^{2,3,*}, Nikolaos Tzenios ^{4,*}, Maha Hoteit ^{5,6,7}, Tony Tannous ⁸ and Joseph Matta ^{9,10}

¹ Department of Nutrition, Faculty of Pharmacy, Ecole Doctorale Sciences et Santé (EDSS), Medical Sciences Campus, Saint Joseph University of Beirut (USJ), Beirut 1100, Lebanon

² GEPEA, Energy Systems and Environment Department, IMT Atlantique, Rue Alfred Kastler, 44307 Nantes Cedex 3, France

³ Doctoral School of Science and Technology, Research and Analysis Platform in Environmental Sciences (EDST-PRASE), Beirut 1100, Lebanon

⁴ Faculty of Public Health, Charisma University, London EC1V 7QE, UK

⁵ PHENOL Research Group (Public Health Nutrition Program-Lebanon), Faculty of Public Health, Lebanese University, Beirut 1100, Lebanon; m.hoteit@ul.edu.lb

⁶ Institut National de Santé Publique, d'Epidémiologie Clinique et de Toxicologie-Liban (INSPECT-LB), Beirut 1100, Lebanon

⁷ Department of Primary Care and Population Health, University of Nicosia Medical School, Nicosia P.O. Box 24005, Cyprus

⁸ Faculty of Arts and Sciences, University of Balamand, Tripoli P.O. Box 100, Lebanon; tony.tannous@balamand.edu.lb

⁹ Department of Nutrition, Faculty of Pharmacy, Saint Joseph University of Beirut, Beirut 1100, Lebanon; joseph.matta@usj.edu.lb

¹⁰ Industrial Research Institute, Lebanese University Campus, Hadat Baabda, Beirut 1100, Lebanon

* Correspondence: sandra.sarkis@net.usj.edu.lb (S.S.); rayan.kashmar@imt-atlantique.fr or rayan.kashmar.1@ul.edu.lb (R.K.); nicolas@trccolleges.com (N.T.)

Abstract: The toxicity of metals such as lead (Pb) and cadmium (Cd) makes heavy metal contamination in food products a major health concern. The aim of this study is to measure the levels of Pb and Cd in yogurt samples that were collected from 11 distinct Lebanese locations and determine their compliance with the legal limits set by the European Commission (0.02 mg/kg for Pb and 0.005 mg/kg for Cd). A total of 165 yogurt samples were examined using atomic absorption spectrophotometry (AAS). Interestingly, the findings showed that 10.9% of samples had Pb concentrations over the allowable limit; the highest amounts were observed in Baalbeck-Hermel (0.118 mg/kg), North Area (0.125 mg/kg), and South Lebanon (0.115 mg/kg). In addition, the highest detected concentrations of Cd were found in North Area (0.094 mg/kg), Baalbeck-Hermel (0.076 mg/kg), and Akkar (0.042 mg/kg), with 14.5% of samples above the limit. The results show regional differences in contamination, which are probably caused by industrial emissions, agricultural activities, and environmental pollution. To better understand the potential health implications, the estimated daily intake (EDI) of Pb and Cd through yogurt consumption was calculated and compared to international health-based guidance values. Although the EDI values suggest a low risk from yogurt alone, the findings highlight the importance of cumulative exposure and emphasize the necessity of regular monitoring and stricter implementation of food safety laws to decrease exposure to heavy metals through dairy intake.

Keywords: heavy metals; yogurt; Lebanon; public health; environmental pollution



**ACTIVITIES OF THE
EUROPEAN-LEBANESE
CENTER FOR INDUSTRIAL
MODERNISATION – ELCIM
AND THE ACTIVITIES OF
THE CENTER FOR
INNOVATION &
TECHNOLOGY
- CIT**

Following a progressive strategic approach, ELCIM and CIT continued their focused engagement with European and Lebanese innovation programs. Central to this effort was their ongoing collaboration with leading universities in Lebanon.

The following are the main programs implemented during 2025:

NEXT MED INTERREG PROGRAMME – SECOND CALL FOR PROPOSALS APPLICATIONS

ELCIM and The CIT applied for the second call for proposals under the NEXT MED Interreg Programme through active participation in the following projects: ECOTWIN, GCDIP, GREENBOT, and ECORENOVATE, all focusing on energy efficiency and sustainable innovation; GREATMED, targeting the tourism sector;

APHRODITE, dedicated to education and social inclusion; and RECODE, addressing recycling and sustainable management of demolition waste. These projects collectively contribute to regional cooperation, sustainability, innovation, and socio-economic development across the Mediterranean area.

PRIMA CALL FOR PROPOSALS ACTIVE PARTICIPATION

As for the PRIMA programme ELCIM and the CIT applied for the published call for proposals through participation in the projects NEMOMED, focused on transforming Mediterranean food systems and promoting sustainable agri-

food practices, and WATERLUTIONS-MED, dedicated to enhancing water resilience and supporting Mediterranean ecosystems through innovative and sustainable water management solutions.

SOFT-LANDING MISSION – FRANCE AND NIVELLES (LEBANON INNOVATE PROGRAMME)

Implementation of the soft-landing mission to France and Nivelles under the LEBANON INNOVATE Programme, held from 16 to 21 November, including the participation of the three Knowledge and Innovation Community focal points in the EBN Techcamp. The mission included preparatory coordination with the European Business and Innovation Centre Network partner for the finalization of logistics, mission objectives, and reporting requirements,

as well as strategic visits to IncubAlliance within the Paris-Saclay Innovation Hub and to Grand Nancy Innovation in Nancy. The programme also featured participation in peer exchange sessions and structured networking activities with EU|BIC members and innovation agencies, alongside a high-level EU–Lebanon Research & Innovation meeting at the Mission of Lebanon to the EU in Brussels.

TECHNOLOGY TRANSFER OFFICE (TTO) SUPPORT COMPONENT – LEBANON INNOVATE PROGRAMME

Under the Technology Transfer Office (TTO) support component of the LEBANON INNOVATE Programme, eight university roadmaps were finalized and contractual agreements were issued to participating institutions. Six universities — Holy Spirit University of Kaslik (USEK), Saint Joseph University of Beirut (USJ), Lebanese International University (LIU), Lebanese American University (LAU), Notre Dame University-Louaize (NDU), and Beirut Arab University (BAU) — signed agreements, received initial payments, and launched implementation activities, achieving 50% of the planned programme output. In this framework, the



Industrial Research Institute (IRI) and Notre Dame University-Louaize officially signed an agreement to establish a Technology Transfer Office on the NDU campus, in the presence of representatives from both institutions and partners from Berytech, the lead partner of the Lebanon Innovate project. The initiative aims to strengthen Lebanon's innovation ecosystem by bridging academic research with industry needs, supporting intellectual property

protection, promoting commercialization of innovative technologies, and generating economic and societal impact. Through the Lebanon Innovate voucher scheme, grants support activities including piloting technology transfer interventions, service delivery to the university community, expert engagement, logistics, communication material development, and procurement of selected equipment required for TTO operations.

SOFT-LANDING MISSION TO SPAIN – LEBANON INNOVATE PROGRAMME

Implementation of a soft-landing mission to Spain under the LEBANON INNOVATE Programme, organized in collaboration with the European Business and Innovation Centre Network (EBN), with the objective of strengthening international exposure, networking opportunities, and capacity building for Lebanese startups and innovation stakeholders. The mission included visits to three EURO BICs, providing practical insights into European startup support ecosystems and innovation acceleration models, as well as participation in the EBN Congress,

which enhanced peer learning and international networking. The activities highlighted effective approaches for scaling health and deep-tech startups, emphasized the importance of physical innovation infrastructure and early-stage support systems, and opened opportunities for future collaboration with BAT, La French Tech, and ESTIA. Overall, the mission outcomes were fully aligned with the programme's objectives related to international networking, innovation exchange, and knowledge transfer.



IRI



**ACTIVITIES OF
THE LEBANESE CLEANER
PRODUCTION
CENTER
LCPC**

LCPC – THE LEBANESE RESOURCE EFFICIENT AND CLEANER PRODUCTION CENTRE

The Industrial Research Institute is committed to support a sustainable industrial development and hereby provide free services of expertise and advise on Resource efficiency for the industrial sector in Lebanon benefiting from the accumulated knowledge of more than 22 years to

provide Resource efficient support to industries and deliver capable RECP services at the national and regional level through the membership of LCPC at the Global UNIDO/UNEP RECP Network.

THE CORE, MISSION AND ADVANTAGES OF LCPC STRATEGY

The core service of LCPC is to introduce for the industrial sector the Resource Efficiency and Cleaner Production (RECP) methodology to assist in bridging environment within their industries and pave the way to sustainability. This is shaped by conducting a full assessment in terms of technical capabilities, financial feasibility and environmental benefits to identify CP projects to be implemented and follow up on the outcomes and provide continuous evaluation.

An overall LCPC strategy is based on preventive approach to reduce risks on human and environmental pollution with special emphasis on reducing raw material, energy consumption, and waste generation and hence cost; and on the other side enhance process efficiency and improve quality and increased lifespan of the product. Furthermore to improve working conditions and hence workers health and well-being; and improve public image of the company.

