



معهد البحوث الصناعية

INDUSTRIAL RESEARCH INSTITUTE
INSTITUT DE RECHERCHE INDUSTRIELLE

**ANNUAL
REPORT**

2020

	Page
<i>Forwad of the Director General</i>	2
<i>IRI Its Purpose & Function</i>	4
1- <i>General Public Activities</i>	5
2- <i>Laboratory services, observation and activities</i>	15
3- <i>International accreditation</i>	25
4- <i>Internal & External activities</i>	31
5- <i>Applied Research & Studies</i>	37
6- <i>Scientific Publications</i>	39
7- <i>Activities of the European-Lebanese Center for Industrial Modernisation - ELCIM And the Activities of the Center for Innovation & Technology - CIT</i>	44
8- <i>Activities of the Lebanese Cleaner Production Center - LCPC</i>	49
9- <i>IRI cooperation with the public sector</i>	52
10- <i>IRI relations with the private sector</i>	57
11- <i>Development of human resources</i>	60
12- <i>On-going employee training</i>	62
13- <i>International and local partnerships</i>	66
14- <i>Decrees, laws and decisions</i>	69
15- <i>Communication & media</i>	73

WITH STRONG WILL AND DEEP INSIGHT, WE AVOIDED A COMPLETE SHUTDOWN OF THE INSTITUTE

*Forward of the Director General of the
Industrial Research Institute,
Dr. Bassam Frenn*



2020 was a disastrous year for both the world and Lebanon. With trepidation, the Lebanese were left contemplating a doomed fate as both their immediate and long-term future prospects seemed increasingly uncertain. The economic outlook was bleak with the complete collapse of the value of the national currency, the public health situation was catastrophic with a frightening spread of the Covid-19 epidemic, and tragic death tolls, not to mention the cataclysmic social and educational situation, and the near collapse of the system of government in the country leading to fears of a meltdown in the security situation that had been, up to that point, well maintained.

The Industrial Research Institute was no stranger to the dramatic context of the last year. Yet, despite the exceptional circumstances, the management and staff of the Institute were able to maintain their usual energy, vitality, bold enthusiasm, patriotic feeling, and sense of responsibility, thus managing to fully perform their duties and offer their public service to citizens.

This is the spirit of the Industrial Research Institute, forged over the past 25 years, with a purposeful and sober determination, trudging along an arduous path, while maintaining a promising vision for the future.

A quarter of a century of continuous and sustainable development, following a consistent yet flexible strategy that responds to challenges and overcomes difficulties and obstacles through planning and participatory economic dynamism.

As mentioned above, the great difficulties did not limit the capabilities of the Institute, nor did they diminish its offerings, be it in the form of consulting, research, and laboratory services. It plowed on in its role as before, avoiding the decline recorded by most institutions, and maintaining the same level of services and number of files that it treated in the past, in a precedent known only to a select number of institutions that were able to pursue their work.

With a strong will, steadfast determination and superior know-how, the management of the

Industrial Research Institute was able to prevent it from being completely shut down in the face of the frightening stagnation of the economic cycle. The staff continued to work daily and sometimes on weekends. The labs never stopped. And all directorates maintained full readiness.

And if, because of the Corona pandemic, participation in external activities was forced to be through virtual communication and video conferencing technologies as required by the preventive measures implemented globally, the management of the Industrial Research Institute and its professional staff physically participated in many activities at the level of the Governmental Serail, and the ministries of Industry, the Environment, Economy and Trade, National Defense and Public Health, as well as the Lebanese Army, many public administrations and institutions, the Lebanese University, the private industrial sector and the business world in Lebanon.

The Institute opened its lecture hall for the Ministries of Industry and Information to hold seminars related to media-industrial cooperation in terms of promoting the productive economic

sector.

The Euro-Lebanese Center for Industrial Modernization (ELCIM) also did not renege in its operational obligations with industrialists and the industrial sector, especially by means of electronic connectivity, maintaining the bridge linking academia and entrepreneurship, and supporting four teams that underwent training programs.

The Center for Innovation also continued to evaluate five projects, while the Lebanese Cleaner Production Center continued its various activities as usual.

True the decline in the foreign trade movement was reflected in the statistics of customs files and laboratories. However, in general, the level of activity at the Industrial Research Institute remained higher compared to all economic sectors...

Unlike previous years, and due to well-known conditions, it was decided this year to present the annual report for the year 2020 on the Institute's website.

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 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



If the events that took place in the small country throughout the year 2020 constitute an obstacle to the achievement of important activities at the level of the Industrial Research Institute, the Corona pandemic is a sufficient reason to eliminate any activity, as health prevention imposes confinement and lack of movement and prevents meetings, and these are cases that have been repeated for long periods.

In this context, the Industrial Research Institute did not close its doors. Rather, it continued to provide the services entrusted to it, especially in terms of operation of its laboratories, monitoring of customs files and providing services and expertise.

Its general manager, Dr. Bassam FRENN, was the onlooker of the Institute's activities, motivating the administrative bodies to persevere in providing services and encouraging them to fulfill the requests of the public and private sectors.

As for the lectures, seminars and relations with abroad, they were limited to a few activities, according to the prohibiting circumstances.

HE TOURED THE INDUSTRIAL RESEARCH INSTITUTE, EXPLORING ITS SKILLS

Minister HOBALLAH: “The Institute is an exemplary institution and the quality of the industrial production gives it a priority in the choice of consumers”

18, February 2020

The Minister of Industry, Dr. Imad HOBALLAH, declared that the Industrial Research Institute is a “successful model institution, in which those in charge play a pivotal role in the modernization and the development of industry, so that the production sector contributes to the development of the economy, attracts investments and keeps pace with the technological development”. He stressed that «the burden on the government is great, but that he will do what he can to make the economic advancement possible”.

research centers at the Institute.

The tour included the laboratories, the departments, the research centers and the new building of the Institute, which is built alongside the existing headquarters.

At the outset, Dr. FRENN welcomed Minister HOBALLAH “at the Industrial Research Institute, pointing out his extensive experience and deep knowledge of everything related to science, technology and communications, which



Minister HOBALLAH’s position was announced during a tour organized for him by the Industrial Research Institute. He was received by the Director General of the Institute, Dr. Bassam FRENN, the Director General of the Ministry of Industry, Dany GEDEON, and the directors and heads of the departments, laboratories and

are closely related to industry and research.” FRENN exposed how the institute has developed and progressed, while anticipating “the importance of developing the industrial sector, and its need to play a role that contributes to achieving economic growth, keeping pace with the technological development, ensuring social



stability and providing sustainable development, so that the industry in Lebanon has become compatible with future changes and challenges.”

He emphasized on the role of industry as a vehicle for rapid and steady growth and prosperity. He stressed on the increase of the

industrial productivity and the improvement of its competitiveness, in order to secure self-sufficiency, improve the standard of living of the Lebanese and advance small and medium-sized industry within a growing industrial sector, as one of the most important elements that contribute to the required economic and social balance.

Minister HOBALLAH

Minister HOBALLAH gave a speech, in which he said: “Amidst the well-known financial, monetary or economic situation, we, as a Ministry, officials and citizens, have to look for all possible means to raise the level of productivity and industry in Lebanon. Our tour comes as one of





the steps to confirm that our industry is ready and able to compete with non-Lebanese industries and products, whether in the foreign or the Lebanese markets, and consumers are required to encourage the products of the national industry. I have also discovered the existence of very good scientific competencies, comparable to foreign competencies and what has been accomplished at the Industrial Research Institute during the past few years is a tremendous work. We are proud of what the Director General of the Institute is doing with the work team, and I congratulate him for their efforts and perseverance, as I congratulate the Director General of the Ministry, the Director General of the Standards and Metrology Organization (LIBNOR) and all the employees of the Ministry for their commitment to the serious and dedicated work to serve the industry and the Lebanese.”

He added, «The opportunity is appropriate to support the Ministry, the Industrial Research Institute, Libnor and the industrialists, and to call upon them to be strict in applying the specifications in order to maintain quality and the reputation of the Lebanese production internally and abroad, so as it rivals the foreign products in terms of compliance with specifications”.

He ended by saying: «The Lebanese are efficient. They have exemplary institutions to be taken as a model, and the Industrial Research Institute is one of the most important of these institutions”.

He concluded, “There is no doubt that the Lebanese production is comparable to the foreign production in terms of quality, which should give it a preference in the choice of consumers”.

HOBALLAH CHAIRS THE BOARD OF DIRECTORS OF THE INDUSTRIAL RESEARCH INSTITUTE

FRENN: The current situation has caused an operational imbalance

HOBALLAH: The Institute is able to keep pace with industrial dynamism



18 May 2020

The Minister of Industry, Dr. Imad HOBALLAH, chaired the Board of Directors of the Industrial Research Institute, in the presence of the Director General of the Institute, Dr. Bassam FRENN, the members, the Director General of the Ministry of Industry, Dany GEDEON, the representative of the Order of Engineers, Adnan Hassan OLAYAN, the representative of the academic and university sector, Dr. Gibran KARAM, the Institute's legal advisor Attorney Andre NADER and the financial and administrative director of the Institute Salim KFOURY.

The meeting discussed the agenda. Dr. FRENN gave a detailed presentation on the development of the Institute's activities for 2019. FRENN explained the Institute's situation in light of the current situation, as the institute's services declined during the first four months of 2020 as a result of the decline in import and export and due to the impact of the situation which led to the operational imbalance.

He also presented the progress of the establishment of the new additional Institute building, in addition to the main existing headquarters,

explaining the process of equipping it with modern laboratories and advanced equipment and pointing out the obstacles that hinder the work progress in its final stages, as a result of the evolvement of the situation in Lebanon to the point of the crisis resulting from the spread of the Covid-19 pandemic.

Minister HOBALLAH congratulated the administration and the staff of the Institute for



the development and progress that the Institute has achieved. He said: "The Institute is one of the few successful, important, productive and worthy institutions at the scientific level. We are in a new dynamism in terms of supporting and developing the industry, and the Institute is able to keep pace with this dynamism and this new trend and path by interacting more and more with the economic sector, especially the industrial one."

AN INTEGRATIVE MEETING CHAIRED BY THE MINISTER OF INDUSTRY AND ATTENDED BY DR. BASSAM EL FRENN.

It included the Presidents of the Lebanese University and the Dental Association

September 09, 2020

The Minister of Industry in the caretaker government, Dr. Imad HOBALLAH, held a meeting in his office at the Ministry with the President of the Lebanese University, Professor Fouad AYOUB, the President of the Dental Association, Professor Roger REBEIZ, and the Director General of the Industrial Research Institute, Dr. Bassam FRENN, with the aim of activating scientific research and studying all means of cooperation.

