CHEMLOG™ INDIA

2nd & 3rd NOVEMBER 2023
Radisson Blu, Mumbai

COUNTRY'S # 1 EVENT FOR CHEMICAL SUPPLY CHAINS & LOGISTICS

CATALYSING EXCELLENCE IN CHEMICAL SUPPLY CHAIN & LOGISTICS: FROM SOURCE TO SOLUTION

POST SHOW REPORT

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EXECUTIVE SUMMARY

CHEMLOG™ INDIA

INDUS Exposium Private Limited, India's new age business intelligence & marketing services company, share the report of the recently concluded 8th Edition of CHEMLOG India , International Conference & Exhibition, in Mumbai.

What made it special was the sheer timing. The Chemical Industry in India is poised for an even more exciting period than last five years, as the post-covid world is looking at India with a new lens. The industry has been growing at an average rate of 15% in the last five years. Investments into India as companies diversify from China is a reality. The conference looked at China Plus One as a more pragmatic strategy. The future looks bright for as the specialty chemicals (which include unique offerings like specialty polymers, coatings, and electronic chemicals) is expected to be the most lucrative segment reaching $50 billion by 2025. This segment is lucrative because only specialty is expected to be a net exporter. India is already the sixth-largest chemical producer, with a market size of $178 billion in 2021 and expected to reach $290-310 billion by 2027.

The challenges in Chemical Supply Chain do exist. Last year the Chemical stocks performed poorly due to elevated valuation and a slowdown in the global market and high raw material costs. Looking at Chemical clusters like China, Germany, Indonesia, Saudi Arabia, South Korea, and Vietnam, India compared against them is doing quite well. However major concerns related to a) domestic availability of feedstock petrochemical building blocks like C1, C2, C3 and C7 (limited availability of ethylene and propylene in the merchant market, India imports methanol and toulene) b) availability of skilled R&D talent (Only 1400 chemical engineers graduated from top 30 Universities in India). India has made significant progress in ease of doing business, however registering property, paying taxes, enforcing contracts, environmental clearances needs improvement.

The event was truly a celebration of the professionals in the Chemical logistics Industry. Congratulations to the award winners. The sheer expertise of fifty plus leaders and domain experts from all over the globe as speakers added insightful suggestions for improvement in policies (road transport regulation simplification, looking at sustainability not from a compliance perspective, infrastructure for cleaning of trucks, relevance of shipper's declaration form). It was also great to have experts from the government who laid out the upcoming regulations.

All this would not have been possible without the partners. We are indebted to the knowledge partners- Kearney, Networking partners – DGM, PSA BDP, National Logistics Partner – VTRANS, Gold Partners – IndianOil and Cordstrap, Bronze Partner – HURL and enthusiastic volunteering from Students of School of Ports, Terminal Management and Logistics from Symbiosis Skills and Professional University, Pune.

Indus Exposium is excited and looks forward to the next edition of CHEMLOG India. India-Middle East-Europe Economic Corridor is a passage of possibilities and the next edition could possibly look at how the Chemical Industry can take advantage of the same. AI and Technology offer immense efficiency improvement opportunities. We are open to what the Industry thinks and wants. Feel free to exchange ideas.

Next few pages are snapshots of what was discussed.

