

Skill Newsletter by Life Sciences Sector skill Development Council

ISSUE: 31; OCTOBER 2023

INSIDE STORIES

- LSSSDC Signed MoU with ADMI for enhancing skills in the IVD industry.
- LSSSDC and Q Academy Join Hands to Implement Various Skill Initiatives
- LSSSDC Approval of two New Qualifications and eight Micro credentials
- 37th GB meeting
- Key Events
- LSSSDC Products
- Special Feature



HIGHLIGHTS

The LSSSDC and ADMI partnership, under the "Skill India Initiative," will enhance skills in the IVD industry, benefiting both students and professionals while strengthening the sector.

Life Sciences Sector Skill Development Council and Q academy Joined hands to implement various skill Initiative. This dynamic collaboration is set to revolutionize skill development at both state and national levels, paving the way for a more inclusive and gender-equal workforce in India. Stay tuned for updates on the transformative impact of this alliance.



LIFE SCIENCES SECTOR SKILL DEVELOPMENT COUNCIL

LSSSDC is an industry led not for profit organization that awards Vocational Education & Skill Certification for Life Sciences Sector. It is an approved awarding body of NCVET under the Ministry of Skill Development & Entrepreneurship and is an authorized advisory and monitoring body under MSDE for engaging Industry for Apprenticeship under Apprenticeship Act. It will serve to address skill shortfalls in the Life Sciences Sector in India includes Pharmaceuticals (including Cosmetics, AYUSH & Nutraceuticals), Medical Devices & IVD, Biotechnology, and Research & Development services related Occupations.

RIJAN





From CEO's Desk

Dear Colleagues,

We are extremely delighted to bring to you our second edition of 'Srijan' this year. We named our newsletter 'Srijan' to communicate the essence of our work that we are doing in Life Sciences Sector. "Srijan" is "Creation" of opportunities, relevant skilling products and skilled manpower for Life Sciences Sector.



I am glad to communicate that your Council has embarked on the growth path with various skilling initiatives giving positive outcome. Council has aligned

with government & state skilling missions at various states for skilling of manpower through various schemes. We are creating network of Training Partners across the country and collaborating with Academic institutions directly or through the network partners. Our association with Pharmacy Council of India is taking shape and we are hopeful that Pharmacy colleges will work together with the Council for creating industry ready workforce through our joint initiatives.

Our focus on Apprenticeship is sharpened through the collaboration with 2COMS (our PMU) and is bearing fruits now.

We have initiated multitude of activities in Life Sciences sector, which will give us the opportunity to conduct relevant and much needed manpower skilling so as to foster further growth impetus for the Life Sciences sector and Council.

Few specific initiatives are:

- GMP skilling: We are happy to inform that Council has aligned with the clarion call given by Health Minister, Dr. Mansukh Mandaviya for the adoption of GMP by all pharmaceutical organizations. LSSSDC has created ready to implement skilling products for GMP for all employees in your organizations. For conducting physical / virtual skilling, Council has developed specific products for
 - · Upskilling / Re-skilling of existing employees on cGMP & revised Schedule M
 - \cdot Fresh Skilling of employees on cGMP & revised Schedule M
 - \cdot Specific Modules on Data Integrity; cGMP for entire organization



- MedTech (Medical Device): One of the stellar initiatives by GoI is to develop MedTech / Medical Devices sector in the country and launch of Production Linked Incentive (PLI) Scheme for Promoting Domestic Manufacturing of Medical Devices scheme to undertake comprehensive interventions. Council has aligned with the GoI initiative and curated specific programs for skilling manpower in Medical Devices sector.
 - * Council also signed the MoU with Association of Diagnostics Manufacturers of India (ADMA) to work together with industry experts to create most relevant courses, conduct skilling and ensure placement of candidates in the companies.
- **Schools:** Council signed MoU with Central Board of Secondary Education (CBSE) recently and has initiated programs in CBSE affiliated schools to as to prepare the students for opportunities in Life Sciences sector.
- **CSR:** Your Council is undertaking massive skill initiatives by upgradation of products, availability of products in various Indian languages and creation of new products as per the need of the sector. We urge you to contribute to Council through your CSR funds so that Council can contribute back to you with future ready skilled and well-equipped manpower and make a worthwhile difference to our Life Sciences ecosystem.
- **Parakh Se Pehchan (Recognition of Prior Learning):** We would like to invite all the companies to take advantage of RPL scheme wherein your current workforce get certified as skilled workforce and we can recognize the requirements for upskilling / reskilling and finally award certification.