HOBALLAH

After the meeting, HOBALLAH explained that “the object of the meeting was the participatory work between the Ministry of Industry, the Lebanese University, the Dental Association and the Industrial Research Institute, with the aim of activating scientific research among the

various authorities, publishing it and evaluating the products that reach Lebanon, so that we provide the Lebanese with products at reduced prices. Our main concern at this difficult stage is to secure products that meet environmental and quality conditions, and are at low prices. There are sectors that are facing great suffering due to the Corona situation and the difficult economic conditions, and we, as Lebanese and as public or private institutions, must cooperate and share with each other to advance in many things, especially in the matters that are related to the industrial sector or other different sectors”.

In response to a question, he stressed that “the details of the work shall be discussed in the next meeting, and these three institutions will follow up on the mechanism set by those responsible to establish it”.



AYOUB

In turn, AYOUB said: «We, as the Lebanese University, in partnership with the Industrial Research Institute and the Ministry of Industry, have gathered to develop this partnership for the benefit of Lebanon and the Lebanese, especially as we need to build national capacities in various fields under the exceptional circumstances we live in in Lebanon”.

REBEIZ

As for REBEIZ, he said: «The Dental Association is putting its potential to pursue this project, with the aim of securing quality in the dental sector, at very reasonable prices, that is, at the lowest cost”.

FRENN

FRENN stressed that “This initiative is complementary to previous initiatives with the aim of focusing on applied research. We bear a common concern to secure the best commodity for the citizen with the best quality and our focus is on this issue, to find how to cooperate between the Lebanese University, the Industrial Research Institute and the Dental Association, as well as through scientific research in order to provide all the needs of the citizens at prices that correspond to their financial capabilities in these difficult circumstances.

INDUSTRIAL DEVELOPMENT ADVISORY BOARD

6 May 2020

In the context of adapting the industrial production with the requirements of the Corona pandemic, the Scientific Advisory Council for Industrial Development was established at the initiative of the Ministry of Industry and held a meeting at the Grand Serail, under the auspices of Prime Minister Dr. Hassan DIAB and in his presence.

Institute, Dr. Bassam FRENN, and the Director of Development and Technology, Dr. Imad HAGE CHEHADE, participated in this Advisory Council.

The Council aims at planning to face any new outbreak of the Corona pandemic and to inform manufacturers of the required specifications, so that the product conforms to the necessary medical and hospital needs and takes into account

The Director General of the Industrial Research



the public safety standards and requirements.

The Director General of the Industrial Research Institute Attends two Activities of the Ministry of Industry

The Director General of the Industrial Research

Institute, Dr. Bassam EL FRENN, attended two activities of the Ministry of Industry, the first of which was a media meeting held in the conference hall of the Research Institute and the second in the Grand Serail in order to launch preventive measures to protect against the Covid-19 pandemic in the industrial sector.

MEDIA PRODUCTION IS A NEED FOR INDUSTRIAL PRODUCTION

June 22, 2020

The Minister of Industry, Dr. Imad HOBALLAH, with the participation of the Minister of Information, Dr. Manal ABDEL SAMAD,

organized a media meeting at the Industrial Research Institute, entitled “Media Production is a Need for Industrial Production”. It aims to activate the cooperation between the industrial and the media sectors. It was attended by the Director General of the Ministry of Industry, Dany GEDEON, the Director General of the Ministry of

Joseph AL-KOSSEIFI, the representative of the Lebanese Press Syndicate, Fouad AL HARAKA, the representative of the head of the National Media Council, Ghaleb KANDIL, the director



of studies and publications in the Ministry of Information, Dr. Hassan FALHA, the Director General of the Industrial Research Institute, Dr. Bassam EL FRENN, the Director General of the Lebanese Standards and Specifications Corporation (Libnor), Eng. Lina DERGHAM, the President of the Association of Lebanese Industrialists, Dr. Fadi GEMAYEL, the President of the Syndicate of Lebanese Press Editors,

of studies and publications in the Ministry of Information, Khodr MAJID, the director of the “National Media Agency”, Ziad HARFOUCHE, the director of Radio Lebanon Muhammad GHARIB, the directors, editors-in-chief and representatives of the audio-visual media, agencies and websites.

PREVENTION OF THE CORONA PANDEMIC

20 May 2020

The Ministry of Industry and the United Nations Industrial Development Organization (UNIDO) also launched “Preventive Recommendations and Measures in Response to Covid-19 in the Industrial Sector” under the auspices of Prime Minister Dr. Hassan DIAB, represented by the

Nicoletta BOMBARDIERI, the United Nations Resident Coordinator in Lebanon Claudio CORDONE, the Secretary General of the Higher Defense Council, Major General Mahmoud AL ASMAR, the Director General of the Ministry of Industry Dany GEDEON, the Director General of the Industrial Research Institute, Dr. Bassam



Minister of Industry Dr. Imad HOBALLAH, today, before noon, in the Grand Serail.

It was attended by the Minister of Public Health Dr. Hamad HASSAN, the Ministry of Labor Lamia YAMMINE, the Minister of Agriculture Abbas MORTADA, the ambassador of Japan Akubo TAKESHI, the ambassador of Italy

FRENN, the Treasurer of the Association of Industrialists, Nazareth SABONJIAN, representing the association’s president, Dr. Fadi GEMAYEL, the representatives of the relevant ministries, departments and industrial associations, and the directors and representatives of a number of international organizations and diplomatic missions.



**LABORATORY SERVICES,
OBSERVATIONS &
ACTIVITIES**

THE INDUSTRIAL RESEARCH INSTITUTE ENSURES BUSINESS CONTINUITY

despite the Corona pandemic, the internal crisis and the disruption of economic activity 187,760 tests and 18,829 files for conformity

The fallout of events in the world was remarkable, as an inevitable result of the Covid-19 pandemic, due to its rapid spread among humans and its lethality with individual immunity, which caused the communication between countries to be stopped and paralyzed and even froze the economic activities.

It is natural for Lebanon to suffer from what has inflicted other countries in terms of isolation from abroad and confinement at home, imposed by measures to prevent the spread of infection with this pandemic. The economic institutions were almost completely closed down.

However, the management of the Industrial Research Institute decided to secure continuous work in all the departments of the Institute in order to meet the demands of the private and public sectors. The institute continued its activities despite the obstacles arising from the general surrounding environment, and from the street and political turmoil that was witnessed in the internal arena, which has exacerbated the economic stagnation in the country.

Nevertheless, the provision of financial support, by securing hard currency for industrial enterprises, led the industrial sector to maintain its exports level at approximately \$3.3 billion, compared to \$3.7 billion in 2019.

The management of the Industrial Research Institute assured once again its adherence to the goals of the Institute, since 1998, the year Dr. Bassam EL-FRENN took office, by making it a scientific edifice. He knows how to draw away, not only from the environment course, which is affected by wars and economic upheaval that have destroyed the state of development and growth, but

also from the internal political tension and the decline in the economic activity, confirming the extent of his commitment to work ethics and practical success and supporting all sectors of the national economy with scientific data that fortify it at the levels of the internal and external markets.

The Institute has proven to be the leading scientific institution in Lebanon and the East, capable of putting its scientific capabilities, its laboratories and the capacity of its human bodies, not only at the service of the industrial sector, but also at the service of the public sector, providing funds and scientific support –with fast results - in the monitoring and inspection of industrial, agricultural and health products campaign, meeting the requests of the Ministries of Economy, Trade, Industry, Health and even the Lebanese Agriculture, in addition to testing imported oil derivatives for the public sector and inspecting new liquid gas bottles.

In this general climate, the institute's activity has decreased, compared to what it was in 2019, while the general economic activity in the country has been reduced to 25 percent.

The tests, examinations and inspections were divided, in total, as follows:

- 187,760 tests and analysis operations in the field of conformity, conducted by the laboratories of the Industrial Research Institute during the year 2020, with a decline of 142,423 operations compared to 2019, that is a rate of 43 percent.
- In addition to these tests, there are 308 external inspections and 424,168 gas bottles, made internally.

- The standardization and calibration tests reached 15,724 tests on 1688 samples.
- The Industrial Research Institute checked, in the field of conformity of goods imported through the external Lebanese gates to the mandatory specifications, 18,829 files.

Thus, the Industrial Research Institute proves its competence as a watchful scientific institution capable of accommodating the needs of the public administration and the private sector in order to conduct scientific and technical tests in many fields with precision and skill, in addition to preparing research and scientific studies in all economic fields.

Tests and analyzes

For the second year in a row, the laboratories of the Industrial Research Institute are witnessing a partial activity of nearly half of what it was in 2019. The activity in the electrical laboratories decreased by 76 percent, and the activity in the chemical laboratories progressed, with its share of the total tests reaching 39 percent, followed by the civil engineering and the soil laboratories the share of tests of which is about 15.5 percent. The activity of bacteriological tests

is equivalent to it, at 15.4 percent, and then the electricity laboratories with about 15 percent... Then the Central Laboratory for Wheat and Flour Research, the Petroleum and Paint Laboratory, and the Textile and Leather Laboratories...

The tests were carried out on 30,280 samples of various incoming types.

As for the welding laboratory, it conducted 1,893 tests on about 4 projects.

NUMBER OF TESTS BY LABORATORY

Year	2020	2019	2018	2017	2016	2015
Chemical and physico-chemical	74270	81500	80600	67870	71400	72850
Microbiological analyses	29250	33500	39300	35700	37620	39614
Textile, leather and rubber	3430	5900	6750	7100	6830	6397
Paint, Petroleum and derivatives	9540	16500	16150	15200	13200	12450
Civil Engineering	29325	60010	80821	86868	93073	72972
Electricity	28092	118484	122841	124633	119595	130011
Central Laboratory for grains, flour and bread research	13853	13879	21678	14742	9973	7543
Welding	1893	2303	4852	1194	3281	4015
Total	189653	332076	372992	353307	354972	345852

The activity of laboratories, according to the statistical tables, appeared as follows:

Chemistry and Physicochemical Laboratories

The number of test operations in Chemical and physicochemical laboratories reached 74,270 tests with a decrease of 7,230 tests i.e. by 8.9 percent, and took up more than 39 percent of the laboratories' total share.

Microbial Analyses

The number of microbial tests decreased by 4,250, i.e. 12.7 percent, and reached to 29,250 tests, constituting about 15.4 percent of the total tests.

Textile, Leather and Rubber Laboratories

Testing and analysis operations in these laboratories recorded 3,430 tests, or about 1.8 percent, but decreased by approximately 42 percent due to the decrease in imports from Syria or the moving of skilled Syrian labor to Lebanon. The import of textiles and fabrics has also stopped tremendously.

Laboratories of Petroleum and its Derivatives

As for the paint and petroleum laboratories, their activity decreased by 6,960 tests, or 42 percent, and reached 9,540 tests, and their share of the total tests remained at 5 percent.