LCPC ACTIVITIES 2025

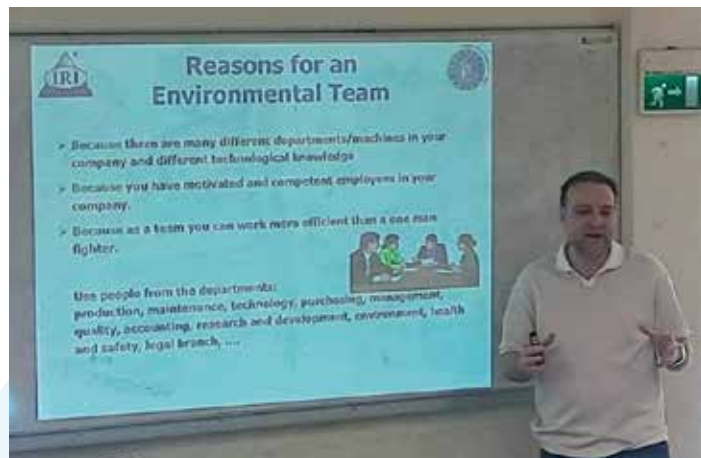
RECP Research for Sustainable Industrial Development

Due to the National need and the recruitment of Executive board for the industrial production of cannabis, and the recent requested development within the war at the end of 2024, LCPC conducted RECP research for the Assessment of good industrial practice for Cannabis Production highlighting the great potential for Therapeutic

and Medical use of CBS, and innovative circular approach to deal with the demolished construction waste all over the country to guide on how circular construction builds a sustainable society. Four RECP Experts have been trained and involved on a volunteering status to conduct both of the research.

Three Workshops integrated with RECP for IRI certification on Solar PV for technicians – 13th of February, 12th of April & 9th of October

LCPC is contributing with RECP concept and insights within the Workshops organized at IRI for certified technicians on Solar PV to support better performance in using of Renewable Energy, as solar energy is one of the most readily available energy sources and may be converted into electric power in a very clean manner using photovoltaic systems. Environmental issues related to global warming and greenhouse emissions push more and more the engineering community towards searching for more renewable sources or developing new technologies that may exploit clean energy sources.



Global UNIDO/UNEP RECP Network

LCPC is since 2007 a regular member within the Global UNIDO/UNEP Resource Efficiency and Cleaner Production Network. This status is only given to the National RECP Centers, which are currently 45 National Centers beside many other international institutions with an observer status. LCPC has throughout this period been able to join UN mission to support establishing many Centers in the GCC and was elected twice for two terms, each for 2 years as Regional Representative for the Arab Countries with the reorganization of the Prime Minister of Lebanon.



Moreover, LCPC is an active member/focal point within the following:

- Global Industry Platform
- Union for Mediterranean
- Global Research Alliance on GreenHouse Gases
- 10 Year Framework of Marrakesh Process
- Knowledge Management System (KMS) in the Arab Region



**IRI COOPERATION
WITH
THE PUBLIC
SECTOR**

RELATION WITH THE PUBLIC SECTOR

The Institute acts on behalf of the Lebanese government and is authorized by it, to approve negotiations, sign agreements for mutual recognition of certificates of conformity in the trade exchange between Lebanon and other countries.

The Institute was tasked with the issuing of certificates of conformity in the importation of industrial goods, pursuant to the Lebanese decrees of mandatory specifications, and also in exportation operations in accordance with the specifications of the destination countries.

It should be mentioned here that since 2004, IRI has been the only internationally accredited body in Lebanon, as per the international accreditation certificate DIN EN ISO/ IEC 17025. Consequently, the Institute is the only window available for the flow of Lebanese goods, which need laboratory tests and certificates of conformity, to the European and international markets.



Parliament

IRI regularly accepts the invitations of parliamentary committees in the Lebanese parliament, and attends meetings held by them. IRI offers its technical and scientific expertise related to the Institute's scope of work to these committees during the drafting and discussion of bills.

IRI actively participated in the drafting and discussion of the bill on technical regulations and pertinent procedures for conformity assessment, in all stages of the process, with the subcommittee of the joint parliamentary committees, until the bill was approved by this committee at the end of September, 2011. IRI participated in the drafting

of the bill regulating drinking water processing, treatment and packaging, with the Committee on Public Health, Labor and Social Affairs.

The bill aims to limit the unregulated and exploding number of drinking water distribution companies in Lebanon, as a result of the growing need of the citizens for water that is otherwise unavailable through public drinking water grids. The bill seeks to subject most unlicensed bottling companies to the laws and regulations in force, in order to ensure the safety of water, that it is uncontaminated, and that it complies with the required specifications to preserve public health. IRI also participated in the activities of the Public Works and Energy Committee in several areas, including:

- Following up the process of replacing domestic gas bottles, especially the control of the production and exportation of gas bottles before they are used in local markets.
- Providing the necessary expertise and technical analysis related to fuels allowed in private cars.
- Offering opinion and technical analysis related to bills concerning public safety in the use of fuel tanks, with a view to prevent explosion.
- Expressing an opinion about the draft food safety law.
- Expressing an opinion about the draft law on electronic transactions and data of a personal nature



Ministry of Industry

IRI is considered to be the quintessential technical arm of the Lebanese Ministry of Industry,

especially as IRI is a subsidiary body of the ministry, and that its Board of Directors is headed by his Excellency the Minister of Industry. IRI is continuously conducting the necessary industrial inspections and studies, as well as feasibility studies aimed at developing existing industries or establishing new ones. This is in addition to conducting studies on the added value of national industrial products and the need for certificates of origin for export clearance. Also, the Institute worked in parallel with the ministry in granting industrial licenses, pursuant to decree No. 8018 dated 20/6/2002, which assigned the required role for IRI in this regard, and is still working in parallel with the ministry whenever it is required to do so.



Ministry of Economy and Trade

Since its inception, IRI has been cooperating with the Ministry of Economy and Trade, especially the Consumer Protection Directorate and the General Directorate of Cereals and Sugar beets.

- A- Consumer Protection Directorate This directorate is tasked with taking samples from local markets on a regular and ongoing basis, and handing them over to IRI for laboratory testing and issuance of the necessary reports, across various sectors. IRI comprises 14 accredited laboratories covering different sectors, in addition to a control and inspection unit, the meteorological calibration unit and the Lebanese Welding Centre.
- B- General directorate of Cereals and Sugar beets The Industrial Research Institute manages and operates the work of the central laboratory for grains, flour and bread research on behalf of the Ministry of Economy and Trade. The laboratory

is equipped in accordance with highly specialized international cereal laboratories. The laboratory meets all the needs of this directorate by controlling the quality of the imported and the locally produced wheat and wheat products (briefly, monitoring the ingredients that make up the Lebanese bread loaf).



Ministry of Agriculture

The Ministry of Agriculture requests IRI to analyze samples from agricultural products or material on a frequent basis. These are usually sent to IRI by the ministry for testing, whether upon importing them, exporting them or their usage. IRI is also tasked with the analysis of fertilizers and pesticide residues in vegetables, fruits and other crops.



Ministry of Public Health

IRI laboratories are used by the Ministry of Public Health in conducting special tests on bottled water, as a fundamental step in the process of obtaining a license for the water bottling companies, in addition to other tests conducted by the instituted which include, for example, baby formula, cosmetics, medicine and other items as needed.

The ongoing regulatory campaign launched by the Ministry of Public Health during 2014, required a continuous coordination with the Ministry which was and still sending a large number of samples daily so that the IRI conduct necessary tests and provide technical advice.

In its laboratories, the Institute conducted analysis and tests for thousands of samples brought by the Ministry of Health monitors, and results were given within the required time period, sometimes immediately. The Institute was not surprised by the unprecedented quantity and quality of samples brought by the Ministry of Health monitors.



Ministry of National Defense

The cooperation with the Lebanese army, including its various interests and divisions, has been firmly established since IRI's inception. IRI meets the requests of the committee tasked with the receipt of the analyzed materials and the central reserve committee for foodstuff analyses, the stewardship for uniforms and equipment, in addition to the requests of the corps of engineers, the logistical corps and the military police and other corps as needed. IRI also holds training courses on welding works, solar energy and other scientific topics which IRI proudly provides to this institution.



Ministry of Interior and Municipalities

The Textile, Leather and Rubber Laboratory at IRI is continuously cooperating with the security in analyzing the uniforms of the Internal Security Forces, as well as shoes and equipment, in accordance with their requirements and in order to certify the conformity of these specimens with the specifications established by them, prior to

purchasing uniforms and gear.

IRI meets the various requests by the Internal Security Forces in different unmentioned sectors, including for example chemical analyses to identify contraband and other security-related analyses.



Ministry of Energy and Water

IRI works with the Ministry of Energy and Water in different areas, most importantly overseeing the manufacturing of gas bottles and certifying that they conform to the mandatory Lebanese standards. IRI also inspects gasoline tanks in petrol stations, whether for licensing purposes or for maintenance when requested.

In addition, IRI inspects the nominal load of fuel tankers, in addition to other inspections that are conducted at the behest of the ministry.

IRI also conducts studies and offers technical consultation in national issues when requested, issues that fall under the scope of both the ministry's work and IRI's fields of expertise.



Ministry of Environment

IRI continually cooperates with the requests of the Ministry of Environment, whether by analyzing samples to assess their negative environmental impact, or whether by providing the Ministry of Environment with its services in the field of the inspection and auditing of factories, before suggesting the optimal approach in the production process in order to mitigate the latter's negative environmental impact.

IRI also hosts the Lebanese Cleaner Production

Centre (LCPC), which was established as a result of the cooperation among the Ministry of Industry, the Ministry of Environment, UNIDO and Austria.

This centre's main objectives include ensuring compliance with environmental standards during the different stages of production, something that is beneficial in terms of reducing costs by keeping waste in check on the one hand, and improving the environment by recycling wherever possible during the production process on the other hand.



Ministry of Justice

The judicial authorities continuously refer legal issues to IRI for technical advice, as IRI is the reference point for these authorities in what pertains to scientific issues.



Ministry of Foreign Affairs and Emigrants

Within the framework of cooperation and coordination among organizations involved in supporting Lebanon's exports abroad, the Financial and Administrative Director, Mr. Selim Kfoury, and the Applied Research and Testing Director, Dr. Joseph Matta represented the Industrial Research Institute in the meetings held virtually, organized by the Ministry of Foreign Affairs and Emigrants with concerned ministries and agencies and economic attachés in certain countries, and representatives of these countries including, Jordan, the United Arab Emirates, Canada, the European Union and others in an effort to overcome barriers and increase the volume of our exports to these countries.