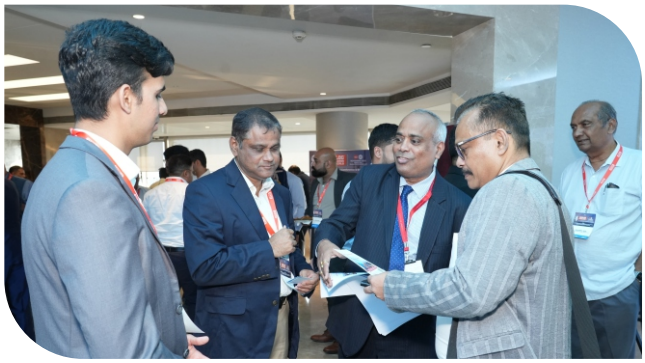
Best Wishes

Sharat Mishra

RECOMMENDATIONS

CHEMLOG™ INDIA

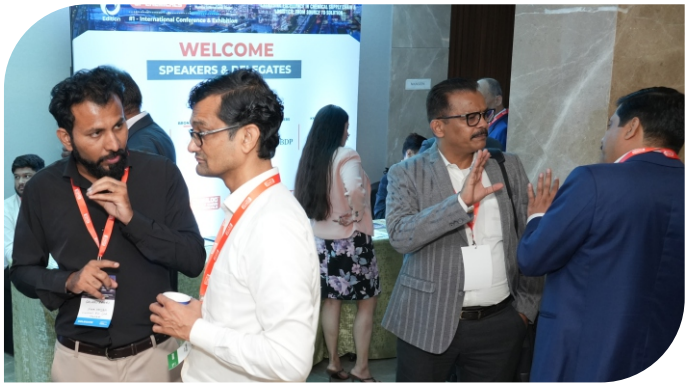
After seven panel discussions involving close to 60 experts below were the recommendations that came out.



Policy Support Needed:

- **PLI:** PLI should be expedited. Chemical Industry would significantly benefit. Budget did look at duty rates. However, a relook at basic customs duty for denatured ethyl alcohol, crude glycerine, acid grade fluorspar, manufacturing ingredients for pre-calcined Ferrite Powder, etc would generate domestic demand.

- **Ease of doing business:** India should take global leadership in simplifying and standardising regulations. Harmonizing regulations and making them straightforward to implement on a global scale is essential. India can bring the European, Indian, American regulators and industry to agree on a common risk based global legal framework. India's digital prowess can come in handy. This will be in line with India's climate change leadership at COP Summit.
  - Product labelling
  - Reduction of plastic waste
  - Packaging
  - Communication related to CLP Regulation, the Detergents Regulation and the Fertilising Products Regulation, REACH, Biocides



- **R&D:** Petchem feedstock availability building blocks C1, C2, C3, and C7, India does not have sufficient feedstock and is a cause for concern. Availability of experts needs to be looked at. Through the education universities, efforts need to be taken to promote professionals within this industry

- **Safe Chemicals Innovation Agenda**: As India marches towards self-reliance by strengthening its research and development infrastructure we would be able to ensure that the Chemical logistics industry leads the way in ensuring in becoming a global exports hub. We recommend setting up regional innovation centres all over India.

Infrastructure Support Needed:

- **Infrastructure:** Infrastructure related to Industrial townships or factories when being built, needs to consider spaces for cleaning of trucks, yards and waste treatment plants to ensure hazardous chemicals not being released into surroundings.

- **Circular Economy:** Govt must provide incentives for an ecosystem to flourish related to the chemical industry. Clusters when formed will facilitate spread of good practices.

- **Cold Chain:** All cold chains within the country should be linked to segment and identify those related to Chemical Industry. From a safety perspective this is critical to monitor accidents.

Regulatory Support Needed:

- **BIS:** The implementation of the Bureau of Indian Standards in 2023 is not yet mandatory. This emphasizes the importance of advocating for standardized safety measures and compliance in the chemical supply chain, even before government regulations enforce them.