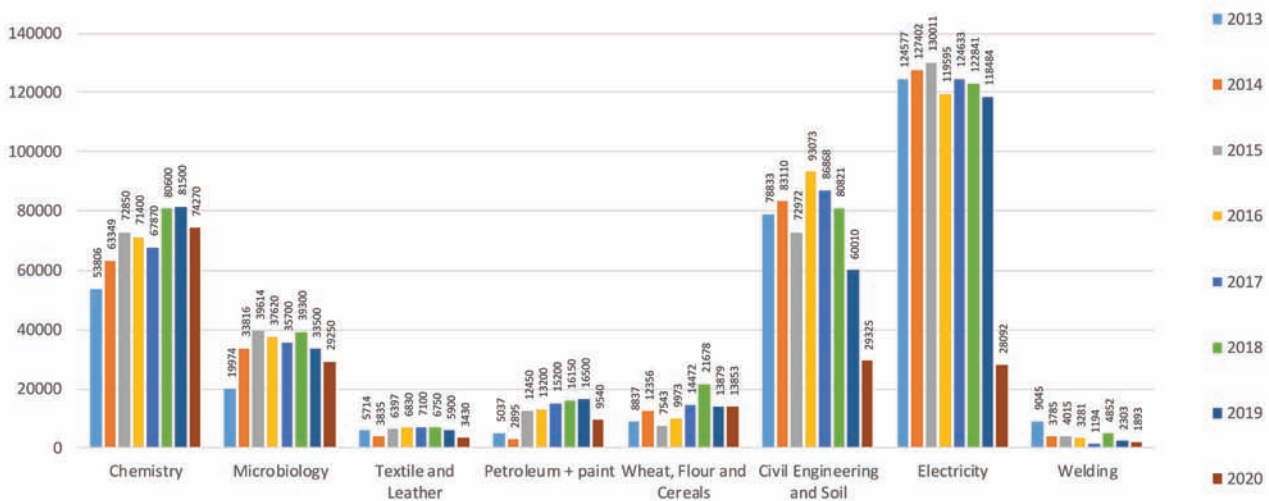
Civil Engineering Laboratories

As for civil engineering and soil laboratories, their activities declined by more than half, recording 29,325 tests and losing 30,685 tests compared to 2019, a rate of 51 percent, and their share reached 15.5 percent of the testing activity. Its decline comes as a result of the stagnation of the construction movement, which affected its activity.

Electrical Laboratories

The activity in the electrical laboratories has dramatically decreased by about 90,392 tests compared to 2019, a rate of 76 percent, and its share became 15 percent, compared to 36 percent a year ago.

Tests



Central Laboratory for Research in Cereals, Flour and Bread

Due to the close cooperation between the Ministry of Economy and Trade and the Industrial Research Institute, the laboratory serves the Ministry of Economy and Trade in terms of its responsibility for conducting laboratory tests on imported wheat. It conducts as well all other tests for the majority of imported and locally manufactured products. The number of tests in the Central Laboratory for Cereals, Flour and Bread Research reached 13,853 tests, compared to 13,879 tests in 2019, which is a decrease of only 26 tests.

Welding Laboratories

As for welding operations, they reached 1,893 operations, which is a decrease of 410 operations, about 18% compared to 2019.

Metrology and Calibration Laboratories

The activity of the various metrology laboratories decreased during the year 2020 by 18.2 percent compared to 2019, and amounted to 15,724 tests compared to 19,218 tests in the previous year. These laboratories received 1688 measuring devices...

These tests were divided among the fields of temperature, pressure, force, mass, dimensions and electricity.

The development of the activity of these laboratories is as follows:

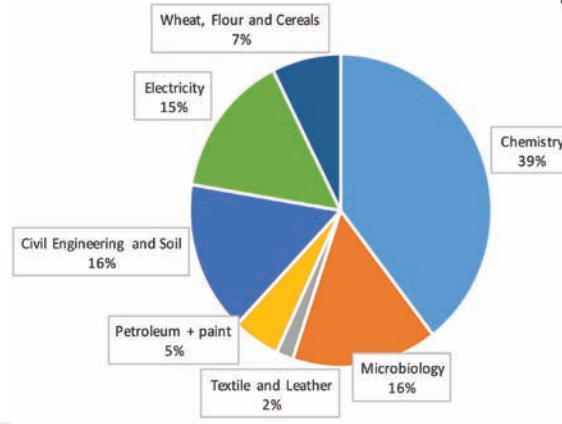
Heat

The heat laboratories received 440 devices, 4400 tests were conducted on them with a decrease of 930 tests or 17.6 percent, and an average of 10 tests for each device, which is the same rate since 2010.

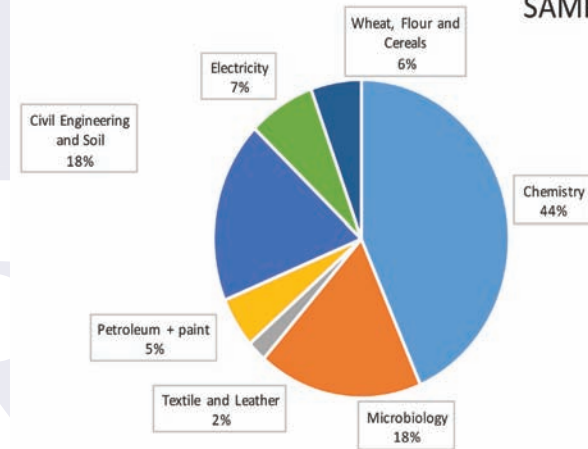
Pressure

The number of machines prepared for pressure

TESTS



SAMPLES



and delivered for testing was 29, and 232 tests were conducted on them, at an average of 8 tests per machine, which is the same adopted rate.

Force

The force measurement laboratories received 5 devices in order to measure their force. 60 tests were conducted on them, at an average of 12 tests per device.

Mass

The number of units of mass was 996 and 9,288 tests were performed on them, at an average of 9.4 tests per unit.

Dimensions

The number of units decreased to 143 units and the tests to 1144, at an average of 8 tests per unit.

Electricity

As for the tests on equipment in the field of

electricity, they increased in 2020 to 51 devices and 408 tests, at an average of 8 tests per device.

Various tests

The various tests reached 192 tests, on 24 devices.

NUMBER OF TESTS BY LABORATORY

TOTAL ACTIVITY	2020		2019		2018		2017		2016	
	Tests	Units	Tests	Units	Tests	Units	Tests	Units	Tests	Units
Temperature	440	4400	533	5330	551	5510	515	5150	512	5120
Pressure	29	232	18	144	70	560	96	768	87	696
Force	5	60	9	108	6	72	10	95	5	40
Mass	996	9288	1228	11532	1170	10816	1298	11844	1062	9680
Dimensions	143	1144	187	1496	113	904	163	1304	115	920
Electricity	51	408	38	304	52	416	29	232	63	504
Other tests	24	192	38	304	36	288	37	296	43	344
Total	1688	15724	2051	19218	1998	18766	2148	19689	1887	17304

EXTERNAL INSPECTION

YEAR	2020	2019	2018	2017	2016	2015
Gas storage tanks inspection	124	79	109	155	162	170
Fuel tanks inspection and calibration	45	39	41	50	93	70
Steam boiler inspection	137	161	188	99	81	108
Various pressure devices inspection						
Total	308	279	338	304	336	348
Local gas cylinders inspection and control	424168	672262	677600	649776	615000	8000
Imported gas cylinders inspection and control	0	0	14784	5000	0	15000

CONFORMITY ASSESSMENT ACTIVITIES ON IMPORTS DECREASES BY 42 PERCENT

Covid-19 Pandemic Reduces the Movement through Crossing Gates

The conformity assessment activities are related to the volume of Lebanese imports. These activities decreased during the year 2020 due to internal, regional and external conditions, which are conditions imposed by the Covid-19 pandemic that invaded the globe and did not exclude any country, forcing countries to cut the lines of the commercial exchange between them.

Lebanon's share was a decrease in the volume and value of the imports to ten billion dollars during the year, compared to about 22 billion in 2018 and 19 billion in 2019, while the value of the exports exceeded 3.2 billion dollars, compared to

3.7 billion in 2019.

This stagnation reflected on the conformity assessment activities that are carried out on the products imported to Lebanon and that are subject to the provisions of the mandatory specification decrees and which the Industrial Research Institute is entrusted with implementing, so as their number decreased by 48%, in parallel with the decline in the value of the imports which is also by 48%, compared to what it was in 2019.

The number reached of 18,829 files compared to 36,272 files a year ago, which is less by 17,443

CUSTOMS FILES 2020

Files type	Pre-Shipment	Chemical	Electrical	Medical	Elevators	Mechanical	Energy	Paint	Pressure	Civil Engineering	Textile	Transport	Common files	Total
Number	286	3,906	3,867	3,592	69	456	64	1,387	109	1,165	2,055	550	1,323	18,829
Subjected files	286	2,600	2,197	3,178	46	200	33	328	47	1,138	1,739	436	898	13,126
unsubjected files	0	1,306	1,670	414	23	256	31	1,059	62	27	316	114	425	5,703
Files not subjected as a result of inspection	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percentage of unsubjected files	0	33.44	43.19	11.53	33.33	56.14	48.44	76.35	56.88	2.32	15.38	20.73	32.12	30.29
Non-conforming files	0	30	228	5	0	0	1	1	0	63	4	0	0	332
Percentage of non-conforming files	0	1.15	10.38	0.16	0	0	3.03	0.3	0	5.54	0.23	0	0	2.53
Corrected files	0	9	224	2	0	0	1	1	0	63	4	0	0	304
Rejected files	0	21	4	3	0	0	0	0	0	0	0	0	0	28

files as a result of the impact of the Corona pandemic and the internal events in the country coupled with the failure of Lebanese banks to open credits in foreign currencies for the import, which paralyzed the movement of foreign trade.

The assessment activities were linked to the activity of the external gates of Lebanon, and not to the activity of the Institute, which remained almost normal.

The decline affected most of the customs data according to the types of imported goods and products. This data is divided as follows:

- The data for which the conformity was assessed in the source country according to the Institute’s mechanism, was 286 files.
- The number of files subject to conformity reached 13,126 files and the files not subject to the provisions of the mandatory specification decrees after the study were 5703 files.
- The number of non-conforming files was 332 files 304 of which were corrected and 28 were rejected.

Files by sectors

As for the repartition of the files according to the type of imported goods, they were divided according to their importance as follows:

Chemicals

Their files amounted to 3,906 files, compared to 6,686 files in 2019, which is a decline of 2,780 files or about 42 percent. These files constitute about 21 percent of the total.

Electrical Equipment

It accounts for about 20.5 percent of the total customs files, with 3,867 files, which is a decrease by 5,656 files, and a percentage of close to 60 percent.

Medical Equipment

Their number constitutes about 19 percent of the total files, amounting to 3,592 files, compared to 5,341 files in 2019, which is a decrease of 1,749 files equivalent to 33%.

Building Materials Files

They decreased from 2,593 files to 1,165, which is a decrease of 1,428 files, equivalent to 55 percent. The share of these files from the total is

6 percent.

Textile Files

The number of customs files related to textile imports reached 2,055 compared to 2,701 files, which is a decrease of 646 files equivalent to 23 percent. These goods account for 11 percent of the total customs files.

Paint Files

Their number is 1,387 files, representing 7.4 percent of the total files. They were 2221 files, but were decreased by 834 files or about 37.5 percent.