Customs

Collaboration with the Lebanese customs is mainly done in the fields of enforcing and verification of conformity with the mandatory specifications required for goods imported to Lebanon, and which are subject to customs restrictions. This is done according to a specific and known mechanism. The Customs authorities, according to the customary procedure, can send samples to IRI for analysis and for identification of their components, prior to clearing them for entry into the local markets.



Lebanese Standards Institution (LIBNOR)

IRI worked diligently to establish the Lebanese Standards Institution (LIBNOR), which is tasked with issuing the Lebanese standards. In the beginning, this institution was established in the campus of IRI, which incubated its operations until it was reactivated in 1998. Since then, IRI published approximately one thousand national standards for the institution, as per annual contracts that were in force from 1998 until 2004. IRI is currently represented in the institution's Board of Directors, while IRI is permanently represented in the technical committees tasked with issuing and updating the national standards.

The Lebanese Council for Accreditation (Colibac)

Some time ago, IRI realized that the infrastructure of a world-class quality process must include the following items:

- Bodies for conformity assessment that

implement these specifications. This role is primarily assumed by IRI in Lebanon, not only in the application of national standards, but also in the application of international standards in export operations as IRI is internationally accredited according to ISO Certificates No. 17020 and 17025.

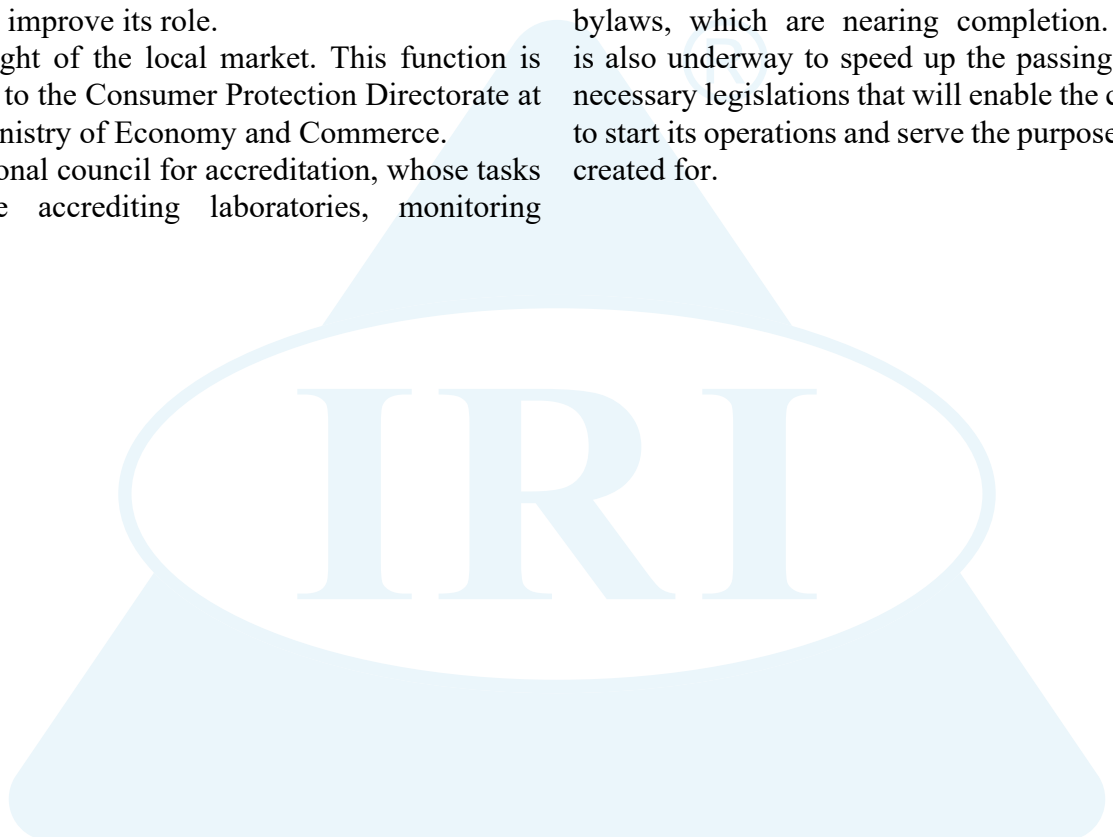
- A national institution for the issuance of national standards, which in Lebanon is the Lebanese Standards Institution (LIBNOR), a body that is ever striving to improve its role.

Oversight of the local market. This function is tasked to the Consumer Protection Directorate at the Ministry of Economy and Commerce.

A national council for accreditation, whose tasks include accrediting laboratories, monitoring

commissions, conformity assessment for products and processes in the country. This national institution was not yet established in Lebanon, and IRI sought hard to establish it in order to complete the quality infrastructure at the level of national institutions, until the decree of its establishment was issued in 2004, while the decree to establish its Board of Directors was issued in 2006. IRI is represented in the Board of Directors of the Lebanese Council for Accreditation (Colibac).

This council is still in the process of drafting its bylaws, which are nearing completion. Work is also underway to speed up the passing of the necessary legislations that will enable the council to start its operations and serve the purpose it was created for.





**IRI RELATIONS
WITH THE
PRIVATE
SECTOR**

IRI'S RELATIONS WITH THE PRIVATE SECTOR

Industrialists

IRI allots great importance to industrialists and industry in Lebanon. Eighteen years ago, IRI concluded an agreement with the Association of Lebanese Industrialists whereby it granted industrialists a fifty percent discount on the costs of all laboratory analyses, in accordance with the list adopted by IRI. The services provided by IRI to the industrialists are as follows:

A- Analysis requests with the aim of improving

The quality of production or finding solutions to production problems Any industrialist can head to IRI to request an analysis of a product produced in his factory with the aim of improving its quality, or as a result of a particular problem he is facing during production. At that point, cooperation and follow-up begin with the industrialist.

In most instances, his request becomes a process of applied research with which these analyses either end up in improving the quality of the product or determining the underlying cause of the production problem and subsequently, working on solving this problem.

B – Pre-export Analysis

There are many products that cannot be exported to foreign markets without first being analyzed. As IRI is internationally accredited pursuant to ISO certificates No. 17020 and 17025, its accreditation is recognized by more than 120 countries, rendering it virtually the sole window through which Lebanese goods that comply with technical specifications can flow into the European and global markets, owing to the certificate of conformity issued by IRI.

Therefore, industrialists head to IRI to conduct the analyses required by the destination

countries, in order to obtain certificates of conformity for their products which would give them access to international markets.

C – Product Certification

This is an optional program that any factory that meets the conditions can request, for implementation in its facilities according to a contract with IRI and a specific mechanism at the latter; this would enable the factory to obtain IRI's conformity mark for its products, in an ongoing and continuous manner. IRI would oversee production through periodical analyses and inspections, before granting the factory certificates of conformity whether for export purposes or for ensuring the conformity of its products to national standards. This takes place in a routine manner, and also on demand, and its cost is factored in into that of the program.

Merchants

There are goods that are subject to mandatory national standards. For this reason, importing such goods is subject to customs restrictions that stipulate their conformity to the mandatory national standards. This is verified by IRI prior to allowing these goods into domestic consumer markets.

Hence, the relation between the importers and merchants on one hand, and IRI on the other hand is constantly evolving. Efforts are underway, on a continuous basis, to facilitate trade exchange on one hand, and to verify the conformity of imported goods following a scientific method on the other hand.

Many merchants voluntarily head to IRI to request tests and analyses of their merchandise and products, in order to determine their

conformity with international standards in the case of export, or national standards in case of import, prior to shipping it from the country of origin.

Farmers

IRI's laboratories continuously cooperate with farmers. In truth, many farms voluntarily head to IRI and request their products to be analyzed. IRI provides analysis for farmers for the following products:

- Olive oil
- Honey
- Vegetables and fruits (pesticide residue)
- Irrigation water
- Meat and fish
- Other agro-food products.

Researchers and scientists

Many researchers and scientists head to IRI to conduct tests and analyses necessary for their scientific research. Most of the time, their requests become applied research projects, as they are aware of IRI's capabilities in this area. This is not to mention the fact that IRI houses 14 laboratories spanning many complementary disciplines, in addition to the meteorology laboratory, the Lebanese Welding Centre, the Euro-Lebanese Centre for Industrial Modernization, the Lebanese Cleaner Production Centre, and the

Centre for Innovation & Technology.

Consumers

The relationship between consumers and IRI is either direct or indirect, through the civil organizations and associations concerned with consumer protection, the environment and other fields.

Direct relationship

Any citizen can go in person to IRI in order to test any product, substance or other items, which is what is often done by citizens to ascertain the safety of what they consume, be it drink, food, supplies, household electric appliances, building materials, petroleum products and other daily items.

Indirect relationship

Consumer protection associations and other civil organizations often head to IRI and request analyses and tests of an environmental or health safety nature. Cooperation with these organizations is done on a continuous basis by IRI, which meets all the former's requests in return for special fees that take into account their conditions in most cases. If these requests were not complimentary, then they would be symbolic, in a bid by IRI to support and encourage these groups to work for the public good.



EXHIBITIONS

Despite the turbulent and challenging developments that marked 2025, the Industrial Research Institute maintained a robust and meaningful presence across key exhibitions. At each event, the Institute’s pavilion successfully drew a high volume of visitors, industry stakeholders, and experts. IRI representatives were consistently on hand to address inquiries, offer technical insights, and engage with the business community.