- **Regulatory overhaul:** Indian regulations are long overdue and a comprehensive review of all bodies and acts are overdue. DISH – Directorate of Industrial Safety and Health, MISHC – Manufacture, Storage, and Import of Hazardous Chemicals, OISD – Oil Industry Safety Directorate, DGFASLI – Directorate General Factory Advice Service and Labour Institutes, NDRF – National Disaster Response Force, PESO – Petroleum and Explosive Safety Organization, DFAB – Directorate of Factories & Boilers, EIA – Environment Impact Assessment notification 2006, IBA – Indian Boilers Act, TPLI – The Public Liability Insurance Act, CAIRS – Chemical Accident Information and Reporting System, DGH - Directorate General of Hydrocarbons, CAEPPR - Chemical Accident(Emergency, Planning, Preparedness and Response) Rules, IRDAI - Insurance Regulatory and Development Authority, ERDMP - Emergency Response & Disaster Management Planning, Factories act, Indian boiler act, National green tribunal act, Environment protection act, Environment Protection Rules (1986), Environmental Impact Assessment Notification (2020), The Chemical Accident (Emergency Planning, Preparedness and Response) Rules (1996), disaster management act, petroleum act.

Industry Bodies Support Needed On:

- **Industrial Logistics Safety:** The Industry needs to play its part in coming together to formulate a driver database for handling HGV and dangerous chemicals.

- **Market Segmentation:** The industry and government can work together on a two-year global plan to help industry capture market share. A data driven market segmentation drive and an incentive for region-based approach will be helpful. World corridor implementation by connecting Indian transporters to Foreign transporters can deliver cost advantages to India.

- **Welfare:** Measure like chemical vehicle assurance and driver safety needs to be taken at a national level. While building infrastructure, adequate driver resting facilities must be incorporated. Truck manufacturers need to be sensitised on driver comfort.

- **Self-regulation:** Indian Industry needs to self-regulate itself and like the banking industry, Indian govt should layout the outsourcing guidelines for the chemical industry. This will help developing suppliers and a system of self-monitoring mitigating risks and supplier disruption.

- **Talent:** Attracting best talent into this industry is critical. The government and industry can work closely with Universities specially skills universities when they are setting up plants. In countries like Korea and China, this is common practice.

- **Self-Certification:** In countries like United States even a plumber needs a certification. In India hazardous and dangerous goods drivers need to be encouraged to get it. Enforcement and penalties for not complying are not deterring enough. Industry bodies need to come together and agree on minimum qualifications for each role.

- **Costs of Regulatory Compliance:** Industry needs to prepare and agree on how costs of regulation are absorbed by different partners.

- **Skill Development:** Lack of skilled officers with technical experience on specific vessels like Chemical or crude tankers is a reality. It is important that for any industry to thrive, young talent needs to be attracted and nurtured. Industry should work with academia to upskill, reskill.

DAY 1 (02 NOVEMBER, 2023)

CHEMLOG™ INDIA

1. LAMP LIGHTING. (10:15 AM)

The day kicked off with the auspicious lighting of ceremonial lamp. Just as Diwali is a celebration of light over darkness, the presence of luminaries and who's who of the industry gave the event a glow that was unmissable. Hanukkah the Jewish Festival of Lights starts on December 7th and it was appropriate that this conference had numerous professionals from the Globe to shed light on topics related to resiliency.

Industry leaders like Abhishek Prakash Rao, President, RSA; Dr Sudeep Maheshwari, Partner, Kearney; Manish Panchal, Executive Director, Equirus Capital; Rajesh Shah, Executive Director, V-Trans set the ball rolling by taking part in the lamp lighting.

2. INAUGURAL SESSION. (10:30 AM-11:30 AM)

Driving resilience in the chemical supply chain.

Moderator:

- Sanjay Desai, Vice President, Commercial, Supply Technologies, APAC.

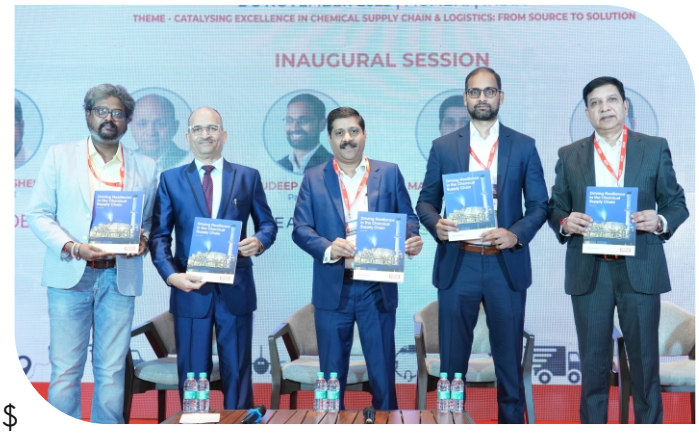
Panellists:

- Abhishek Prakash Rao, President, RSA.
- Dr Sudeep Maheshwri, Partner, Kearney
- Mansih Panchal, Executive Director, Equirus Captal
- Rajesh Shah, Executive Director, V Trans.

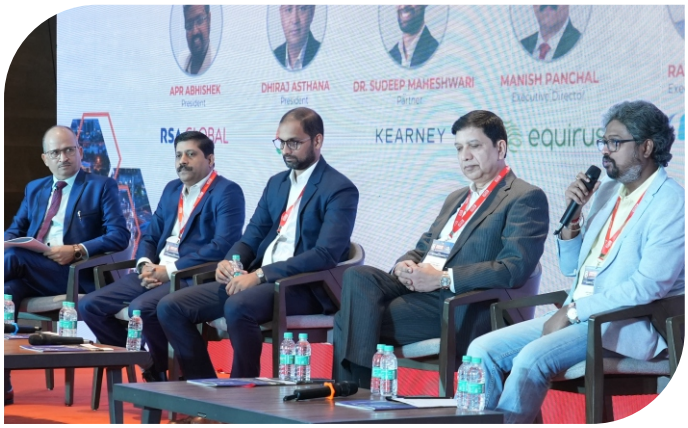
Recommendations:

- **Policy Support:** PLI should be expedited. Chemical Industry would significantly benefit. Budget did look at duty rates. However, a relook at basic customs duty for denatured ethyl alcohol, crude glycerine, acid grade fluorspar, manufacturing ingredients for pre-calcined Ferrite Powder, etc would generate domestic demand.
- **R&D:** Petchem feedstock availability building blocks C1, C2, C3, and C7, India does not have sufficient feedstock and is a cause for concern. Availability of experts needs to be looked at. Through the education universities, efforts need to be taken to promote professionals within this industry
- **Safe Chemicals Innovation Agenda:** As India marches towards self-reliance by strengthening its research and development infrastructure we would be able to ensure that the Chemical logistics industry leads the way in ensuring in becoming a global exports hub. We recommend setting up regional innovation centres all over India.

Key Highlights of the panel discussion were:



- **Policy Support:** The government is focused on promoting PLI – Production linked scheme for domestically produced agro-chemicals. The govt. is also helping in setting up manufacturing facilities for Advance Chemistry Cell (ACC), Battery Storage in India. Government is working on the 25,000 Jan Aushadhi Kendras to make medicines available at affordable prices. In April 2023, the Cabinet approved the National Medical Devices Policy, 2023. Prime Minister announced a subsidy of US$ 120.93 billion (Rs. 10 lakh crore) for providing cheaper Urea to farmers recently. Global Chemicals and Petrochemicals Manufacturing Hubs in India (GCPMH 2023) was organized in Delhi, India. Govt has set up '2034 vision for the chemicals and petrochemicals sector' to explore opportunities of reduction in imports and improvement in domestic production
- **Investment and Spending:** Other than fertilisers, FDI inflows in the chemicals sector reached US$ 21.48 billion between April 2000-June 2023 which shows the diversification. The PCPIR guidelines (Petroleum, Chemicals and Petrochemicals Investment Region) were redrafted
- **Shifting World Supplier Base:** The specialty chemicals market in India is expected to have a greater growth rate than China, market share to increase reaching 6% by 2026. The China+1 strategy and domestic end user market is fuelling significant revenue growth of 18–20% in 2022 and 14–15% in 2023.
- **Technology:** The chemical supply chain has evolved over the years, embracing technological advancements and innovative processes to enhance efficiency and reliability. Balancing cost-effectiveness with the ability to adapt to disruptions and maintain a resilient supply chain is crucial in the chemical industry. Digital technologies are increasingly integrated into chemical supply chains, improving visibility, tracking, and overall efficiency. Optimizing the entire supply chain network, from sourcing to distribution, is crucial for minimizing costs and enhancing efficiency.