Common files

The number of these files is 1,323 compared to 2,771 files a year ago, which is a decrease of 1,448 files and a percentage of about 52 percent. The share of these files is 7 percent of the total customs files.

As for the remaining files, they are: Machinery 550 files (2.9 percent), mechanical 456 files (2.4 percent), files approved in the source, 286 (1.5 percent), pressure machines 109, elevators 69 and energy 64 customs files.

FILES BY GATE

A slight Increase in the Port of Tripoli and Massnaa

Conforming files: Beirut port 64 and the airport 31 percent

Beirut Port

12,063 files were treated compared to 24,439 files a year ago, which is a decline of 12,376 files or about 51 percent. These files make up 64 percent of the total.

Beirut Airport

The number of files that were subjected to a conformity assessment and that are issued through Beirut airport reached 5736 files, compared to 10,693 files, which is a decrease of 4,957 files or about 46 percent. These files constituted 30,5 percent of the total.

Port of Tripoli

In the port of Tripoli, the number of customs

files assessed for conformity increased to 560 compared to 511 files, which is an increase of 49 files, representing about 10 percent. They make up 3 percent of the total.

Massnaa

Massnaa witnessed a slow movement, and the conformity assessment was done through it for 430 files, representing 2,2 percent of the total.

As for the rest of the gates, the customs files processed and passing through them amounted to 37 files through Al-Aboudiya, 3 files for each of the port of Sidon and the Arida gate.

GATES OF GOODS ENTRY

Files type	Pre-Shipment	Chemical	Electrical	Medical	Elevators	Mechanical	Energy	Paint	Pressure	Civil Engineering	Textile	Transport	Common files	Total
Masnaa	0	50	1	13	0	7	0	25	0	0	326	0	8	430
Port of Beirut	281	2,744	2,290	865	66	387	56	1,235	92	1,117	1,538	475	917	12,063
Arida, Sidon, Al-Aboudiya and Tyre	0	0	1	0	0	1	0	1	0	0	36	0	1	40
Tripoli	0	119	117	26	0	17	1	62	3	41	79	45	50	560
Airport	5	992	1,458	2,688	3	45	7	64	14	7	76	30	347	5,736
Total	286	3,905	3,867	3,592	69	457	64	1,387	109	1,165	2,055	550	1,323	18,829
Daily rate of customs files	1.5	20.7	20.5	19.1	0.4	2.4	0.3	7.4	0.6	6.2	10.9	2.9	7	100

QUALITY CERTIFICATION

The Industrial Research Institute continues to strengthen and support the conditions of the Lebanese industry. As of the end of 2020, it has awarded 36 quality certifications, including 18 industrial institutions ISO 9001 certification, two establishments obtained ISO 14001 certification in environmental system management, and four establishments obtained ISO 13485 certification for the quality system of medical devices and HACCP certification.

Product Authentication Certificate

Since 2014, 74 products have obtained a quality certification from the Industrial Research Institute,

distributed over 17 production enterprises.

Certificates of the Lebanese Center for Welding

By virtue of Law No. 423/2002, “The Industrial Research Institute is considered to be the accreditation awarding body authorized to issue conformity certificates in the field of welding of all kinds.” The Institute granted 332 certificates for welding through the Lebanese Center for Welding, a certificate for a non-compatibility test inspector and 30 trainees in non-compatibility tests.

New Central Laboratory Equipment for Cereals, Flour and Bread Research

A new, automated Kjeldahl Digester for checking cereals, flours and pastas, to deal with increased workload and optimization in terms of inspection delays. Fast and safe sample processing.

The new device is fast and safe to handle and delivers accurate results.





INTERNATIONAL ACCREDITATION

INTERNATIONALLY RECOGNIZED FROM THE WORLD'S MOST RIGOROUS ACCREDITATION BODIES DOCUMENTS, 30 INDICATORS, 44 AUDITORS 1000 AND 400 MAN-DAYS OF AUDIT IRI CONDUCTS 2000 TESTS FOR 1300 PARAMETERS WITH A SUCCESSFUL RATIO OF 97%

Quality management overview

The quality management section personnel, assisted by 44 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, 30 Key Performance Indicators continuously monitored and 400 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).

All of the accreditation organizations mentioned above are full members in the international organizations IAF and ILAC and signatories of mutual recognition. This make the institute's reports and results trustable and recognized all over the world.

Also, the Industrial Research Institute is

The screenshot shows the ILAC website's 'MEMBERS BY CATEGORY' page. The navigation menu includes: About ILAC, ILAC MRA and Signatories, ILAC Membership, Publications, News and Events, Contact Us, and Members Area. The main content area is titled 'MEMBERS BY CATEGORY' and includes a disclaimer: 'The following is an alphabetical list, by economy within category order, of ILAC members and contact details. Click the categories below to reveal the relevant members within the alphabetic section. The Regional Cooperation Bodies and Stakeholders are included under the economy that currently holds the Secretariat for that organisation. Please note ILAC is not responsible for the contents, safety or reliability of the linked websites listed on this page and does not necessarily endorse the views expressed within them. ILAC cannot guarantee these links will work: all of the time and has no control over the availability of the linked pages. If you see a bad link and are aware of the correction, please contact ILAC.'

The categories listed are: REGIONAL COOPERATION BODIES, FULL MEMBERS (MRA SIGNATORIES), ASSOCIATES, AFFILIATES, and STAKEHOLDERS. Under STAKEHOLDERS, there are two entries:

- JAPAN**
JLA
Japan Laboratory Association
Contact Name:
Phone: +81 3 4560 5448
Fax: +81 3 4560 9002
Email: jla-secretary@jqa.jp
Website: http://www.kt.rim.or.jp/~jla
Social Media:
Stakeholder
- LEBANON**
IRI
Industrial Research Institute
Contact Name:
Phone: +961 5 467831
Fax: +961 5 467831
Email: info@iri.org.lb
Website: http://www.iri.org.lb
Social Media: f t in
Stakeholder

a stakeholder member in the international organization ILAC since 2014.

Moreover, IRI regularly participates in international proficiency testing rounds to validate its results. Until date, 2300 tests were done for 1300 parameters with a successful ratio of 97%.

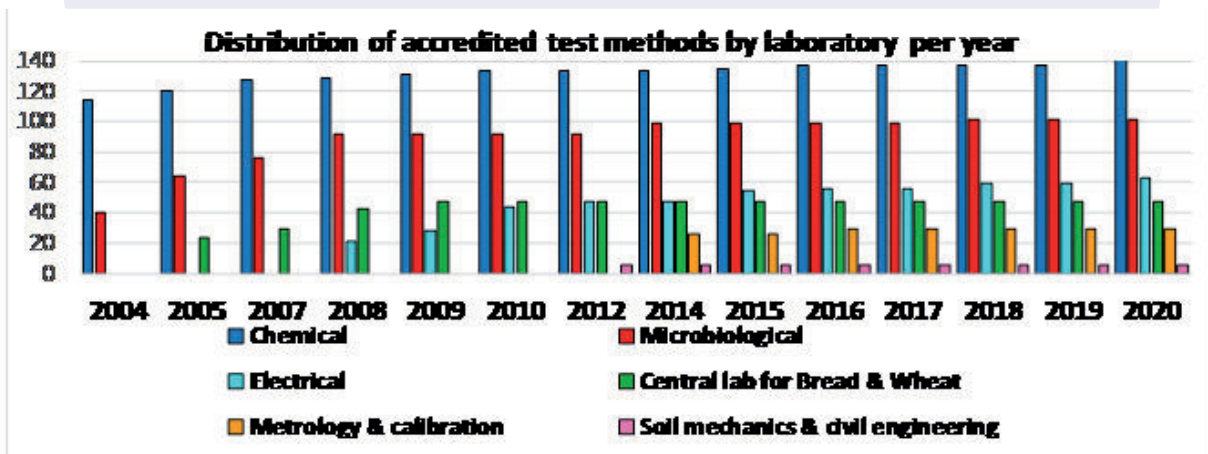
This robust quality management system enabled the Industrial Research Institute to become accredited according to ISO 17025 (since 2004) & ISO 17020 (since 2017) requirements. This helped the Institute to be a key player in the National Quality Infrastructure and earn the confidence of the most prestigious 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:

Methods and Procedures	Type and Range of Inspection	Items, Materials OR Products Inspected
Boilers Ceramic Tile Cosmetic Diapers Electrical Appliances Fire Extinguishers Food Gas Cylinders Glass Medical Items Notebook Oil Sanitary Wares Solar Water Heaters	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 32 IMP/CFM-n/01 to 03 IMP/CFM-r/01 to 07 IMP/CFM-s/02 & 03 Customer-Provided Inspection Requirements



The scope of accreditation according to ISO 17025 requirements covers over 380 test methods in different fields as detailed below:

- Chemical, physic-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) and balances (on-site & in permanent laboratories),
- Physico-mechanical testing of cement and ceramic tiles.

An extension of the accreditation scope was granted for the following fields as detailed below:

Activity / Field	Item / Test	Standard / Method
Chemical	Water and Wastewater: - Chemical Oxygen Demand - Total Kjeldahl Nitrogen - Total suspended solids	- ISO 6060, AOAC 973.46 (E, F) - ISO 5663, AOAC 973.48 - ISO 11923, EPA 160.2
Electrical	Static energy meter: - Limits of error due to the variation of the current - Meter constant	- IT/ELC/44 based on NL CYS EN 62053-21 (clause 8.1) - IT/ELC/44 based on NL CYS EN 62053-21 (clause 8.4)
	Electromechanical energy meter - Limits of error due to the variation of the current - Meter constant	- IT/ELC/44 based on NL CYS EN 62053-11 (clause 8.1) - IT/ELC/44 based on NL CYS EN 62053-11 (clause 8.4)



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.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 29 August 2022

Certificate Number: ACT-1898



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



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.



R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 29 August 2021
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

MEETING WITH THE LEBANESE UNIVERSITY AND THE DENTAL ASSOCIATION

In implementation of the decisions taken in the meeting held at the Ministry of Industry on September 9, 2020, which included His Excellency the Minister of Industry, Dr. Imad HOBALLAH, the President of the Lebanese University, Professor Fouad AYOUB, the President of the Dental Association, Professor Roger RBEIZ, the Director General of the Industrial Research Institute, Dr. Bassam FRENNE, and the Director of Development and Technology, Dr. Imad HAGE CHEHADE, which resulted in the activation of the cooperation in the field of scientific research, that would benefit from all the efforts made by the mentioned authorities.

Accordingly, a meeting was held at the Industrial Research Institute, chaired by Dr. Imad HAGE CHEHADE and attended by:

For the Dental Association: Professor Georges AOUN and Professor Issam KHALIL

For the Lebanese University: Dr. Muhammad HAMDAN (Faculty of Engineering), Dr. Ahmad YASSINE (Faculty of Pharmacy), Dr. Ziad SALAMEH (Faculty of Dentistry), Dr. Bachar QOBEISSI (Faculty of Chemistry) and Dr. Aline HAMADEH (Faculty of Life Sciences).