The integration of Artificial Intelligence (AI) in the Life Sciences sector is inevitable. Thus, your Council is gearing up to cater to the future skilled manpower requirements of the Sector and creating futuristic courses which will address the specific skill gaps and requirements by the sector.

Special feature: From this edition, we are initiating a separate section of 'Special Feature' in Srijan wherein we will invite each of you to contribute your thoughts on the Life Sciences sector, its trends and future requirements and policy intervention that will impact the sector moving forward. We heartily welcome your contribution to this section and the same shall reach to the universe that the Council is catering and communicating.

We look forward to your suggestions and responses, as always.

With Warm Regards, Goutam Bhattacharya





Life Sciences Sector Skill Development Council and Association of Diagnostics Manufacturers of India Join Forces to Boost Skilling in the IVD Industry under Skill India Initiative



Glimpse of the MOU Signing event in presence of Mr. Goutam Bhattacharya CEO LSSSDC and Mr. Jatin Mahajan, MD Mitra & Company, and Secretary ADMI

Life Sciences Sector Skill Development Council has signed a with Association of Diagnostics Manufacturers of India (ADMI) in presence of Shri. Nilambuj Sharan, Senior Economic Advisor, Ministry of Skill Development and Entrepreneurship, Govt. Of India.

The MoU was exchanged between Mr. Goutam Bhattacharya CEO LSSSDC and Mr. Jatin Mahajan, MD Mitra & Company, and Secretary ADMI. The signing ceremony was attended by Ms. Veena Kohli, CEO Vanguard Diagnostics and past President- ADMI, Mr. Rajat Kapoor, Asso. Director-Secretariat ADMI, Mr. G M Mohan Reddy, NSDC and Anshul Saxena Sr. Director LSSSDC

This long-term MoU shall enable development of the skilling ecosystem and implementation of various demand based vocational education programme under "Skill India Initiative" which would aim to enhance the employability of students and existing professionals by equipping them with Industry relevant advance and futuristic skills and in turn shall benefit IVD Industry in India.





LSSSDC and Q Academy Join Hands to Implement Various Skill Initiatives



LSSSDC, CEO and Senior Director glimpse of the signing event

The Lifesciences Sector Skill Development Council (LSSSDC) and Q Academy have teamed up to implement a range of skill development initiatives at the state and national levels. This collaboration is poised to reshape the landscape of skill development, with a special focus on empowering women through their flagship project, Project Sam.

Empowering Women through Project Sam

One of the highlights of this partnership is Project Sam, which is dedicated to promoting and empowering women

through skill development. It seeks to bridge the gender gap in the workforce by providing women with the skills and support they need to excel in their chosen fields. While Project Sam takes the spotlight, this alliance also extends its reach to various other skill development projects at both state and national levels, promising to make a significant impact on skill development in India. Together, LSSSDC and Q Academy are committed to building a more inclusive, gender-equal, and prosperous workforce. Stay tuned for updates on this transformative partnership.



LSSSDC and CBSE Collaborate to Elevate Skill Development in Education



Glimpse of the MOU signing event

n a remarkable development, the Life Sciences Sector Skill Development Council (LSSSDC) and the Central Board of Secondary Education (CBSE) have forged a crucial Memorandum of Understanding (MOU) to enhance skill development within education sector. This the strategic partnership aims to empower students with industry-relevant skills, blurring the lines between academic knowledge and practical application in the life sciences and related fields.

The MOU outlines various collaborative initiatives, including curriculum development, teacher training programs, and the integration of skill development modules into the current educational framework, all geared toward preparing students for successful careers in the everevolving life sciences sector. This partnership signifies a significant stride toward a more holistic and employable educational experience, benefiting both students and the industry.