- **Sustainability:** Achieving a balance between cost-efficiency and sustainable practices is critical, ensuring that cost-cutting measures do not compromise environmental and social responsibility in the supply chain. Implementing eco-friendly processes, reducing energy consumption, and using green transportation options are key strategies to minimize the carbon footprint in the chemical supply chain.
- **Strategy:** Adopting a "just in case" approach involves stockpiling critical materials or chemicals to ensure a continuous supply in case of unexpected disruptions. Finding and retaining skilled professionals in the chemical supply chain industry is a challenge due to the specialized knowledge and expertise required.

3. SHAPING THE LANDSCAPE-AGENDA. (11:30 AM- 12:30 PM)

Moderator:

- Vickram Srivastava, Head - Planning, Global Supply Chain, Sun Pharma

Panellists:

- Arush Kishore, Vice President, Petrochem SCM, Reliance
- Vipul Patel, Head, Supply Chain, PI Industries
- Udeep Agarwal, Principal, Kearney
- Priyanka Shivan, Head, Supply Chain, Clariant IGL Speciality Chemicals
- Seema Mohanty, Global Supplier Manager, Bayer

Recommendations:

- **Policy Support:** India should take global leadership in simplifying and standardising regulations. Harmonizing regulations and making them straightforward to implement on a global scale is essential. India can bring the European, Indian, American regulators and industry to agree on a common risk based global legal framework. India's digital prowess can come in handy. This will be in line with India's climate change leadership at COP Summit.
  - Product labelling
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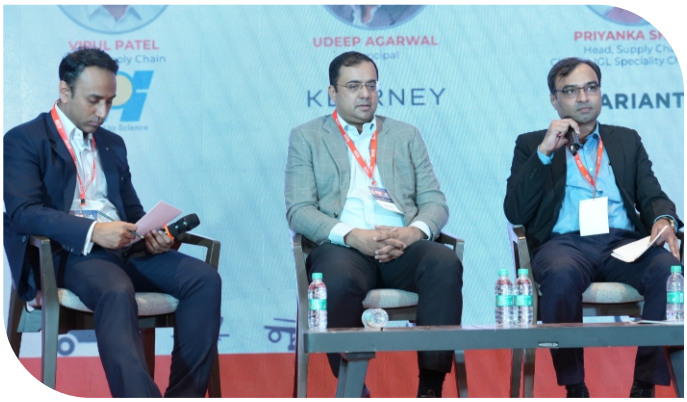
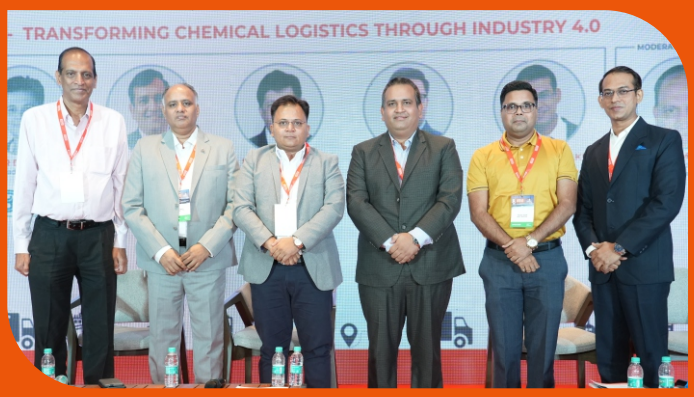
  - Communication related to CLP Regulation, the Detergents Regulation and the Fertilising Products Regulation, REACH, Biocides
- **Regulations:** Indian regulations are long overdue and a comprehensive review of all bodies and acts are overdue. DISH – Directorate of Industrial Safety and Health, MISHC – Manufacture, Storage, and Import of Hazardous Chemicals, OISD – Oil Industry Safety Directorate, DGFASLI – Directorate General Factory Advice Service and Labour Institutes, NDRF – National Disaster Response Force, PESO – Petroleum and Explosive Safety Organization, DFAB – Directorate of Factories & Boilers, EIA – Environment Impact Assessment notification 2006, IBA – Indian Boilers Act, TPLI – The Public Liability Insurance Act, CAIRS – Chemical Accident Information and Reporting System, DGH - Directorate General of Hydrocarbons, CAEPPR - Chemical Accident(Emergency, Planning, Preparedness and Response) Rules, IRDAI - Insurance Regulatory and Development Authority, ERDMP - Emergency Response & Disaster Management Planning, Factories act, Indian boiler act, National green tribunal act, Environment protection act, Environment Protection Rules (1986), Environmental Impact Assessment Notification (2020), The Chemical Accident(Emergency Planning, Preparedness and Response) Rules (1996), disaster management act, petroleum act.
- **Welfare:** Measure like chemical vehicle assurance and driver safety needs to be taken at a national level. While building infrastructure, adequate driver resting facilities must be incorporated. Truck manufacturers need to be sensitised on driver comfort.