LEBANESE INDUSTRY EXPO 2025

October 29 – November 1, 2025

The Industrial Research Institute participated in the inaugural edition of the Lebanese Industry Expo 2025. Organized by the Association of Lebanese Industrialists (ALI) in partnership with the Ministry of Industry, and in cooperation with Promofair and Hospitality Services, the event took place at the Seaside Arena from October 29 to November 1, 2025. Throughout the exhibition, IRI welcomed visitors to its pavilion, showcasing an integrated suite of services designed to drive sustainable economic development and bolster the capabilities of Lebanon’s industrial sector.

This participation offered a premier platform to engage with industrialists and key stakeholders. IRI highlighted its pivotal role in supporting the sector through innovation, quality

assurance, and specialized technical consultancy, reaffirming its commitment to advancing Lebanese industry and enhancing its competitiveness.



COMMUNICATION & MEDIA

Held under the patronage of President Joseph Aoun, the exhibition's opening ceremony drew a distinguished gathering of official, economic, social, and industrial figures, alongside representatives from various productive sectors. Spanning approximately 10,000 square meters and featuring nearly 190

exhibitors, the event served as a dynamic platform to highlight Lebanese industrial capabilities and foster networking and collaboration opportunities, before successfully concluding on November 1 after a rich program of activities and meetings.

LEBANON GRAND ENERGY EVENT 2025

September 24–26, 2025

Participating in the Lebanon Grand Energy Event represented a valuable opportunity to strengthen industry engagement, explore the latest advancements in the energy sector, and enhance professional networking with key stakeholders, suppliers, and technical experts. The event provided insight into emerging technologies and market trends related to renewable energy, power management, energy efficiency, and sustainable infrastructure solutions. Through active participation



in technical discussions, product showcases, and business meetings, IRI reinforced its commitment to innovation, continuous development, and alignment

with evolving energy sector standards and practices in Lebanon and the region.



**DEVELOPMENT
OF
HUMAN
RESOURCES**

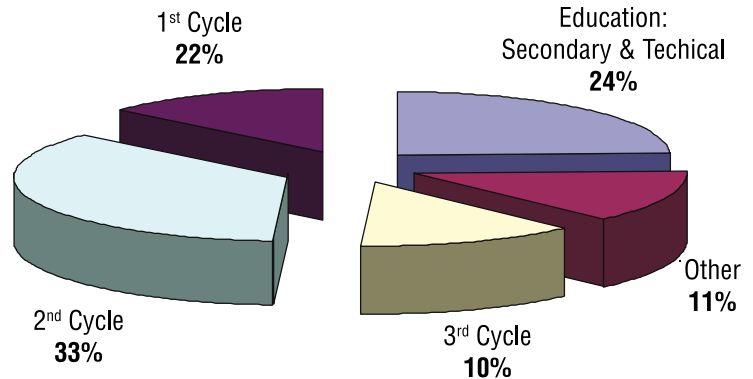
DEVELOPMENT OF HUMAN RESOURCES

The Industrial Research Institute has experienced steady workforce growth over the past 25 years, with its permanent staff expanding from 32 employees to 160 by the end of 2025. This is supplemented by 23 daily-wage and contract workers. The overall workforce features a balanced gender distribution of 66% male and 34% female, with an average age of 39 years.

The academic and professional qualifications of the personnel are distributed as follows:

3 rd Cycle Doctorate, DEA, DESS	2 nd Cycle BE, ME, MS, MA	1 st Cycle BS, BA
<ul style="list-style-type: none"> Economic Development Mechanical Engineering Nutrition & Micro Science Chemistry Business & Accounting Chemistry & Quality Law Agronomic Science 	<ul style="list-style-type: none"> Civil Engineering Engineering Industrial Industrial Technology Electrical Engineering Chemistry Bio Chemistry Business & Economics Architecture Telecommunications Publicity & Graphic Arts Journalism Urbanism & Landscaping Agriculture 	<ul style="list-style-type: none"> Analytical Chemistry Chemistry Bio Chemistry Accounting Business Technologies Civil Engineering Economics Information System

Elementary Levels	No.	%
3 rd Cycle	19	10
2 nd Cycle	60	33
1 st Cycle	40	22
Secondary Edu. & Tech	44	24
Other *	20	11



Average Age	Gender	
39 Years	66% Male	34% Female

(*) other excluded

Average Age	Gender	
39 Years	65% Male	35% Female



**ON-GOING
EMPLOYEE TRAINING**

International Training, Seminars & Workshops

Nb.	Participant	Organizer	Object/Title	Date	Location
1	Edgar Shaaya	NIS - National Institute of Standards	Calibration of high voltage measuring equipment	19-20/02/2025	NIS - Cairo Egypt
2	Joseph Matta	EUROLAB aisbl	EUROLAB General Assembly	28-29/04/2025	Copenhagen - Denmark
3	Elias Maalouf Joseph Helou	AIDSMO	Training courses on the calibration of dimensional measuring devices	11-13/05/2025	KSA
4	Lama Abou Rjeily	Global Food Regulatory Science Society (GFoRSS) team	Workshop on Data Collection and Analysis for Codex proceedings	30-31/07/2025	Muscat, Oman

MISSIONS (Trainers, Experts & Speakers)

Nb.	Participant	Organizer	Object/Title	Date	Location
1	Selim Kfoury	LIBNOR - Order of Engineers Beirut	World Standards Day 2025	23/10/2025	OEA Beirut

MISSIONS (Trainers, Experts & Speakers)

Nb.	Participant	Organizer	Object/Title	Date	Location
1	Joseph Matta	Ministry of Environment	Inception meeting for the review and update of the National Implementation Plan (NIP) under the Stockholm Convention on Persistent Organic Pollutants (POPs) in Lebanon	05/02/2025	Ministry of Environment building - Beirut
2	Bilal Houssein Ricardo Shaaya	FRONIUS	FRONIUS Smart Meters	18/02/2025	Online
3	Robert Haddad Hanady El Khally	Exchange of Perspectives	Quality Culture	27/02/2025	Online
4	Joseph Matta	Ministry of Environment	Technical Session on uPOPs in River Sediments	28/02/2025	Ministry of Environment building - Beirut
5	Joseph Matta	Ministry of Environment	Technical Sessions Assessment and inventories of SCCP/MCCP, PCBs and PCNs in Lebanon	11-13/03/2025	Online

Nb.	Participant	Organizer	Object/Title	Date	Location
6	Robert Haddad Cendrella Tannous	CASCO	DIS ISO/IEC 17020	18/03/2025	Online
7	Cendrella Tannous	AFNOR	AI in internal audit	21/03/2025	Online
8	Mohamad Assaad Hajjar Hadi Al Aawar Gaby Baayno Ricardo Shaaya	IRI - Deye	Lithium Batteries Technical support	28/03/2025	Hazmieh
9	Selim Kfoury	National Anti-Corruption Commission	The Right to Access Information Law: Achievements, Challenges, and Prospects for Advancement	03/04/2025	UNESCO - Beirut
10	Naji Abi Zeid	IRALeb	LIRA Capacity Building Ceremony 2025	14/04/2025	Smallville Hotel - Badaro
11	Ali Yaacoub	Arab Forum for Sustainable Development	Arab Forum for Sustainable Development	14-16/04/2025	Beirut
12	Bilal Houssein	FRONIUS	FRONIUS Inverters	28/04/2025	Online
13	Mahmoud Amhaz	ESCWA	The Importance of Using Technology	29-30/04/2025	Beirut
14	Joseph Matta	National Committee for Wine, Arak and Alcoholic Beverages	First meeting of National Committee for Wine, Arak and Alcoholic Beverages	05/05/2025	Beirut
15	Naji Abi Zeid	Berytech	IZRAA mobile application official launch	15/05/2025	Beirut
16	Selim Kfoury	Ministry of Agriculture and the Economic, Social and Environmental Council (ESEC)	"Agriculture is the Pulse of the Earth" conference	21/05/2025	Beirut
17	Ahmad Hassan Mohamad Assaad Hajjar	ESCWA	Expert Group on Extractive Industries on Critical Energy Transition Minerals for the Arab Region	21/05/2025	Online
18	Joseph Matta	European Union Delegation to Lebanon EEAS	Health Sector Stakeholder Consultation Workshop	30/05/2025	Radisson Blu Hotel - Beirut
19	Ahmad Hassan Mohamad Assaad Hajjar	EU delegation to Lebanon - ALMEE & ICU	Enabling Lebanon's Private Sector Energy Transition	03/06/2025	Radisson Blu Hotel - Beirut
20	Imad Hage Chehadeh	Green Essence & BYD team	BYD Success Stories and new products	05/06/2025	Order of Engineers - Beirut
21	Imad Hage Chehadeh	AB Certification	Medical Sector Auditors' meetings.	27/01/2025 05/06/2025	Online
21	Selim Kfoury Naji Abi Zeid	UNIDO	UNIDO Lebanon Country program	18/06/2025	Movenpick Hotel - Beirut