By leveraging the combined strengths of LSSSDC and CBSE, this collaboration aspires to create a seamless transition for students from educational institutions to the professional world, ensuring that they are well-equipped with the skills and knowledge required to thrive in the dynamic life sciences sector. This MOU marks an important milestone in the realm of skill development within the education sector and promises to shape a brighter future for students and the life sciences industry alike.



LSSSDC Receives NCVET Approval for Eight Micro credentials and Two New Qualifications

The Life Sciences Sector Skill Development Council (LSSSDC) proudly announces the approval of eight micro credentials and two new qualifications from the National Council for Vocational Education and Training (NCVET).

These newly approved micro credentials are set to enhance the skills of professionals in the life sciences sector. They include:

- 1. Foundation for Pharma Sales and Marketing
- 2. Product Promotion with Registered Medical Practitioners
- 3. Retail Chemist Prescription Audit
- 4. Retail Pharmacy Management and Sales
- 5. Foundation Skills for Retail Cashiers
- 6. Order Management
- 7. Managing Point of Sales (POS)
- 8. Payment and Transaction Management

In addition to the micro credentials, two new qualifications have been added to LSSSDC's repertoire:

Specialist - Quality Assurance (Pharma, Biological Products, and Medical Devices): This qualification offers five electives and two options, enabling professionals to specialize in quality assurance within these crucial sectors.

Research Associate - Pharma and Biological Products: This qualification provides seven electives and one option, allowing individuals to deepen their expertise in pharmaceutical and biological research.

The approval of these micro credentials and qualifications underscores LSSSDC's commitment to advancing skill development and education in the life sciences sector, ensuring that professionals in these fields receive comprehensive training and expertise, contributing to the growth and excellence of the industry.





LSSSDC's Train The Trainer Program in Nagpur Empowers Trainers for Medical Sales Representatives Qualification under LS-Pro Project



LSSSDC, Senior Director Dr. Nivedita and Mr. Anubhav glimpse of the training event

LSSSDC transformative Train the Trainer program recently unfolded in Nagpur, conducted under the pioneering LS-Pro initiative. Led by Master Trainer Anubhav Saxena, this program successfully prepared trainers to guide and qualify future Medical Sales Representatives.

LS-Pro, an innovative venture, is dedicated to nurturing and supporting new Training Partners, focusing on skilling activities, particularly within the burgeoning field of Pharma Sales. It also extends an invitation to aspiring candidates, encouraging them to explore the dynamic and rewarding world of Pharma Sales in India. This initiative aims to not only meet the escalating demand for skilled professionals in the booming Life Sciences sector but also to foster a passionate, skilled workforce.

With a rapidly growing presence in the industry, LS-Pro seeks to bridge the gap between a thriving pharmaceutical sector and an eager workforce, ensuring a brighter and more rewarding future for all. As the allure of Pharma Sales in India continues to expand, LS-Pro is at the forefront of shaping the industry's future. Stay tuned for more updates on this promising initiative.





LSSSDC Celebrating World Pharmacist Day 2023: Dr. Nivedita Inspires Tomorrow's Pharma Leaders



LSSSDC, Senior Director Dr. Nivedita glimpse at the event

In honor of World Pharmacist Day on September 25, 2023, Dr. Nivedita, Senior Director of the Lifesciences Sector Skill Development Council (LSSSDC), shared her insights with 450 enthusiastic pharmacy students at Chhatrapati Shivaji College in Deori, Maharashtra.

Dr. Nivedita's address emphasized the vital role of pharmacists in healthcare and the evolving pharmaceutical industry. She underscored the importance of skill development and the need for students to continually update their skills to meet industry demands. Her speech left an indelible mark, inspiring these students to become Pharmaceutical professionals and change-makers in society.

As we celebrate World Pharmacist Day, Dr. Nivedita's visit reminds us of the industry's commitment to nurturing the next generation of pharmacy professionals, ensuring a brighter future for Pharmaceuticals.