Key Highlights of panel discussion were:

- **Market Opportunities:** India has a huge opportunity to make a dent in the market share of China in agricultural and pharmaceutical chemicals, currently around 50% of the global market share. Rising labour costs in China have led to increased production expenses. China plus one strategy is a reality if India can capitalize on it.
- **Sustainability:** With increased opportunities comes responsibilities. Improving standards in the chemical supply chain is crucial to ensure product quality, safety, and environmental responsibility. Enhanced standards drive consistency, reducing variability and risk in chemical manufacturing and distribution.
- **Regulatory Compliance:** The chemical supply chain is complex due to the diversity of chemicals, varying storage and transportation requirements, and a multitude of stakeholders, making it challenging to manage efficiently.
- **Welfare:** Ensuring driver assurance in the chemical supply chain involves measures to guarantee that drivers are adequately trained, aware of safety protocols, and equipped to handle hazardous materials, reducing the risks associated with transporting chemicals. CHEMICAL VEHICLE ASSURANCE": This refers to the assurance of the vehicles used for chemical transportation. It involves rigorous maintenance, inspections, and adherence to safety standards for chemical transport vehicles to prevent accidents, leaks, or other incidents that could harm the environment or public safety.
- **Efficiency:** Leveraging digital tools, such as data analytics and automation, can significantly enhance the speed of operations, providing real-time insights and streamlining processes in the chemical supply chain.
- **Risk based vendor relationships:** Understanding and managing the suppliers of your suppliers (often referred to as second-tier suppliers) is vital to ensure the reliability and quality of raw materials in the chemical supply chain, as issues at this level can affect the entire supply chain.
- **Innovation:** Innovation and investment bottlenecks in chemical supply chain is an issue that cannot be ignored. The chemical industry has traditionally been owner-driven and relatively conservative in adopting new technologies and practices, which can slow down innovation and hinder progress.
- **Infrastructure:** To support India's growth and enhance its role in the global supply chain, investments in infrastructure, such as ports and roads, are crucial. Expanding the capacity of ports and road networks is vital for accommodating the growing demands of the chemical supply chain. Adequate infrastructure ensures smoother logistics, reduces bottlenecks, and supports industry growth.