Nb.	Participant	Organizer	Object/Title	Date	Location
22	Sandra Sarkis Mohamad Assaad Hajjar	The Lebanese Association for Energy Saving and for Environment (ALMEE) and the Regional Center for Renewable Energy and Energy Efficiency (RECREE)	Energy Efficiency and Green Buildings: New Innovative Financing Mechanisms	19/06/2025	Radisson Blu Hotel - Beirut
23	Selim Kfoury	Ministry of Environment	Marine Environment Conference in Lebanon	25/06/2025	Grand Serail - Beirut
24	Bilal Houssein Ricardo Shaaya	FRONIUS Egypt LLC	Reliable Fronius - Victron microgrid bsolutions	01/07/2025	Online
25	Amine Jbeily	Debbané Saikali Family Holding sal	Agrotica 30 years Celebration	03/07/2025	Holy Spirit University - Kaslik
26	Siham Youssef	The Lebanese German University	14th Commencement Exercises for 2025	09/07/2025	Casino du Liban
27	Amine Jbeily	Ministry of Agriculture	Second meeting of National Committee for Wine, Arak and Alcoholic Beverages	14/07/2025	Beirut
28	Joseph Matta	Ministry of Environment	Community-Based Wildfire Risk Management in Lebanon's Vulnerable Landscapes	15/07/2025	Grand Serail - Beirut
29	Sandra Sarkis	University of Balamand - Lebanese Association for Sustainability and Social Responsibility (LASSR)	Conference on Social Responsibility: "Towards Sustainable Cities and a Green Environment".	15/07/2025	University of Balamand - Souk El Gharb Campus
30	Tarek Hakim Mohamad Hajjar Ahmad Habli Mohamad Assaad Hajjar Hachem El Ali Ricardo Shaaya	Arab Industrial & Mining Training & Consultation Institute (AIMTCI)	Artificial intelligence and smart transformation in the industrial and mining sectors	04-07/08/2025 11-14/08/2025	Online
31	Bilal Houssein	FRONIUS Egypt LLC	Fronius EV chargers for commercial and residential	08/09/2025	Online
32	Hanady El Khally	ILAC	LAC/IAF Stakeholders' work session	08/09/2025	Online
33	Amine Jbeily	Ministry of Agriculture	Opening of the Agri Lebanon 2025 Exhibition	10/09/2025	Beirut Hall, Sin El Fil
34	Naji Abi Zeid	UNIDO - 2Circular Project	The Green Industry Finance Forum	16-17/09/2025	Movenpick Hotel - Beirut

Nb.	Participant	Organizer	Object/Title	Date	Location
35	Mohamad Assaad Hajjar	LCEC	Enhancing Renewable Energy Investment Policies and Regulatory Frameworks for Lebanese Experts	22-23/09/2025	Metropolitan Palace Hotel - Sin El Fil
36	Joseph Helou	AIDSMO	Calibration of Dry Block - Thermal Mapping for closed volumes	23/25/09/2025	Online
37	Imad Hage Chehadeh	OMSAR	Consultation Session – Stakeholder Aspirations Phase under the “Reinventing Government 2030” Program.	07/10/2025	Ministry of State for Administrative Reform (OMSAR)
38	Ramzi Bhamdouni	UNDP - Berytech	Lebanon Clusters on Circularity	15/10/2025	Le Royal Hotel - Dbayeh
39	Mohamad Assaad Hajjar	Center of Science & Technology (CST)	Scientific Seminar on the Energy Sector	22/10/2025	Beirut - Bir Hassan
40	Wadad Daher Carine Slaiby	LIBNOR - Order of Engineers Beirut	World Standards Day 2025	23/10/2025	OEA Beirut
41	Naji Abi Zeid	IRALeb	IRALEB Innovation Ceremony 2025	24/10/2025	Le Royal Hotel - Dbayeh
42	Amine Jbeily Petra Youssef	LabCore sarl - Crown Bake - KPM Analytics	Decoding Dough: How formulation and Machinery Drive Excellence	30/10/2025	Habtoor Grand Hotel - Beirut
43	Mahmoud Amhaz	ESCWA	The Importance of Blockchain Technology in trade facilitation and the legislative requirements for its adoption in Lebanon	30/10/2025	United Nations Building - Beirut
44	Imad Hage Chehadeh	LCEC	STORM Launching Event	06/11/2025	Gefinor Rotana Hotel - Beirut
45	Bilal Houssein	S. & A.S. Controllers	Lift Controller Seminar 2025	13/11/2025	Smallville Hotel - Badaro
46	Mohamad Assaad Hajjar	LCEC	E-Motor Show for Electric and Hybrid Vehicles Middle East	15/11/2025	Forum de Beyrouth
47	Antoine Fayçal	AIDSMO	Workshop on the Arab Technical Regulation for Gas Appliances and Their Accessories.	27/11/2025	Online
48	Ziad Moukarzel	Basil Fuleihan Institute of Finance.	Artificial Intelligence and Development Challenges.	24-26/11/2025	Online
49	Siham Youssef Thomas Sabbagh	AIMTCI - AIDSMO	The Arab Program for Smart Settlement of Industrial and Mining Disputes	25-27/11/2025	Online

Nb.	Participant	Organizer	Object/Title	Date	Location
50	Robert Haddad	Nicolas Desbrière	Quality Management and Artificial Intelligence: How Far Can AI Really Go?	27/11/2025	Online
51	Antoine Fayçal	AIDSMO	Workshop on the Arab Technical Regulation for Personal Protective Equipment	24/11/2025	Online
52	Imad Hage Chehadeh	LCEC	Meeting with the IRENA committee	26/11/2025	IRI
53	Naji Abi Zeid Siham Youssef Carine Slaiby	NDU	MOU signing ceremony	3/12/2025	NDU - Zouk Mosbeh
54	Antoine Fayçal	AIDSMO	Workshop on the Arab General Regulation for Conformity Forms	9/12/2025	Online
55	Edgar Shaaya	AIDSMO	Sixth Meeting of the Technical Subcommittee on Energy and Electricity	22/12/2025	Online
56	Edgar Shaaya	AIDSMO	Sixth Meeting of the Technical Subcommittee on Electricity and Magnetism	22/12/2025	Online
57	Joseph El Helou	AIDSMO	Low-Pressure and Vacuum Calibration	29/12/2025	Online

LIBNOR

Nb.	Participant	TC Number	Standard Title	Date
1	Ahmad Habli	TC 199 Safety of Machinery	ISO 13850: 2015 ISO 13851: 2019	29/01/2025
2	Ahmad Habli	TC 199 Safety of Machinery	ISO 13854 - ISO 13857	13/03/2025
3	Dany Frenn	TC 178 Lifts escalators and moving walks	NL EN 81-21: 2020	08/04/2025
4	Elias Bechara	TC 207 Environmental management	NL ISO 14064-1: 2011 - NL ISO 14064-2: 2011 -	24/09/2024
5	Alaa Ahmad Dany Frenn	TC 178 Lifts escalators and moving walks	NL EN 81-28: 2022 - NL EN 81-31: 2024 + Am: 2018 - NL EN 81-40: 2020 - NL EN 81-41: 2020	26/05/2025 10/06/2025
6	Ahmad Hassan	TC 3018 Heating, Ventilation and Air Conditioning Committee.	ISO 16890-1: 2016 - ISO 16890-2: 2022 - ISO 16890-3: 2024 - ISO 16890-4: 2022	02/07/2025
7	Ahmad Habli	NL TC 199 Safety of Machinery	ISO 19353: 2019 - ISO 14122-1: 2016 - ISO 14122-2-3: 2016 - ISO 138561-1-2: 2013	25/06/2025
8	Ahmad Habli	TC 22 Vehicle Committee	ISO/TR 8713: 2019 - ISO 6469-2-3: 2022 - ISO 17409: 2020	09/07/2025

Nb.	Participant	TC Number	Standard Title	Date
9	Ahmad Habli	TC 199 Safety of Machinery	EN 415-1: 2014 - EN 415-2: 2025 - EN 415-3: 2021 - EN 415-5: 2006 + A1: 2009	20/08/2025
10	Ahmad Habli Mohamad Assaad Hajjar	TC 22 Road Vehicles	ISO 13063-1 - 2 - 3: 2022	27/08/2025
11	Mark Tahchy	NL TC 98 Bases for Design of structures	Structural Assessment of Existing Buildings.	11/07/2024 2025/08/19
12	Ahmad Hassan	TC 3018 Heating, Ventilation and Air Conditioning Committee	ISO 24963-1: 2024 - ISO 24963-2-3-4: 2011 - ISO 24963-5: 2022 - ISO 29463-4/5 - ISO 29462	24/09/2025 2025/11/26
13	Elias Bechara	TC 146 Air Quality	EN 17255-2: 2020 , EN 17255-3: 2021, EN 14212: 2024, ISO 4219: 1979, ISO 4221: 1980, ISO 6767: 1990	20/11/2025
14	Mohamad Assaad Hajjar	TC 180 Solar Energy Committee.	NLIEC 60364-4-41: 2003, NLHD: 60364-7-719, IEC 62548-1:2023; IEC 60364-6: 2016	06/11/2025 2025/12/10

IRI Seminars / Conferences

Nb.	Participant	Organizer	Object/Title	Date	Location
1	Youssef Andraos Layal Yatim Karim El Hajjar	IRI - CFM Directorate	Custom Files Protocols	11-13/02/2025	IRI
2	Thomas Homsy	IRI - Electrical Lab	Solar PV training course for installation	12-13/02/2025	IRI
3	Chikri Massaad	IRI - Electrical Lab	Tripping Characteristics	25/02/2025	IRI
4	Ahmad Hassan Thomas Homsy	IRI - Electrical Lab	Performing the needle flame test	14/03/2025	IRI
5	Chikri Massaad Osmat Serhan	IRI - LCEC	Certified Training for Solar PV Technicians	09-10/04/2025	IRI
6	Thomas Homsy Chikri Massaad	IRI - Electrical Lab	Perform Lead acid batteries test	11/04/2025	IRI
7	Chikri Massaad	IRI - Electrical Lab	Led Lamp Testing	13/05/2025	IRI
8	Chikri Massaad	IRI - Electrical Lab	Protection degree against solid foreign objects and water penetration	19/06/2025	IRI
9	Thomas Homsy Elie Dawaliby	IRI - Electrical Lab	Perform Vertical Vibration test for audio video appliances	28/07/2025	IRI