For the Industrial Research Institute: Professor Joseph MATTA and Dr. Imad HAGE CHEHADE.

The attendees discussed ways to cooperate with each other and assist the dental sector in order to reduce the importation and provide products to the Lebanese market at reduced prices while maintaining

all the quality conditions by making use of the laboratories of the internationally accredited Industrial Research Institute to conduct the necessary examinations.

The attendees focused on the role of the Lebanese dentists and their participation in many projects abroad as it turns out that about 30% of the products necessary for the work of the dentists can be manufactured in Lebanon, and that there are about 5 products that are ready for manufacture and are in the negotiation stage with Lebanese pharmaceutical companies.

The attendees agreed to provide a list of these products and to work, each in his competence, to provide what is necessary in order for the manufacturing process to take place and to ensure that the product is in conformity with the international regulations. They emphasized on the need to ensure that the cost of manufacturing will be in the interest of the citizen and the doctor, that is, much less than the cost of import.

Finally, the attendees agreed to continue the meetings through online technologies due to health conditions, after preparing a list of products that can be manufactured and identifying ways to test them and the international standards for monitoring them.



INSPECTION OF THE INSTITUTE'S ACTIVITIES BY THE ACCREDITATION BODY (TESTS AND INSPECTION)

As part of the measures taken by the Industrial Research Institute to complete its activity despite the difficulties the country is going through, the quality unit and the laboratories concerned with international accreditation completed the annual evaluation process for tests and inspection within the field of accreditation, and the process of remote inspection was conducted according to the requirements of the international standards ISO 17025 and ISO 17020 through the video conference techniques. The inspector C.K. Cheung in Hong Kong and the inspector

Goudat RAMADAN in Qatar, from the National Accreditation Board (ANAB) held a virtual meeting with the heads of the relevant laboratories and the operation was achieved with complete success.

At the same time, the institute's inspectors carried out inspections to grant quality certificates using the same technology for Lebanese companies in order to obtain the ISO 9001 certificate and other certificates, or to confirm the certificate through annual visits programmed for this purpose.

THE SCIENTIFIC COMMITTEE OF THE PORT EXPLOSION HEALTH AND ENVIRONMENTAL EFFECTS

The Industrial Research Institute, represented by Professor Joseph MATTA, participated in the first meeting of the scientific committee formed by the Minister of Public Health in the caretaker government, Dr. Hamad HASSAN, Resolution No. 1/1020, to study the health and environmental effects of the gases emitted by the port explosion and the extent of their negative effects on public health, the environment and the food.

The committee includes doctors

specializing in bacterial and infectious diseases as well as academics from universities specialized in chemistry, analytical chemistry, environmental protection, natural sciences and physics.



VIRTUAL TRAINING ON ZAATAR VALUE CHAIN

The Industrial Research Institute, represented by Professor Joseph MATTA, participated in the virtual training on Zaatar value chain, organised by UNIDO. Technical assistance was provided and the main objective was to uncover the current baseline of Thyme production in Lebanon and identify needs for its development, in a view of strategic vision of IRI regarding the industrial support and development.

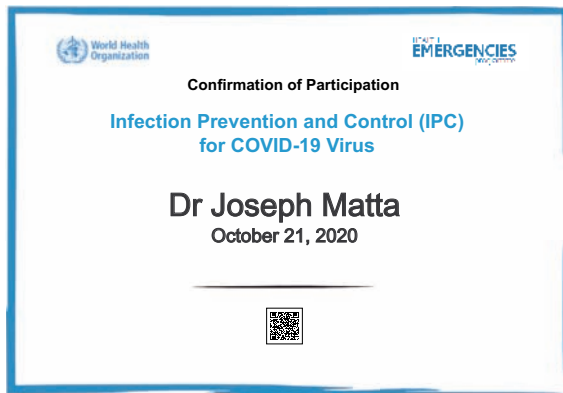
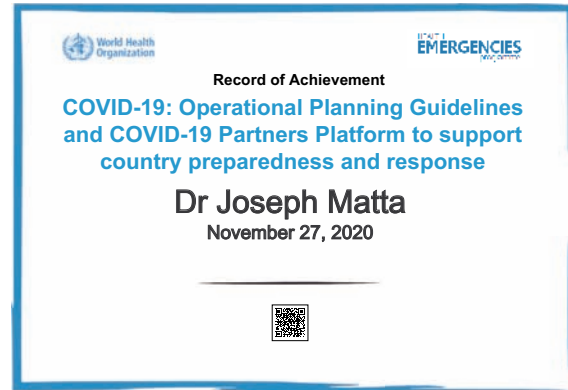


IRI

INTERACTION WITH THE COVID-19 PANDEMIC

In a view of strategic vision of IRI regarding the health support valorization, Professor Joseph MATTA, Applied research and testing acting director, demonstrated considerable record of achievement in the context of Coronavirus disease COVID-19 pandemic, developed by World Health Organization (WHO – Health Emergencies Program).





THE ICC RENEWS TO JBEILY, AND FRENNE CONSIDERS THAT A CAUSE OF PRIDE FOR LEBANON

The International Association for Cereal Science and Technology (ICC), headquartered in the Austrian capital Vienna, has renewed the position's term of the head of the Central Laboratory for Grains, Flour and Bread at the Industrial Research Institute, Engineer Amine JBEILY, as technical director in the association for a period of four years ending in 2024.

The Director General of the



Industrial Research Institute, Dr. Bassam FRENN, stressed that the international organization is concerned with issuing international technical specifications and internationally approved methods of analysis and with keeping pace with emerging issues such as nutrition, food safety and public health.

FRENN considered this renewal as a cause of pride for Lebanon, as it translates the reaffirmation of confidence in the effectiveness of the role and the affiliation of the Industrial Research

Institute to the association and in developing the economy, as well as reflecting JBEILY's vitality and his experience in one of the most important international organizations dealing in food.

The Technical Director chairs the Scientific Committee and is a member of the Executive Committee, he plays an active guiding role and contributes on the scientific level to the development and the dissemination of standardized methods.

MEDAL OF FRIEDRICH SCHWEITZER 2020

During the online general assembly of the International Association for Cereal Science and Technology (ICC) held on December 9, 2020.

Engineer Amine JBEILY, Head of the Central Laboratory for Grain, Flour and Bread Researches and Technical Director of the International Chamber of Commerce was awarded the 2020 Friedrich Schweitzer Medal, which is normally awarded to food scientists who provide distinguished service in furthering the goals and ideals of the International Chamber of Commerce and advancing grain science and technology worldwide.

The ICC Technical Director submitted to the national delegates of more than 30 countries a progress report on the standards activities undertaken in 2020.

The 2020 General Assembly was characterized by the approval of the innovative test methods developed in cooperation with the ICC and the IRI:

- Draft ICC Standard No. 187: Determination of rice varieties using 12 Simple Sequence Repeat (SSR) tags.



- Draft ICC Standard No. 188: Determination of Alfiolabe characteristics of dough at appropriate humidity of commercial flour or test flour.

<https://icc.or.at/general-information-about-icc/the-icc-academy>

<https://icc.or.at/publications/news/icc-awards-2020-fellow-schweitzer>



APPLIED RESEARCH & STUDIES

THE INSTITUTE PERFORMED 10 ENVIRONMENTAL AND TECHNOLOGICAL STUDIES AND ANALYZES

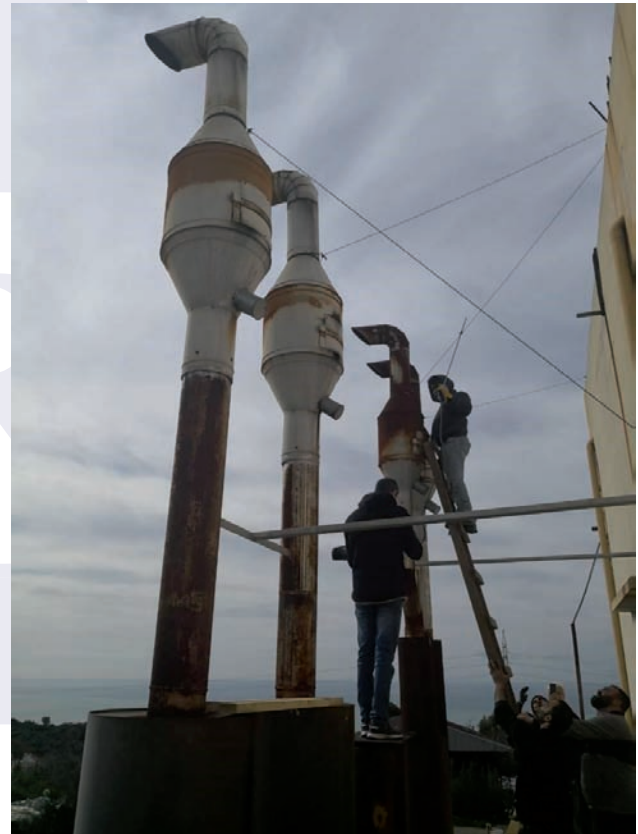
The Industrial Research Institute keeps pace with the current status of industries and factories, especially the ones that received ISO environmental certification from the Institute, and ensures their continuous compliance with the scientific and technological standards required to maintain

a healthy environment for human beings and preserve the nature.

The IRI completed 10 studies and analyzes in 12 factories, among which studies in environmental auditing and in environmental analyzes and technical field studies, as follows:

Comprehensive Environmental Analyzes and Technical Field Studies

- Algorithm s.a.l.
- Cimenterie Nationale s.a.l.
- Sanita Persona s.a.l.
- Nero s.a.l.
- Hawa Chicken
- Specialized Factory for Steel Product s.a.r.l. (SFSP)
- Liban Cables
- Unipack Tissue Mill s.a.l.
- Hôpital de la Croix
- Henkel Lebanon s.a.l.





SCIENTIFIC PUBLICATIONS

A DEVELOPMENT PLAN TO REVITALIZE THE INDUSTRY A STRATEGY DEVELOPED BY DR. BASSAM FRENN IN 1992

To enable industry to have a leading role, the Industrial Research Institute, based on its pioneering role in the development of the Lebanese industrial sector, publishes a booklet that includes the basic objectives of the policy of “Encouraging and Developing Lebanese Industry”, including a visionary and far-reaching strategy developed by the Director General of the Industrial Research Institute, Dr. Bassam FRENN in 1992 that includes the second version amended in 2012.

In the presentation of the booklet, Dr. FRENN wrote the following:

In 1993, when I held the position of Director of the Industry, Oil, Agriculture and Environment Sector at the Council for Development and Reconstruction, in addition to my advisory duties to the Minister of Industry and Oil (at that time), I realized the importance of developing the industrial sector in Lebanon. At the time, I thought that the sector should play a role that contributes to achieving economic growth, keeping pace with the technological development, ensuring social stability and achieving sustainable development. This prompted me to draw up a policy of encouragement and development for the Lebanese industry through which I defined the goals and principles to make the industry compatible with the changes and challenges ahead. I concluded with the development of a long-term visionary strategy.