4. TRANSFORMING CHEMICAL LOGISTICS THROUGH INDUSTRY 4.0 (2:30 PM- 3:30 PM)



Moderator:

- Seshadri Mukundan, Founder, Grntec Packaging

Panellists:

- Ajay Singh, VP, Hindustan Platinum
- Ankur Dekivadiya, Head Logistics, Best Value Chem
- Bhupendra Kumar, Head Logistics, IOL Chemicals And Pharmaceuticals
- Keyur Pandya, General Manager, Thermo Fisher Scientific
- Koshal Bisen, Head Growth Office & oll Manufacturing, Indofil Industries
- Mahendra Shelke, Head Logistics, Lanxess

Recommendations:

- **Policy Support:** Indian Industry needs to self-regulate itself and like the banking industry, Indian govt should layout the outsourcing guidelines for the chemical industry. This will help developing suppliers and a system of self-monitoring mitigating risks and supplier disruption.
- **Industrial Logistics Safety:** The Industry needs to play its part in coming together to formulate a driver database for handling HGV and dangerous chemicals.
- **Market Segmentation:** The industry and government can work together on a two-year global plan to help industry capture market share. A data driven market segmentation drive and an incentive for region-based approach will be helpful. World corridor implementation by connecting Indian transporters to Foreign transporters can deliver cost advantages to India.

Key Highlights of panel discussion were:

- **Chemical Industry Technology Guidelines:** In the upcoming decade, India's global leadership aspiration in this industry will involve leveraging technologies such as IoT, AI, and data analytics to streamline processes, enhance transparency, and gain real-time visibility into supply chain operations. Utilizing advanced technology and software solutions in the chemical supply chain enhances visibility by providing real-time data and analytics, enabling companies to make informed decisions, anticipate issues, and optimize their operations for greater efficiency.
- **Driver database:** Systematizing data collection and analysis within an organization leads to improved efficiency. It allows for streamlined processes, data-driven decision-making, and the elimination of manual, error-prone tasks, ultimately boosting productivity and reducing operational costs. Implementing performance evaluation measures, such as monitoring driver behaviour like over speeding and night driving, is essential for ensuring safety and efficiency in the chemical supply chain. This data-driven approach helps mitigate risks and improve overall operations. Leveraging technology to reduce road accidents is a proactive approach. Implementing tools like telematics, real-time monitoring, and driver-assist systems can enhance road safety, reduce accidents, and minimize disruptions in chemical transportation.
- **Market Segmentation:** Implementing segmentation within the chemical supply chain involves categorizing and organizing different aspects, such as products, customers, or geographic regions, to tailor strategies and resources effectively. This approach allows for a more customized and responsive approach to meet specific market needs and optimize resource allocation. Collaboration in the chemical supply chain is vital for cost reduction and overall efficiency. When companies work together, they can share resources, optimize transportation routes, and pool their expertise, ultimately lowering costs associated with transportation, warehousing, and procurement. This cooperative approach fosters a more streamlined and cost-effective supply chain, benefiting all parties involved

4. EMPOWERING HUMAN CAPITAL. (3:30 PM- 4:30 PM)

Moderator:

- Ramit Mahajan, Head- Supply Chain & CSE, Henkel

Panellists:

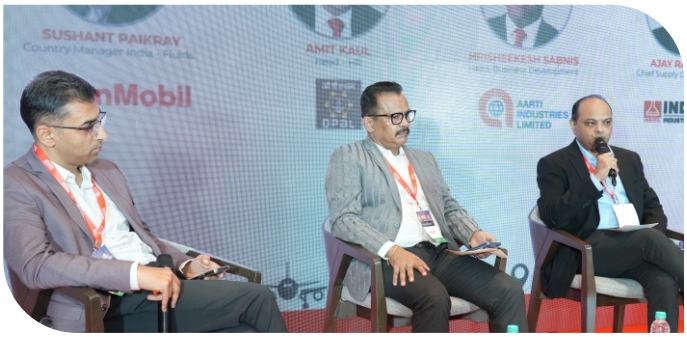
- Sanjay Kshirsagar, Head, Supply Chain, Brenntag
- Sushant Paikray, Country Manager India - Fluids, ExxonMobil
- Amit Kaul, Head – HR, OPaL
- Chirag Chawla, Akasa Air
- Ajay Rathour, Chief Supply Chain Manager, Indofil
- Hrisheekesh Sabnis , Head, Business Development, Aarti Industries