Nb.	Participant	Organizer	Object/Title	Date	Location
10	Chikri Massaad	IRI - Electrical Lab	Cable Testing	18/08/2025	IRI
11	Thomas Homs Chikri Massaad Mehyi El Dine Habli	IRI - Electrical Lab	Spring hummer Test	18/09/2025	IRI
12	Tony Hayek	IRI - LCEC	Certified Training for Solar PV Technicians	08-09/10/2025	IRI
13	Thomas Homs Chikri Massaad	IRI - Electrical Lab	Performing the test of electronic ballast	25/11/2025	IRI
14	Mehyi El Dine Habli	IRI - Electrical Lab	Perform the Resistance to external forces test	10/12/2025	IRI
15	Antoine Fayçal Jihad Hajj Chehade Houda Wehbe Zainab Saleh Malak Al Dika	IRI - CFM Directorate	New Sections in the File Study	18/12/2025	IRI



IRI

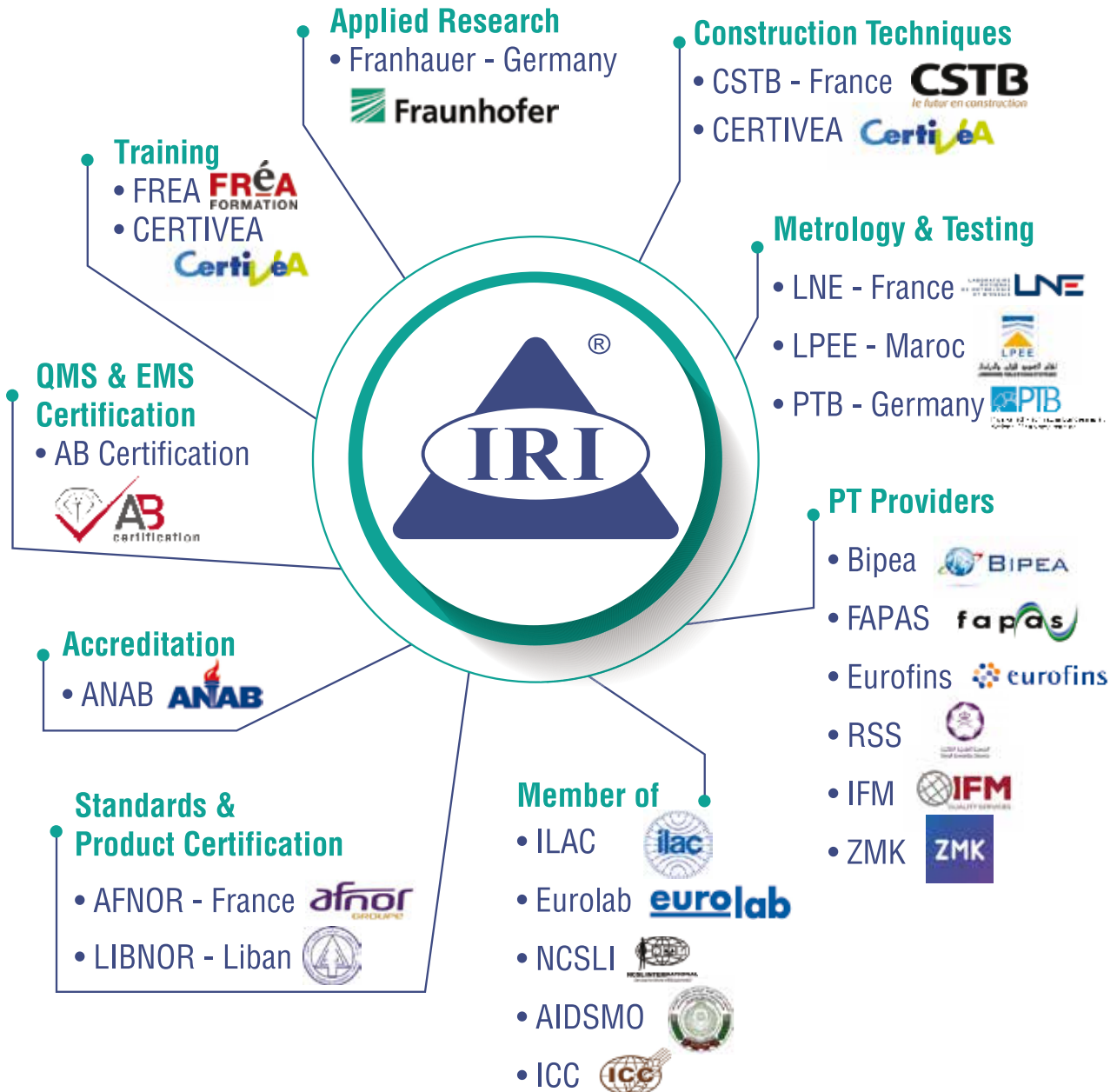


**INTERNATIONAL
AND LOCAL
PARTNERSHIPS**

LOCAL PARTNERS



INTERNATIONAL PARTNERS





**DECREES, LAWS
AND DECISIONS**

DECREES

Decree		Official Gazette		Subject	Authority
No.	Date	Issue	Date		
454	2025/06/12	27	2025/06/19	Regulating the Metrological Control Requirements for the Packaging of Prepackaged Products	Presidency of the Republic
1104	2025/09/05	39	2025/09/11	Relating to the National Medicines Agency	Ministry of Public Health (MoPH)
1/481	2025/09/03	40	2025/09/18	Establishing conditions for the importation of powdered milk, powdered milk products, composite dried products made from milk, vegetable oil, UHT milk	Ministry of Agriculture
1119	2025/09/08	40	2025/09/18	Establishing a national advisory committee for organic production	Ministry of Agriculture
1287	2025/09/19	41	2025/09/25	Appointing the chairperson and members of the board of directors of the Regulatory Authority for the Cultivation of Cannabis for Medical and Industrial use	Presidency of the Republic
2036	2025/12/08	53	2025/12/18	Granting legal mandatory status to a national standard related to the reuse of wastewater for irrigation	Ministry of Industry
2037	2025/12/08	53	2025/12/18	Granting legal mandatory status to a national standard related to residual fuel oil	Ministry of Industry
2038	2025/12/08	53	2025/12/18	Granting legal mandatory status to a national standard related to playground equipment and children's furniture	Ministry of Industry

DECISIONS

Decision		Official Gazette		Subject	Body
No.	Date	Issue	Date		
23	24/01/2025			Extending validity of Decision No. 1/1/A T/M dated 21/01/2019 concerning regularization of the status of liquid and liquefied petroleum fuel storage tanks and the mandatory implementation of public safety requirements through the maintenance of liquid and liquefied petroleum fuel storage tanks	Ministry of Energy and Water
12/1	06/02/2025	9	27/02/2025	Repealing Decision No. 53/1 dated 09/05/2019 and Schedule No. 1 annexed thereto (Registration of Foreign Manufacturers Qualified to Export Their Products to the Lebanese Republic), including all their provisions	Ministry of Industry
38/1	23/04/2025	19	01/05/2025	Repealing Decision No. 74/1 dated 07/12/2021 and Decision No. 152/1 dated 10/12/2015 concerning the submission of imported aluminium profiles to local expert testing	Ministry of Industry
54/1	13/05/2025			Regulating the mechanism for approving the importation of aluminium profiles and approving pro forma invoices (as amended by Decision No. 56/1-2025)	Ministry of Industry
56/1	21/05/2025	25	05/06/2025	Amending Decision No. 54/1 dated 13/05/2025 regulating the mechanism for approving the importation of aluminium profiles and approving pro forma invoices	Ministry of Industry
323/1	24/06/2025	29	03/07/2025	Requirements for honey marketing	Ministry of Agriculture
114/1	10/11/2025	49	20/11/2025	Amending Decision No. 16/1 dated 02/05/2013 concerning the prohibition of the use of titanium dioxide (E171) in artificial beverage powders and its amendments	Ministry of Industry

Decision		Official Gazette		Subject	Body
No.	Date	Issue	Date		
131/1	27/11/2025	52	11/12/2025	Requiring industrial establishments operating in sectors subject to periodic laboratory testing to provide the Industry Ministry with copies of the results of the tests performed (repealed by Decision No. 134/1-2025)	Ministry of Industry
134/1	17/12/2025			Repealing Decision No. 131/1 dated 27/11/2025 concerning the requirement for industrial establishments operating in sectors subject to periodic laboratory testing to provide the Industry Ministry with copies of the results of the tests performed	Ministry of Industry

CIRCULARS

Number	Date of signature	Subject	Authority
35/2025	17/09/2025	To all public administrations, public institutions and municipalities regarding the acceptance of donations offered by various entities for the benefit of ministries and administrations and their exemption from all customs duties and taxes	Presidency of the Council of Ministers

MEMORANDA

Decision		Official Gazette		Subject	Body
No.	Date	Issue	Date		
2	27/01/2025			Mandatory implementation of public safety requirements through the maintenance of liquid and liquefied petroleum fuel storage tanks	Ministry of Energy and Water
3	28/01/2025			Conditions to be met for obtaining the approval of the Ministry of Energy and Water for the manufacture and registration of a tanker truck for the transport of liquid and liquefied petroleum fuels	Ministry of Energy and Water



**COMMUNICATION
& MEDIA**

Minister of Industry Joe Issa El-Khoury visits Industrial Research Institute
16.04.2025



وزير الصناعة: تطوير البنى التحتية ضرورة للجودة

تفقد وزير الصناعة جو عيسى الخوري أمس معهد البحوث الصناعية حيث كان المدير العام للمعهد بتسامق الفرن في استقباله. في حضور مديري الإدارات والمراكز التخصصية ورؤساء الأقسام والمديرية العامة لوزارة الصناعة بالإبانة المهندسة شانتال عقل وأكد الفرن على مثانة العلاقة الاستراتيجية بين الوزارة والمعهد واستمراريتها، وذلك بهدف مواصلة المساهمة في تعزيز الاقتصاد الوطني وتحديث القطاع الصناعي، وقدم شرحاً عن تاريخ المعهد ومراسل تطوره.