LSSSDC Launches 'Parakh Se Pehchaan' Recognizing Prior Learning at Venus Remedies and Panacea Biotech



Parakh se Pehchaan assessment in Venus Remedies and Panacea Biotech

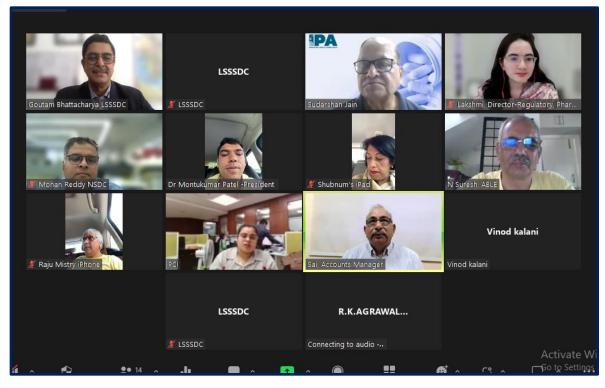
The Life Sciences Sector Skill Development Council (LSSSDC) is leading the way in recognizing prior learning within the life sciences industry with its 'Parakh Se Pehchaan' initiative. This program acknowledges the accomplishments of two distinguished industry leaders, Venus Remedies and Panacea Biotech, marking a transformative shift in the sector.

This recognition not only elevates the status of these organizations but also adds

considerable value to the profiles of their employees. The 'Parakh Se Pehchaan' initiative underscores LSSSDC's commitment to promoting skill development and lifelong learning within the life sciences sector, inspiring a culture of excellence and skill development throughout the industry. This initiative is set to motivate other organizations to participate, fostering a culture of growth, innovation, and expertise in the field.



LSSSDC pursuing a Path to Excellence: Insights from the 37th LSSSDC Governing Body Meeting



LSSSDC, CEO Mr. Goutam Bhattacharya with GB Members in ZOOM Call

We are delighted to share the significant highlights from the 37th Governing Body (GB) meeting of the Life Sciences Sector Skill Development Council (LSSSDC), with a particular focus on the discussions related to the medical device sector. The presence of our distinguished Chairman, Mr. Sudarshan Jain, at this event was especially noteworthy, as he expressed unwavering support and enthusiasm for the initiatives undertaken by LSSSDC in the realm of medical devices.

The enthusiasm displayed by our GB members extended far beyond the leadership. Numerous GB members actively engaged in discussions, demonstrating their steadfast commitment to advancing the medical aevice segment within LSSSUC. Their invaluable insights and contributions have paved the way for transformative strategies, which are poised to shape the future of skill development in the medical device field.

challenges As we address the and opportunities that await us in the medical device sector, our dedication to empowering the workforce with the essential skills needed to excel in this dynamic industry remains unshakable. Together, we embark on this journey with a shared vision of nurturing a highly skilled and proficient workforce, poised to make substantial contributions to the growth and innovation of the medical device industry in India.



LSSSDC Presents 360-Degree Good Manufacturing Practices Program for Production Machine Operators, Manufacturing Assistants, and Packaging Assistants!





LSSSDC Upskilling Program For MSME employee in Gujarat with CED



Under the funding support from CED, Gujarat, LSSSDC has launched an upskilling program for employees and workmen in the Life Sciences Sector. The program aims to enhance the skills of 900 individuals, focusing on Machine Operators, Packaging Assistants, and Manufacturing Assistants in Pharmaceutical MSME companies. IDMA, Gujarat and GIZ have joined as industry and project partners respectively. The program will use a hybrid mode of delivery and recognize prior learning. Exciting developments for the sector's growth and workforce advancement.





LSSSDC CEO Inspires at FICCI Session on Life Science Skill Development



LSSSDC, CEO Mr. Goutam Bhattacharya with various stakeholder at FICCI event

Mr. Goutam Bhattacharya, CEO of the Life Sciences Sector Skill Development Council (LSSSDC), delivered an impactful address at the FICCI Interactive Session on Skill Development in Life Science Sectors on July 15, 2023.