The importance of the plan developed at that time lies in the extension of its effects over time. It was designed to suit the current real and actual needs of the industry, to set the required priorities and to define them as a clear-cut road map, in order to raise the status of industry and make it

a major national issue, equal in importance to the importance of the national social security.

The importance of the plan sheds light on the role of the industry as a tool for rapid and steady paced growth and prosperity. In fact, through its implementation, I wanted not only to increase industrial productivity and improve competitiveness for the sake of self-sufficiency, but I also looked for solutions that I proposed, in order to improve the standard of living of the Lebanese. The most vivid example is that I have focused on is diversified growth and the



advancement of small-scale industry within a growing industrial sector as one of the most important determinants which contribute to this balance.

I worked in depth on the interaction between the public and the private sectors, based on the central role of the state, in order to shift towards the industrial model, and to give the private sector a great scope for expansion in type, quality and performance.

This strategy recalls the major objectives of the industrial policy to be adopted in Lebanon, according to the concept of the development strategy to be adopted in the first place.

Unfortunately, a number of successive officials in power have adopted some of its concepts and overlooked others. They supported the rentier sectors to the detriment of the first productive

sector, or they started to take restrictive measures that contradict free trade regulations. However, what can keep a possible glimmer of hope is the fact that the basic paper, in addition to the amendments I made thereto to keep pace with urgent industrial developments, is still considered the main key to obtaining the desired results in order to build the solid pillars and foundations of a Lebanese industrial sector that has the capabilities for internal confrontation and competition in foreign markets.

In order to extend the benefits and to facilitate its obtainment, its reading or its downloading, the Institute publishes it at the following link:

Click to read or download

<http://iri.org.lb/documents/Booklet.pdf>

Because scientific research contributes to the progress and preservation of societies by ensuring a better life, the Industrial Research Institute contributed during the year 2020 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.

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Contents lists available at [ScienceDirect](#)

Heliyon

journal homepage: www.cell.com/heliyon



Research article

Zinc, aluminium, tin and Bis-phenol a in canned tuna fish commercialized in Lebanon and its human health risk assessment

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^f Department of Nutrition, Faculty of Pharmacy, Saint Joseph University, Beirut, Lebanon

RESEARCH ARTICLE

Nutritional value of the Middle Eastern diet: analysis of total sugar, salt, and iron in Lebanese traditional dishes [version 1; peer review: 2 approved]

Maha Hoteit ¹, Edwina Zoghbi², Mohamad Al Iskandarani ¹, Alissar Rady ², Iman Shankiti², Joseph Matta^{3,4}, Ayoub Al-Jawaldeh ⁵

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Article

A Comprehensive Approach in Medical Nutrition Therapy for Adults' Weight Loss Management in Lebanon

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Original Article

Muscular Maximal Strength Indices and Bone Variables in a Group of Elderly Women

Riad Nasr^{1,2}, Nathalie Al Rassy³, Eric Watelain^{4,5}, Joseph Matta^{6,7}, Fabienne Frenn⁶, Maroun Rizkallah⁸, Ghassan Maalouf⁸, César El Khoury¹, Abdel-Jalil Berro¹, Rawad El Hage¹ 

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Body Image Satisfaction and Interest in Losing Weight between Gender

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

IDAL MATCHMAKING PLATFORM PRESENTATION AT IRI

January 28, 2020

On Tuesday the 28th of January 2020, the Lebanon SoftShore Cluster at ELCIM organized an information session at the IRI to introduce the soon-to-be-launched “Online Business matchmaking platform” prepared by IDAL.

This platform will be open to companies in the productive sectors (mainly manufacturing, agriculture, hospitality, and ICT services) that are legally registered in Lebanon and operational for at least two years and will help connect Lebanese SMEs with a network of investors interested to invest in



their business through equity participation.

BRIDGE BETWEEN ACADEMIA AND ENTREPRENEURSHIP/COLLABORATION BETWEEN ELCIM&BERYTECH FOUNDATION.

September 1, 2020

ELCIM is very happy to support the bridge between Academia and Entrepreneurship through the management of the ACT Smart IP Valorization Grants Program launched by Berytech Technology & Health. 4 grants of \$25,000 were awarded to 4 teams.

The selected participants followed a training program led by Dr. Bijan Azad. The training program will help the winners of the grant to develop a commercially viable innovation.

As such, ELCIM delivered 4 group trainings on Value Proposition Design, Value Proposition Validation, Market Sizing and Minimum Viable Product Design. 16 one-on-one mentoring sessions were also provided to the 4 different teams.



CIT

The Center for Innovation and Technology followed the progress of 5 awarded projects within its Innovation voucher support program, in relation to their planned milestones and activities.

The initial part of awarded voucher (\$3,000 out of a total of \$6,000 per team) was released and the teams geared up for the second part of the project.

TRAININGS

• Food Packaging Manufacturing Organizations Project

January 14-2020

Relaunch of the Food Packaging Project in Collaboration with Notre Dame University to support food packaging industries in Lebanon. This study aims to assess the current status in order to increase compliance with local and international standards providing tailor made technical assistance to this industry, in order to evaluate the prerequisite programs in food packaging manufacturing organizations and to associate these findings with microbiological testing of packaging materials and food contact surfaces as well as employee hands swab samples taken from these organizations.

1- Lean Manufacturing Process: February 12-2020;

Lean Manufacturing Process In-House training

was held at the Industrial Research Institute premises. It is a way of thinking towards satisfying the customer through On Time delivery, by eliminating wastes in the developments of a company. It is a way of Personal discipline and commitment that a person can apply in his daily life and then transfer this to his work environment to improve productivity.

2- Data science: February 26-2020;

Data Science is the study of data. It includes developing methods of storing, analyzing and recording data to efficiently extract valuable information as well as applying knowledge and insights from structured and unstructured data, so the participant can build a Data Science team within his organization and his Business team.



• **The training on the MVP (Minimum Viable Product)**

December 10, 2020

The training on the MVP (Minimum Viable Product) for the winner of the ACT Smart IP Valoriza-

tion Program from Berytech in collaboration with ELCIM, was organized on December 4. It was delivered by Dr. Bijan Azad.

LSS

“Remodeling a Resilient Tomorrow” Webinar

In collaboration with the Lebanese Embassy in the UAE, the Lebanon SoftShore Cluster has organized on the 15th of July, 2020 a Webinar entitled “Remodeling a Resilient Tomorrow” gathering Lebanese ICT Entrepreneurs from Lebanon and the UAE.

During this event, the speakers exchanged their business experience and the adaptations strategies implemented to overcome the challenges generated by the Covid-19 crisis, moreover they agreed to open up future collaboration channels between Lebanese and Emirati companies in order to leverage their market experience and technical knowledge for better opportunities.

“Unfolding ICT Collaborative Opportunities in Challenging Times” Webinar

On the 4th of November 2020, the Lebanon Soft-Shore Cluster organized in collaboration with the Lebanese Embassy in Kuwait a webinar entitled “Unfolding ICT Collaborative Opportunities in Challenging Times”.

The event’s objective was to bring together Lebanese ICT entrepreneurs and Kuwait businesses to highlight each market’s specificities and discuss new paths for collaboration.

MAIA-TAQA ENI CBC MED Project

15 December 2020

Some exciting updates from Maia-Taqa, Lebanese partners activities

Follow-up and coordination meeting with the teams of IRI, UTILITALIA and CEEBA in order to set the schedule and structure of the Train-the-Trainers courses for the Lebanese partner. On the menu, the methods that will be adapted in the training sessions:

- Some lessons will be taught on technical training, coordinated by IRI; and other lessons will be held by ASCAME and CEEBA.
- The project will provide a certificate of attendance, if the to-be-

trained participate at a minimum of 80-90% of the lessons.

- Lessons will be held live



Award of the design tender for the wastewater treatment plant to Watermastercompany.

The pilot project part of the MAIA TAQA CBC MED project will irrigate neighboring agricultural spaces and will serve as demonstrator for future initiatives.

Launch of the TRANSDAIRY CBC MED Project

The project aims to introduce innovative ICT and bio/ Nano technologies to the dairy value chain to enhance its productivity. Two living labs will be established for this purpose: one dealing with ICT technologies and the other with BIO/NANO technology.





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

TRAINING AND CAPACITY BUILDING

Dissemination Workshop:

Dr. Yaacoub discussed various scientific collaborations with the Ministry of Economy and the Governor of Beirut.



Dissemination/ Media:

TV interview on Family Awareness discussing Environment at Télé Lumière.

In-plant demonstration:

LCPC visited 138 sites and companies and filled the initial assessments to apply CP Methodology

Awareness Raising:

Training to Master's students at different Universities mainly LU, NDU, MEU and USJ.

LCPC Participations

EU and ACTED cooperatives support Initiative.
Inclusive Growth for Lebanon's Communities At Monroe Hotel



Seminar on growth with financing at Sin El Fil Municipality.



Meeting with the Governor of Beirut at Beirut Municipality



OUTPUTS

- Brochures
- Newsletters (21)
- Annual Reports (17)
- Manual Guide (6)
- Factsheets (47)
- CD Rom
- Text book on CP:
“Half is enough: An Introduction to Cleaner Production



IRI



**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 DINENISO/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 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 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 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 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 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.

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:

1. 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.
2. 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.
3. Oversight of the local market. This function is tasked to the Consumer Protection Directorate at the Ministry of Economy and Commerce .
4. 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).
5. 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. Thirteen 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.



DEVELOPMENT OF HUMAN RESOURCES

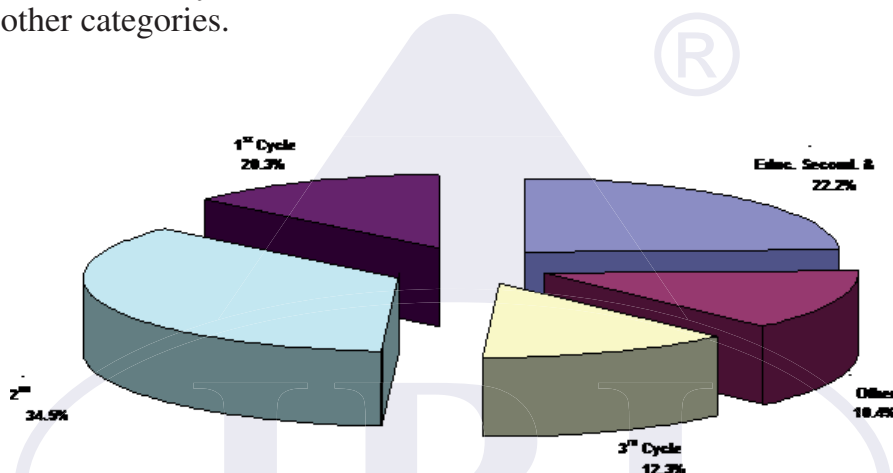
DEVELOPMENT OF HUMAN RESOURCES

The number of IRI staff members amounted to 162 at the end of 2020; 66% are males, while 34% are females.

The average age is around 39 years.