استهلّت الزيارة بعقد اجتماع موعود في قاعة المؤتمرات، لتعريف الوزير على مديري الإدارات والمراكز ورؤساء الأقسام ومهامهم، والاطلاع على هيكلية المعهد. ثم عرض فيلم وثائقي تضمن أبرز المحطات والإنجازات العلمية والبحثية التي شهدها المعهد.

بعد ذلك، قدم كل من المدير العام المساعد سليم كفوري، ومدير المشتات المبركة والمرافقة والمطابقة المهندسين أنطوان فيصل، ومدير المركز الأوروبي اللبناني للتجديد الصناعي (ELCIM) ومركز الابتكار والتكنولوجيا (CIT) ناخي أبي زيد شروحات عن تطبيق BRIDGE System، وعن أهداف ELCIM و CIT ومخالفات عملهما.

وأشار الوزير عيسى الخوري إلى أهمية تطوير البنى التحتية للجودة في لبنان وتطبيق المعايير الدولية، باعتبارها ركيزة أساسية لتحقيق التنمية المستدامة، وتعزيز الأمن الاقتصادي والاجتماعي، وزيادة القدرة التنافسية للصناعة الوطنية، كما أبدى استعداده التام لدعم المعهد وتقديم المساعدة اللازمة، سائلاً عن التحديات والعمليات، بهدف العمل على معالجتها.

واختتمت الزيارة بجولة ميدانية في مختلف أقسام المعهد، شملت عدداً من المختبرات، وفهم كل من مدير التطوير والتكنولوجيا الدكتور عماد الحاج شحاده ومدير الأبحاث التطبيقية والاختبارات الدكتور جوزيف مني، شروحات حول التجهيزات والتقنيات الحديثة المعتمدة، وطبيعة عملها ودورها في دعم الصناعة الوطنية وحماية المستهلك اللبناني.



16 Apr 2025

عيسى الخوري جال في معهد البحوث الصناعية: لضرورة تطوير البنى التحتية للجودة

تفقد وزير الصناعة جو عيسى الخوري معهد البحوث الصناعية، حيث كان المدير العام للمعهد بتسامق الفرن في استقباله. بحضور مديري الإدارات والمراكز التخصصية ورؤساء الأقسام وحضر المديرية العامة لوزارة الصناعة بالإبانة شانتال عقل.

وبعد الترحيب بالخوري، تمتّ الحرن التوضيح له من معانه الزوارية، وأكد "مثانة العلاقة الاستراتيجية بين الوزارة والمعهد واستمراريتها، وذلك بهدف مواصلة المساهمة في تعزيز الاقتصاد الوطني وتحديث القطاع الصناعي، وقدم شرحاً عن تاريخ المعهد ومراسل تطوره".

استهلّت الزيارة بعقد اجتماع موعود في قاعة المؤتمرات، لتعريف الوزير على مديري الإدارات والمراكز ورؤساء الأقسام ومهامهم، والاطلاع على هيكلية المعهد.

ثمّ عرض فيلم وثائقي تضمن أبرز المحطات والإنجازات العلمية والبحثية التي شهدها المعهد.

بعد ذلك، قدم كل من المدير العام المساعد سليم كفوري، ومدير المشتات المبركة والمرافقة والمطابقة أنطوان فيصل، ومدير المركز الأوروبي اللبناني للتجديد الصناعي (ELCIM) ومركز الابتكار والتكنولوجيا (CIT) ناخي أبي زيد شروحات عن تطبيق BRIDGE System، وعن أهداف ELCIM و CIT ومخالفات عملهما.

وردّ عيسى الخوري بكلمةً لعقرار بمستوى التقدّم في المعهد، مشيراً إلى "أهمية تطوير البنى التحتية للجودة في لبنان وتطبيق المعايير الدولية، باعتبارها ركيزة أساسية لتحقيق التنمية المستدامة، وتعزيز الأمن الاقتصادي والاجتماعي، وزيادة القدرة التنافسية للصناعة الوطنية"، كما أبدى "استعداده التام لدعم المعهد وتقديم المساعدة اللازمة، سائلاً عن التحديات والعمليات، بهدف العمل على معالجتها".

اختتمت الزيارة بجولة ميدانية في مختلف أقسام المعهد، شملت عدداً من المختبرات، وفهم كل من مدير التطوير والتكنولوجيا الدكتور عماد الحاج شحاده ومدير الأبحاث التطبيقية والاختبارات جوزيف مني، شروحات حول التجهيزات والتقنيات الحديثة المعتمدة، وطبيعة عملها ودورها في دعم الصناعة الوطنية وحماية المستهلك اللبناني.



زيارة وزير الصناعة الى معهد البحوث الصناعية



استقبل المدير العام لمعهد البحوث الصناعية الدكتور سامح لخم، وزير الصناعة المهندس د. عيسى الخوري، خلال زيارته الرسمية لقرية أريحا مركز المعهد، لمتابعة سير عمل الصناعة باللائحة الهندسية كمشاكل طحل وبحسبون عدد من مبرهي الارزات والتركيز التخصصية لريضاء الاقسام في المعهد.

رأس الدكتور بطرس بطرس الخوري، مديراً له الخوري في رة معاهم الزائرة، وذلك على امضاء التمهيد الكامل لوضع مكناته تصريف وزارة الصناعة وتسامعة الفاعلة في تعزيز الاقتصاد الوطني وتحديث القطاع الصناعي.

استقبلت الزيارة بعدد اصحاب في قاعة الاجتماعات البحث خلاله الرسمية لعالي الوزير التكرم على مبرهي الارزات والتركيز لريضاء الاقسام والاطلاع على هياكله المعهد واطراف عمله والاشتماع اشرح مشغل من المعهد.

كما قدم الدكتور لخم عرضاً شاملاً عن تاريخ المعهد ومراميل تطويره، تعلقه عرضاً مفصلاً على أبرز المخططات والإجراءات التي شهدها المعهد، عبر مبرهي العلية والرجعة.

بعد ذلك، قدم المدير العام المساعد الأستاذ سليم الخوري، شحة لريضية مبرهنة من المعهد، أعطاها عرضاً فمياً مبرهي الفئات العمركية، ترفقة والمعلقة المهندس بطرس لخم، حول تطبيق BRIDGE System، ثم قدم مدير لشركر الأوربي الشاسي لتصميم الصناعي (ELCIM) ومركز الابتكار والتكنولوجيا (ICT) الأستاذة شامي كي، رةم، ترفقة من كل من مبرهي التركيز التخصصية مسانعة وشاهاة اهلها ومجالات عملها.



عيسى الخوري يجول في معهد البحوث الصناعية؛ لضرورة تطوير البنية التحتية للجودة

المركزية - بغداد وزير الصناعة و عيسى الخوري معهد البحوث الصناعية حيث كان المدير العام للمعهد الدكتور بطرس لخم في استقباله، بحضور مبرهي الارزات والتركيز التخصصية لريضاء الاقسام ومبرهي العلية العامة لريضاء الصناعة باللائحة الهندسية شاملياً على:

ويعد التمهيد بالوزارة، مدياً الخورن التوفيق له من مبرهات الوزارة، وألذ على عائلته المعلقة الفسارعية من الوزارة والتعمية واستمرارية لها، وذلك بهدف هوية الشراكة في تعزيز الاقتصاد الوطني وتحديث القطاع الصناعي، وتقدم شرحاً عن تاريخ المعهد ومجالات تطويره.

استقبلت الزيارة، بعدد اصحاب من مبرهي الارزات والتركيز التخصصية لريضاء الاقسام ومبرهي العلية العامة لريضاء الصناعة باللائحة الهندسية شاملياً على:

ثم عرض مدير عام واتهمي، نخسش أبرز المخططات والإجراءات العلية والذاتة التي شهدها المعهد.

بعد ذلك، قدم لخم من المدير العام المساعد سليم الخوري، ومبرهي العليات العمركية والمعلقة والمعلقة المهندس بطرس لخم، ومبرهي الارزات والتركيز التخصصية لريضاء الاقسام (ELCIM) ومركز الابتكار والتكنولوجيا (ICT) شامي كي، رةم، شوهيات من تطبيق BRIDGE System، وعن أهداف ELCIM و ICT ومجالات عملها.

وبد الخورن عيسى الخوري، معلقة اطلاق مبرهاتو، التكرم في المعهد، مشيراً إلى أهمية تطوير البنية التحتية للجودة في لبنان وتطبيق المعايير الدولية، باعتباره رةم أساسية للتطوير النموذجي للمصنعة، وتعزيز الامن الاقتصادي والقطاعاتي، وإيادة القدرة التنافسية للصناعة الوطنية. كما أرى استعدادات الام لدعم المعهد والتقديم للصناعة الترفقة، سائللاً من التبادلات والمعلومات، بهدف العمل على مجالها.

أكدت الزيارة بقوة مبرهاتة في مختلف الاقسام المعهد، شملت عدداً من المخططات، وقدم لخم من مبرهي الخورن والتكنولوجيا العلية معاهم، اطلع مبرهي الارزات التخصصية والعشرات المبرهت على شوهيات حول التهورات والتفقيات الحديثة المتعمدة، وهوية عملها ومبرهاتة في دعم الصناعة الوطنية وصناعة المستهلك اللبناني.