In his speech, Mr. Bhattacharya emphasized the critical role of skill development in life sciences, highlighting the need for a skilled workforce to meet industry demands and foster innovation. He shared LSSSDC's commitment to empowering individuals with the skills required to excel in these sectors.

The audience left the session inspired to contribute to the growth and excellence of the healthcare and life science fields through skill development. The event showcased the pivotal role of organizations like LSSSDC in advancing these sectors through education and training.





LSSSDC CEO attended ISCR 10th Annual PV Symposium



On left LSSSDC CEO with various esteemed member of ICSR symposium

The CEO of the Life Sciences Sector Skill Development Council (LSSSDC) was a distinguished presence at the ISCR 10th Annual Pharmacovigilance (PV) Symposium. This prestigious event took place at the Vydehi Institute of Medical Sciences in Bengaluru on September 15th and 16th.

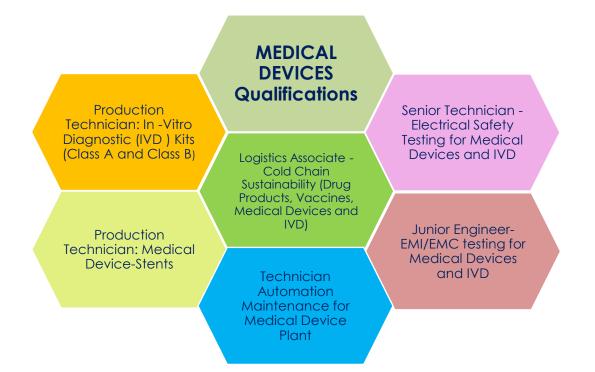
The CEO's expertise enhanced the quality and relevance of the sessions, fostering a

platform for knowledge exchange and collaboration among PV, Clinical Research, and Academic stakeholders. The CEO's attendance at this symposium reinforced LSSSDC's commitment to the advancement of knowledge and collaboration within the life sciences sector, emphasizing the importance of skill development and education in this vital industry.





Lifesciences Sector Skill Development Council Proposes 6 New Qualifications to Fuel Growth in the Medical Device Sector



Following the resounding success of the Medical Device Policy, India's medical device sector is experiencing unprecedented growth. To further support this expansion and ensure a skilled and capable workforce, the Lifesciences Sector Skill Development Council (LSSSDC) has taken a proactive stance by proposing six new qualifications in the field of medical devices.

These qualifications span a wide spectrum of roles and skills critical to the industry's continued success. From In-Vitro Diagnostic (IVD) kit production to logistics

management of cold chain sustainability, and from electrical safety testing to stent manufacturing, these qualifications are set to empower the workforce with the expertise needed to meet the sector's evolving demands. Additionally, elective qualifications provide specialized skills, ranging from laser cutting to primary packaging. LSSSDC's forward-thinking approach is poised to ensure India's medical device industry remains at the forefront of innovation and quality, with a highly skilled workforce capable of addressing diverse sector needs.



Unlocking the Future: Special Edition Unveils the Power of AI in the Life Sciences Sector

Artificial Intelligence (AI) in Life Sciences Sector

Lifesciences Sector has a big influence of artificial intelligence (AI) and digital transformation in various subsector/area of the life sciences industry, including drug discovery and development, Bioinformatics, improving pharmaceutical productivity, clinical trials, sterile packaging, supply chain management amongst others; such influence will lead to increase productivity & efficiency and reduce the human workload as well as achieving targets in a short period of time.

Few prominent areas where the AI influence is predominant in Life Sciences sector are:

Artificial Intelligence in new drug discovery

Artificial Intelligence provides aid in determining hit and lead compounds and provide a faster validation of the drug target and optimization of the drug /product design. Also, various tools of Al also help in Drug screening by analyzing various toxicity prediction as well as bioactivity of any drug.

Artificial Intelligence in product development lifecycle

Lifesciences product development process get artificial intelligence influence as involvement of Al in the development lifecycle of a product from the bench to the bedside can be imagined given that it can aid rational drug/product design; assist in decision making; determine the right therapy/treatment for a patient, including personalized medicines; and manage the clinical data generated and use it for future product development.