They can be categorized according to the level of their education:

- 20 hold a 3rd Cycle
- 56 hold a 2nd Cycle
- 33 hold a 1st Cycle
- 36 are in their secondary and technical studies
- 17 are in other categories.



Elementary Levels	No.	%
3 rd Cycle	20	12.3
2 nd Cycle	56	34.5
1 st Cycle	33	20.3
Secondary Education & Tech	36	22.2
Other *	17	10.4

Average Age	Gender	
39 Years	66% Male	34% Female

(*) other excluded

Average Age	Gender	
39 Years	65% Male	35% Female



ON-GOING EMPLOYEE TRAINING

MISSIONS (Trainers, Experts & Speakers)

Participant	Organizer	Object/Title	Date	Location
Joseph Matta	UNIDO - Ministry of Industry - Italian Agency for development cooperation	Virtual training on Zaatar Value Chain	10,17/11/2020	Webinar

Local Training, Seminars & Workshops

Participant	Organizer	Object/Title	Date	Location
Thomas Sabbagh	OMSAR	Organize, manage and develop people	09/01/2020	Online
Thomas Sabbagh	OMSAR	Succeed as a First-Time Manager	28/01/2020	Online
Carine Slaiby	معهد باسل فليحان المالي والاقتصادي	اجتماع المنسقين السنوي للترتيبات المتعلقة بأنشطة المعهد لعام 2020	12/02/2020	معهد باسل فليحان المالي والاقتصادي
Thomas Sabbagh	OMSAR	Add Coaching to your Management Style	13/02/2020	Online
Ahmad Hassan	UNDP – KIGALI	Launching of the National Cooling PLA of Lebanon	20/02/2020	Radisson Blu Hotel, Verdun
Hanna Francis	Ministry of Industry – OMSAR	اطلاق منصة تعاون الجامعات وقطاع الصناعة	20/02/2020	Hilton Hotel, Beirut
Mohamad Assaad El Hajjar	Tigo	The Solar first aid kit	23/04/2020	Webinar
Stephanie Al Asmar	OMSAR	Basics of Project Management	04/06/2020	Online
Mohamad Assaad El Hajjar	Zmerly& Co	Underfloor heating	05/06/2020	Webinar
Mohamad Assaad El Hajjar	LCEC	Sustainable Energy in Lebanon: Planning over actions to exit the survival mode	07/07/2020	Webinar
Elias Maalouf Edgar Shaaya Joseph El Helou	Physikalisch–Technische– Bundesanstalt PTB	Infrared thermometer calibration	08/07/2020	Webinar
Edgar Shaaya Hanna Francis Carine Slaiby	Physikalisch–Technische– Bundesanstalt PTB & Global–lyCool	Optimize your digital marketing: Towards an effective and converting website	25,27/08/2020 01,03,07/09/2020	Webinar
Thomas Sabbagh	OMSAR	إدارة الاجتماعات	16/09/2020	Online
Imad Hage Chehadeh	Physikalisch–Technische– Bundesanstalt PTB & the German Development Institute DIE	The transition towards a green economy and its implications for quality infrastructure	30/09/2020	Webinar
Robert Haddad	AIDMO	Quality Infrastructure on regional and international level	13/10/2020	Webinar

Participant	Organizer	Object/Title	Date	Location
Robert Haddad	AIDMO	Role of metrology to complete quality infrastructure in the arab region	19/10/2020	Webinar
Edgar Shaaya Carine Slaiby	Physikalisch–Technische– Bundesanstalt PTB &Global– lyCool	Optimizing social media	20,22,27/10/2020 ٢٠٢٠/١١/١١	Webinar
Robert Haddad	AIDMO	The importance of regional cooperation to enhance metrology and measurement capabilities	22/10/2020	Webinar
Mohamad Assaad El Hajjar	General Federal Ministry for the Environment	BUILD ME project	03/11/2020	Webinar
Amine Jbeily	UNIDO – Ministry of Industry – Italian Agency for development cooperation	Virtual training on Zaatar Value Chain	10,17/11/2020	Webinar
Robert Haddad Stephanie Al Asmar Hanady El Khally RaymoneKhazzaka Elie Melky Ahmad Hassan Mark Tahchy	Physikalisch–Technische– Bundesanstalt PTB& National Institute for Standards (NIS, Egypt)	Proficiency testing ISO 17043	16-17,20/12/2020	Webinar

LIBNOR

Participant	TC Number	Standard Title	Date
Dany Tahchy	NLTC 96 Tower Cranes	ISO 16880 / ISO 19961 / ISO 25599 / ISO 27245 / ISO 15696	09/01/2020
Dany Tahchy	NLTC 178: Technical committee for Lifts	EN 81–28: 2018 / EN 81–21: 2018 / EN 81–70: 2003	14/01/2020
Tarek Hakim	TC 44 – Welding and allied process	ISO 4036 – ISO 6947 – ISO 13920 – ISO 14175 – ISO 15607	05/02/2020
Haitham Shawa	TC 2207 – Furniture	EN716–2,1 – EN 527–2, EN 581–2–3, EN 14073–2, EN 14073–2, EN1335–1/2/3/4 – CEN/TS16526 – CEN/TR14699 – CEN/TR17202, EN14072 – ISO13349 – ISO 13351 – EN14825 – EN1614 – EN1021–1/2, EN597–1/2 – EN1023–1/2/3 – EN14074 – CEN/TR16015 – EN1116 – EN15372	27/02/2019 05/02/2020
Haitham Shawa	NL TC 83: Sports and other recreational facilities and equipment	ISO 25649–3/4 – EN 12572–2/3 – EN 749: 2004/AC2005	20/02/2020
Mohamad Assaad El Hajjar	TC 180 لجنة الطاقة الشمسية	NLEN12977–1–2–3–4–5 – NLENISO9806: 2015 – ISO9553:1997 – ISO9808:1990 – ISO/TR10217:1989 – ISO9059:1990	05/03/2020
HaithamShawwa Mohamad El Hajjar	NL TC 83: Sports and other recreational facilities and equipment	EN12572–1:2017, ISO25649–3, EN749:2004/AC:2005, EN913:2018, EN749/AC – EN748+A1 – EN957–2 – EN914 – EN915 – EN1270 – EN1271 – EN 15312 – EN 16664	15/03/2019 24/01/2020
Hovig Kouyoum– djian	NL TC 3019 ممارسات الزراعة الجيدة	NL 811 – NL 820	29/11/2018 03/11/2020
Tarek Hakim	TC 44 Welding	ISO ١٠٦٥٢٠, ISO ٢٠١٨٠:٢٠٠٤٢, ISO ١٧١١٣, ISO/TR ١٨٤٩١, ISO ١٣٩١١	11/11/2020

Participant	TC Number	Standard Title	Date
Hiba Yaacoub	TC 160 Glass in building	EN 1748-1-1, EN 1748-2-1, EN 1288-1-2-3-4-5, EN 12600, EN 356, NLEN 13167	04/10/2020 18/11/2020
Ahmad Habli	TC 22 Road Vehicles	ISO 3929, ISO 13556, ISO 16247, ISO 23274-1/2, ISO 13216-1/2/3, ISO 29061-1/3/4/5	30/10/2020 26/11/2020
Tarek Hakim	NL TC 44	ISO 10882-1/2, ISO 14732, ISO 17846, ISO 25980	02/12/2020
Haitham Shawa	TC 2207 – Furniture	EN 1130:2019, EN 14073-3:2004, EN 716-1 + AC:2019, EN 1116:2018	05/08/2020 02/12/2020
Amine Jbeily	TC 146 Air Quality	ISO 7934 Am 1:1998, ISO 7935, ISO 11632, ISO 11564, ISO 10849, ISO 12141, ISO 9096, ISO 10155, ISO 21258, ISO 25139, ISO 25140, ISO 13833, ISO 14385-1/2, ISO 18466, ISO 17211, ISO 17179, ISO 21877, ISO 15713, ISO 11338-1/2, ISO 10397, ISO 12039, ISO 10911-1/2, CEN/TR 17078, ISO 10780, ISO 14164, EN 14791 – EN 14181 EN 13284-1/2, ISO 9096, ISO 25597, ISO 10155, ISO 23210, ISO 13271, ISO 16911-2, ISO 9096, ISO 25597, CEN/TS 13649, EN 12619, EN 15058, CEN/TS 16429, EN 1911, EN 15058, EN 1948-1/2/3/4/5	29/08/2020 11/12/2020