Minister of Industry Joe Issa El-Khoury Chairs IRI Board of Directors Meeting 08.05.2025



عيسى الخوري ترأس مجلس إدارة معهد البحوث الصناعية

ترأس وزير الصناعة جو عيسى الخوري اجتماع مجلس إدارة معهد البحوث الصناعية بحضور المدير العام للمعهد الدكتور بطرس الخوري، والأعضاء ورئيس جمعية الصناعيين اللبنانيين سليم الزعبي، ورئيس اتحاد غرف التجارة والصناعة والزراعة الوزير السابق محمد طلع، ممثل لرابطة للمهندسين المهندس عدنان حسن عريان، رئيس بونداكيان، الدكتور جان شعون، بالإضافة إلى الاستشار القانوني للمعهد أندريه نادر، والمدير العام المساعد والمدير الإداري والقيادي في المعهد الدكتور. تخلل الاجتماع عرض شامل لأوضاع المعهد الراهنه والأضرار التي لحقت به نتيجة الحرب الأخيرة، تلاه نقاش حول الوضع الراهن والتحديات التي تواجهه على هذا الصعيد، كما تناول المجتمعون قضايا متعلقة ببطون الموظفين والتطورات الإدارية، وبحوث في سن تعزيز أداء المعهد وتوسيع نطاق خدماته. كذلك تم التطرق إلى مناقشة استراتيجية المعهد لتسنوات المقبلة.

وتكتسب هذه السنة طابعاً استثنائياً، إذ تصادف الذكرى العشرين لتأسيس المعهد الوطني.



عيسى الخوري ترأس مجلس إدارة معهد البحوث الصناعية



وتكتسب هذه السنة طابعاً استثنائياً، إذ تصادف الذكرى العشرين لتأسيس المعهد الإيعتماد الدولي، وهو إنجاز نوعي وسبقاً جعله أول معهد أبحاث في الدول العربية يحصل على اعتماد دولي، الأمر الذي عزز مكانته كمرجع وطني وإقليمي علمي وصناعي موثوق به.

ترأس وزير الصناعة جو عيسى الخوري اجتماع مجلس إدارة معهد البحوث الصناعية في حضور المدير العام للمعهد الدكتور بطرس الخوري، والأعضاء؛ رئيس جمعية الصناعيين اللبنانيين سليم الزعبي، ورئيس اتحاد غرف التجارة والصناعة والزراعة الوزير السابق محمد طلع، ممثل نقابة المهندسين المهندس عدنان حسن عريان، رئيس بونداكيان، الدكتور جان شعون، بالإضافة إلى الاستشار القانوني للمعهد أندريه نادر، والمدير العام المساعد والمدير الإداري والقيادي في المعهد سليم ككوري.

تخلل الاجتماع عرض شامل لأوضاع المعهد الراهنه والأضرار التي لحقت به نتيجة الحرب الأخيرة، تلاه نقاش حول الوضع الراهن والتحديات التي تواجهه على هذا الصعيد، كما تناول المجتمعون قضايا متعلقة ببطون الموظفين والتطورات الإدارية، وبحوث في سبيل تعزيز أداء المعهد وتوسيع نطاق خدماته. كذلك تم التطرق إلى مناقشة استراتيجية المعهد لتسنوات المقبلة.

المركزية

وزير الصناعة يتراس مجلس إدارة معهد البحوث الصناعية



به نتيجة الحرب الأخيرة، تلاه نقاش حول الوضع المالي والتحديات التي تواجهه على هذا الصعيد. كما تناول المجتمعون قضايا متعلقة بشؤون الموظف والتطورات الإدارية، وبحثوا في سبل تعزيز أداء المعهد وتوسيع نطاق خدمته، كذلك تم التطرق إلى مناقشة استراتيجية المعهد للسنوات القادمة.

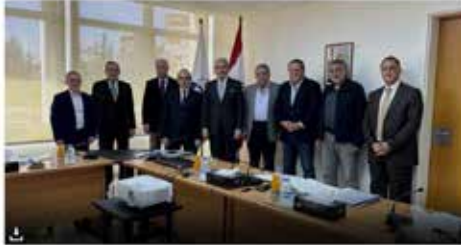
وتكتسب هذه السنة طابعاً استثنائياً، إذ تصادف الذكرى العشرين لتبني الميثاق الوطني، وهو إنجاز نوعي وسبق جعله أول معهد أبحاث في المغرب العربي يحصل على اعتماد دولي، الأمر الذي عزز مكانته كمرجع وطني وإقليمي علمي وصناعي موثوق به ويعتمد عليه.

ووزير الصناعة جو عيسى الخوري، اجتماع مجلس إدارة معهد البحوث الصناعية بحضور المدير العام للمعهد الدكتور بشام الفرن، والأعضاء السادة لجمعية الصناعيين الأستاذ سليم الزعني، رئيس اتحاد غرف التجارة والصناعة الوزير السابق محمد شقير، ممثل نقابة المهندسين المهندس حسن عليان، الأستاذ سركيس بوداكيان، الدكتور جان شمعون، بالإضافة إلى المستشار القانوني للمعهد المحامي أندريه نادر، والمدير العام المساعد والمدير العام للمعهد الأستاذ سليم كفور.

والاجتماع عرض شامل لأوضاع المعهد الراهنة والأضرار التي لحقت

المراقب المالي

عيسى الخوري ترأس مجلس إدارة معهد البحوث الصناعية الخميس 08 أفريل 2025



وطنية -ترأس وزير الصناعة جو عيسى الخوري اجتماع مجلس إدارة معهد البحوث الصناعية بحضور المدير العام للمعهد الدكتور بشام الفرن، والأعضاء السادة لجمعية الصناعيين اللبنانيين سليم الزعني، رئيس اتحاد غرف التجارة والصناعة والزراعة الوزير السابق محمد شقير، ممثل نقابة المهندسين المهندس عدنان حسن عليان، سركيس بوداكيان، الدكتور جان شمعون، بالإضافة إلى المستشار القانوني للمعهد المحامي أندريه نادر، والمدير العام المساعد والمدير الإداري والمالي في المعهد سليم كفور.

تخلل الاجتماع عرض شامل لأوضاع المعهد الراهنة والأضرار التي لحقت به نتيجة الحرب الأخيرة، تلاه نقاش حول الوضع المالي والتحديات التي تواجهه على هذا الصعيد. كما تناول المجتمعون قضايا متعلقة بشؤون الموظفين والتطورات الإدارية، وبحثوا في سبل تعزيز أداء المعهد وتوسيع نطاق خدماته، كذلك تم التطرق إلى مناقشة استراتيجية المعهد للسنوات المقبلة.

وتكتسب هذه السنة طابعاً استثنائياً، إذ تصادف الذكرى العشرين لتبني الميثاق الوطني، وهو إنجاز نوعي وسبق جعله أول معهد أبحاث في الدول العربية يحصل على اعتماد دولي، الأمر الذي عزز مكانته كمرجع وطني وإقليمي علمي وصناعي موثوق به ويعتمد عليه.

Annahar Interview: Inside IRI – Scope of Work, Funding, and Impact 29.04.2025



Tuesday 29 April 2025 - 92 Years - N28533
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معهد البحوث الصناعية

ما طبيعة عمله؟ ومن يموله؟



أنشئ معهد البحوث الصناعية سنة 1953 بموجب اتفاقية دولية، وله استقلالية مالية وإدارية

دولي لهذه الفحوص منذ 2004، وهذا ما ساعد الصناعيين اللبنانيين على تصدير بضائعهم إلى الخارج، خصوصا إلى الدول الأوروبية. منذ نشأة هذا المعهد والدولة يد فيه، وسبق أن خصصت له مساهمات في موازنتها العامة وجعلت سعر بعض خدماته مقبولة، ولكن منذ أزمة الـ2019 بات المعهد يمول نفسه بنفسه من دون أي مساعدة من الدولة.

وفي هذا السياق، يوضح المدير الإداري والمالي سليم كفوري أن المعهد "أنشئ سنة 1953 بموجب اتفاقية دولية، وله استقلالية مالية وإدارية، وهو مرتبط بوزارة الصناعة"، لافتا إلى أن "لا سلطة وصاية للوزارة عليه كما يحصل مع المؤسسات العامة، والترابط بين المعهد والوزارة يتجزم بترؤس وزير الصناعة مجلس إدارة المعهد".

وعن أقسام المعهد ومختبراته وطبيعة العمل فيها، يقول: "في المعهد نحو 16 مختبرا، ويقدم خدمات عدة أبرزها شهادات المطابقة للبيضائع المستوردة من الخارج، الخاضعة لأحكام مراسيم المواصفات الإلزامية، إضافة إلى ذلك يمكن أي صناعي أو مزارع أو حتى مواطن فحص أي سلعة أو منتج لديه في مختبراتنا المرتبطة بقطاعات صناعية مختلفة، وهذا يعني أن المعهد قادر على إجراء الفحوص لأي سلعة صناعية أو غذائية، وقد حصلنا على اعتماد

جاد فقيه

معهد البحوث الصناعية، أحد المعاهد المعترف بها دوليا في لبنان، يضم عددا من المختبرات في مقره في مجمع الحدت الجامعي ويتبع لوزارة الصناعة، وهدفه دعم التنمية الصناعية والعلمية من خلال تقديمه خدمات عدة.

قد يستغرب البعض وجود معهد مماثل في لبنان، خصوصا أن اقتصاد الدولة قائم على قطاع الخدمات والسياحة، حيث لا وجود لمصانع كبيرة، لذلك لا بد من التساؤل عن طبيعة عمل هذا المعهد ومصادر تمويله. لجوء الصناعيين والمزارعين وبعض أصحاب المطاعم إليه غالبا ما يكون للتأكد من جودة منتجاتهم ومحصولهم وصناعاتهم، إذ إنه يتفوق بصدقيته على عشرات المعاهد الخاصة غير المراقبة من الدولة.



IRI Premises, Lebanese University Campus, Hadat, Baabda, Lebanon
P.O.Box 1107 2806 Beirut
Tel/Fax +961 5 467831-7 Mobile +961 3 286340
www.iri.org.lb