Artificial Intelligence in Clinical Research

Artificial Intelligence plays a major role in all the Clinical Research phases as a drug/product clinical trial require 6–8 years timelines with a substantial financial investment where many trial faces issues from participant selection to clinical data management. Here AI can play a major role in all phases of Clinical Trial management including clinical trial monitoring and data management of all enrolled participants.

Artificial intelligence in pharmaceutical manufacturing

With the increasing complication of manufacturing processes along with increasing demand for efficiency and better product/drug quality, modern manufacturing systems are trying to confer human knowledge to machines, continuously changing the manufacturing practice. Hence, with the aid of AI, industries are moving towards automated manufacturing and personalized manufacturing so that error in manufacturing can be reduced and production time can also be reduced and optimized.

Artificial intelligence in Quality Assurance and Quality Control

An automated data entry platform, such as an Electronic Lab Notebook, along with various advanced, intelligent techniques, can ensure the quality assurance of the product. Also, data mining and various knowledge discovery techniques in the Total Quality Management expert



system can be used as valuable approaches in making complex decisions, creating new technologies for intelligent quality control.

Artificial intelligence in product sales

There is many Machines Learning algorithm are being developed which along with easy-to-use interface create analytical roadmaps based on competitors, key stakeholders, and currently held market share to predict key drivers in sales of pharmaceuticals, thus helping marketing executives to allocate resources for maximum market share gain, reversing poor sales and enabled them to anticipate where to make investments.

Artificial intelligence in supply chain management

There are automated warehouses that are utilized in various life sciences sector industries which use AI for proper flow of goods. Machine learning is in general important to optimize the decision-making process in the flow of goods and services alongside supply chain management. Properly applied, these methods can lead to time and resource savings. In particular, the planning process can benefit from well-known statistical methods that have long been used and extended by ML.

Various life Sciences companies in USA have made and are continuing to invest in AI and have collaborated with AI companies to develop essential Pharmaceutical tools. They are shifting towards AI to decrease their financial cost and chances of failure during product entire lifecycle. In USA, there was an increase in the AI market of life sciences industry from US\$200 million in 2015 to US\$700 million in 2018 and is expected to increase to \$5 billion by 2024 which also provide an important prospect to Indian industries. Companies like Novartis, Takeda and AstraZeneca are working in association with Microsoft, Benevolent AI etc., for their drug discovery process.

LSSSDC's various job roles have futuristic approach and provision to integrate AI concepts. For example, Bioinformatics Associate/Analyst, Associate-Clinical Research Management (Pharma, Biologics and Medical devices): Data management, Associate-Store (Pharma/Bio Pharma / Medical Devices): Automated warehouse and more are prepared with future development in mind. These job roles provide a proper approach for individuals to work with AI emerging industry. However, the fear of unemployment in life Sciences industry after AI could be a myth, given that AI will be taking over repetitive jobs, while leaving scope for human intelligence to be used for developing more complicated insights and creativity.¹



Mr. Goutam Bhattacharya & Mrs. Manshi Tyagi



Sector Skill Scramble: Test Your Life Sciences Knowledge

1.		(A doctor's written recommendation for medication)
2.		(Medicinal products and drugs developed)
3.	ILYBOOG	(The study of living organisms)
4.		he branch of science that deals with the properties and composition of matter)
5.		(The use of living systems and organisms to develop or make products)
6.	CIGOYBILORMO	(The study of microorganisms like bacteria and viruses)
7.		(Monitoring and evaluating the safety of pharmaceutical products)
8.	QYALITU CNAURSSAE	(Procedures and practices to ensure product quality)
9.	RBROTAYLAO	(place for scientific research and experimentation)
10	. RTUYEROLAG	(Relating to rules and regulations governing an industry or sector)





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THANK YOU

EDITORIAL TEAM, LSSSDC

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Unscrambled Answer Prescription, Pharmaceuticals, Biology, Chemistry, Biotechnology, Microbiology, Pharmacovigilance, Quality Assurance Laboratory, regulatory