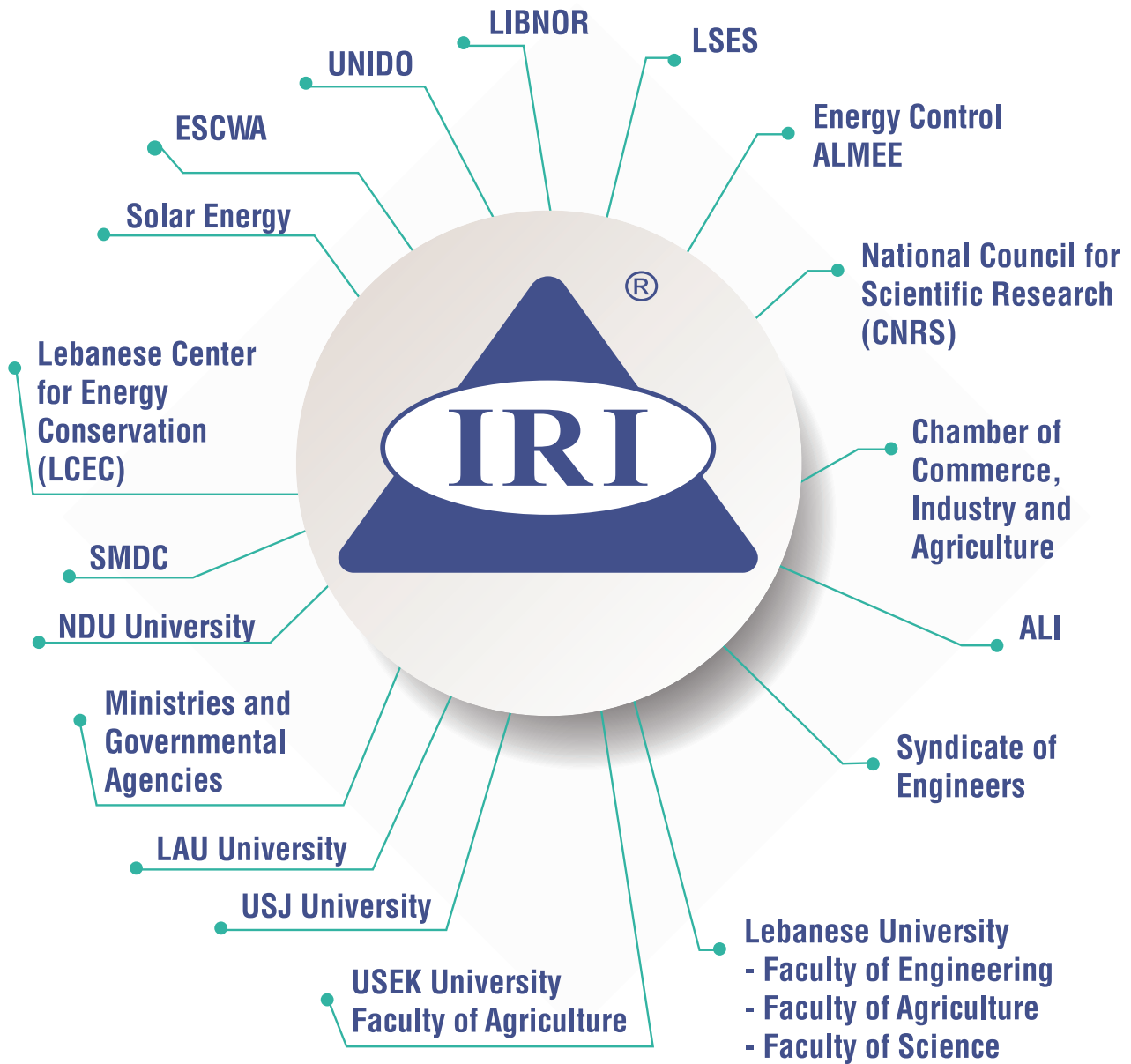
IRI Seminars / Conferences

Participant	Organizer	Object/Title	Date	Location
Stephanie Al Asmar Tony Chammai Mahmoud Amhaz Hanna Francis Dany Tahchy Roy Reaidi WadadDaher FadyMelhem Michael Abi Fadel Elias Bechara Joelle Saikaly Danielle Gemayel Edgar Shaaya Marc Cherfan Lama AbouRjeili Perla Hanna Elie Melky Ahmad Hassan Jihad Hajj Chehade RaymondeKhazzaka Marianne Chucric Mohamad Assaad El Hajjar	ELCIM / IRI	Lean Manufacturing Awareness Session	12/02/2020	IRI
Thomas Homsic	Electrical Lab-IRI	Mechanical Shock Test	28/07/2020	IRI
MehydineHabli	Electrical Lab-IRI	Safety of electric toys	10/09/2020	IRI
Thomas Homsic	Electrical Lab-IRI	Glow Wire Test	13/10/2020	IRI

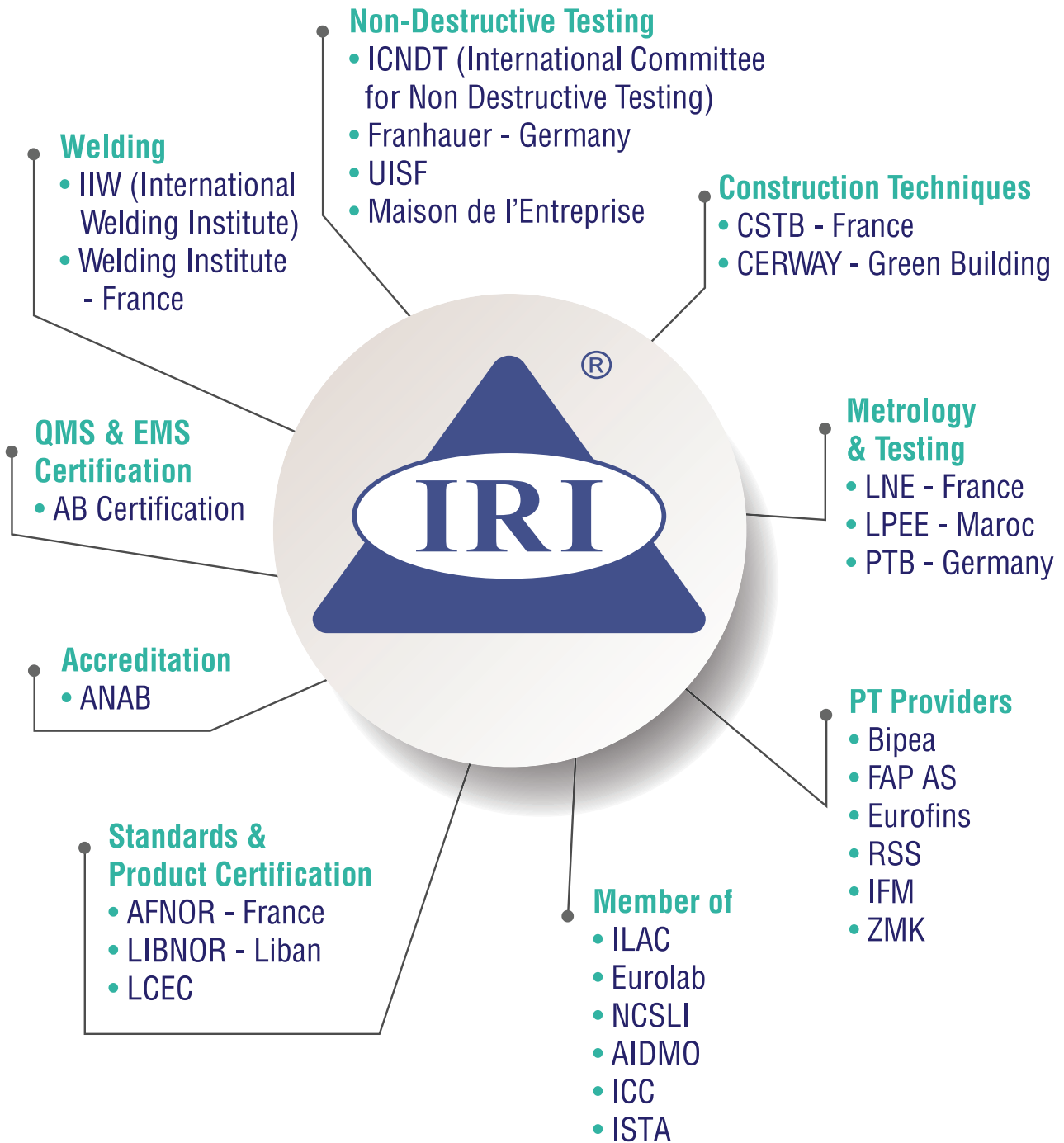


INTERNATIONAL AND LOCAL PARTNERSHIPS

LOCAL PARTNERS



INTERNATIONAL PARTNERS





DECREES, LAWS AND DECISIONS

LAWS

Law		Official Gazette		Subject	Party
Number	Date	Number	Date		
178	28/05/2020	23	04/06/2020	Licensing the cultivation of the cannabis plant for medical and industrial use	Lebanese Parliament

DECREES

Decree		Official Gazette		Subject	Party
No.	Date	Issue	Date		
6155	21/01/2020	4	23/01/2020	Considering the government headed by Saad Al-Din Al-Hariri resigned	President of the Republic
6156	21/01/2020	4	23/01/2020	Nomination of Mr. Hassan Diab as Prime Minister	President of the Republic
6157	21/01/2020	4	23/01/2020	Government formation	Presidency of the Council of Ministers
6843	14/08/2020	35	20/08/2020	Amending Decree No. 5706 of October 1, 2019 regarding making national standard specifications related to fertilizers and soil conditioners legally binding.	Ministry of Industry
6995	29/09/2020	39	08/10/2020	Making national standard specifications related to petroleum products and lubricants legally binding.	Ministry of Industry
6996	29/09/2020	39	08/10/2020	Making national standard specifications related to electrometry equipment legally binding.	Ministry of Industry
6997	29/09/2020	39	08/10/2020	Making national standards related to solar energy and photovoltaic systems legally binding.	Ministry of Industry
6998	29/09/2020	39	08/10/2020	Making national standards related to national standard specifications related to construction and construction materials legally binding.	Ministry of Industry

Decree		Official Gazette		Subject	Party
No.	Date	Issue	Date		
6999	29/09/2020	39	08/10/2020	Making national standards related to national standard specifications related to health care technologies, devices and medical supplies legally binding.	Ministry of Industry
7000	29/09/2020	39	08/10/2020	Making national standards related to food legally binding.	Ministry of Industry
7001	29/09/2020	39	08/10/2020	Making national standards related to furniture legally binding.	Ministry of Industry

RESOLUTIONS

Resolutions		Official Gazette		Subject	Authority
No.	Date	Issue	Date		
20/1	14/05/2020	21	21/05/2020	Conditions to be observed in the factories of protective fabric masks	Ministry of Industry
1	19/05/2020	22	28/05/2020	Controlling the movement, the quality and the prices of goods and materials.	Ministry of Industry
21/1	19/05/2020	22	28/05/2020	Conditions to be observed for inactive medical devices.	Ministry of Industry
24/1	02/06/2020	25	11/06/2020	Approval of the mechanism and conditions for benefiting from the provisions on the subsidy of financing operations for the import of industrial raw materials	Ministry of Industry
9	04/06/2020	29	09/07/2020	Amending the Cabinet decision related to the request of the Ministry of Economy and Trade to impose a dumping fee in an anti-dumping complaint from a producer of aluminum bars, angles and profiles	Ministry of Economy and Trade
10	10/08/2020			The stimulus plan for the Lebanese government in the industrial field	Minutes of the Council of Minister's session

Resolutions		Official Gazette		Subject	Authority
No.	Date	Issue	Date		
108	14/07/2020	30	16/07/2020	Amending Resolution No. 175 of September 15, 2015 regarding the replacement of metal gas bottles (butane / propane) existing in the local market	Ministry of Energy and Water
69/1	26/10/2020	43	05/11/2020	Approval of the mechanism and conditions for benefiting from the provisions of subsidy for financing operations related to the import of industrial equipment	Ministry of Industry
70/1	26/10/2020	43	05/11/2020	The mechanism for implementing the industrial sector stimulus plan	Ministry of Industry
71/1	05/11/2020	44	12/11/2020	Conditions to be observed with regard to locally manufactured goods that are presented for the first time in the market	Ministry of Industry
190	02/11/2020	44	12/11/2020	Amendment of Resolution No. 175 September 15, 2015 regarding the replacement of metal gas bottles (butane / propane) in the local market	Ministry of Energy and Water

CIRCULARS

Circular		Subject	Party
No.	Date		
2020/31	2020/08/19	To all public administrations, public institutions, municipalities and their unions, and the councils concerned with works regarding compliance with national standards and specifications.	Presidency of the Council of Ministers



COMMUNICATION & MEDIA

NBN TELEVISION, 11/03/2020

Monitoring by the Industrial Research Institute of goods for protection against corona.



LBC, 14/03/2020

Non-conforming sanitizing materials in the market... How can a citizen distinguish them?



MTV: AL HALL ENNA, 26/03/2020

The role of the Industrial Research Institute in assessing the conformity of the goods for the consumer's safety and protection during the Corona pandemic.



NOUR RADIO, 25/03/20

Corona preventive measures taken at the Industrial Research Institute.



NEW TV, 08/06/2020

Presentation of the results of analyzes of the Lebanese seawater.



MTV, 01/12/2020

Amine Jbeily, Technical Director of the International Organization for Grain Science and Technology for an additional four year period.



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