Recommendations:

- **Policy Support:** Attracting best talent into this industry is critical. The government and industry can work closely with Universities specially skills universities when they are setting up plants. In countries like Korea and China, this is common practice.
- **Industry Bodies:** In countries like United States even a plumber needs a certification. In India hazardous and dangerous goods drivers need to be encouraged to get it. Enforcement and penalties for not complying are not deterring enough. Industry bodies need to come together and agree on minimum qualifications for each role.

Key Highlights of his message was:

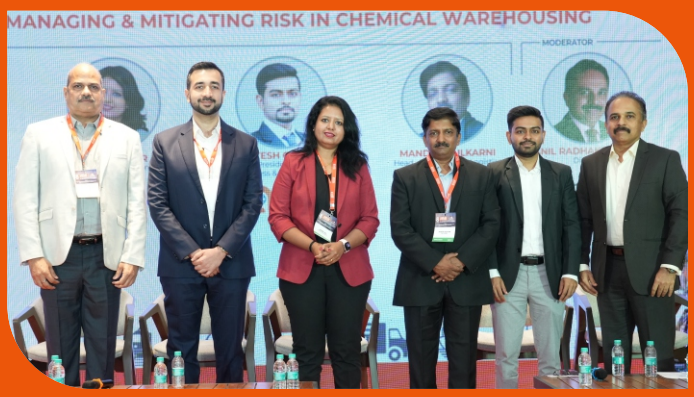
- Empowerment in the chemical supply chain is not a solitary act but an interconnected ecosystem. It involves giving employees the tools, autonomy, and support to make decisions and contribute to the supply chain's success, fostering a collaborative environment. Effective management should ensure that employees have a voice and influence in decision-making. In the chemical supply chain, this participatory approach can lead to better-informed choices and increased engagement. Fairness and transparency are fundamental in the chemical supply chain industry. Open communication and equitable treatment of employees create trust, enhance morale, and promote ethical practices throughout the supply chain.
- Diversity, whether in terms of backgrounds, experiences, or perspectives, contributes to the richness of problem-solving in the chemical supply chain. A diverse workforce can offer innovative and well-rounded solutions, improving overall operational efficiency.
- A skilled supply chain manager in the chemical industry should possess several key attributes. These include being sceptical and cautious to manage risks effectively, staying updated on technology trends to leverage innovations, embracing challenges as opportunities for growth, fostering teamwork as supply chain success relies on collaboration, recognizing supply chain as an enabling process that drives business goals, maintaining flexibility to adapt to changing circumstances, and staying observant to identify and address issues proactively. These skills collectively enable a supply chain manager to excel in a dynamic and complex industry, ensuring efficient operations and meeting customer demands.



6. SAFETY FIRST: MANAGING & MITIGATING RISK IN CHEMICAL WAREHOUSING (10:25 AM-11:40 AM)

Moderator:

- Anil Radhakrishnan, Director, Accex supply chain solutions



Panellists:

- Pradeep Tewari, Head – Supply Chain Operations, Reliance New Energy
- Ronak Shah, Executive Director, VTrans (India) Ltd
- Rashmi Iyer, Head, Distribution, Merck Life Sciences
- Mitesh Gangar, Vice President & Head - Business & Supply Chain, Aarti Industries
- Mandar Kulkarni, Head - Warehouse & Logistics, Sun Pharma

Recommendations:

- **Safety:** Infrastructure related to Industrial townships or factories when being built, needs to consider spaces for cleaning of trucks, yards and waste treatment plants to ensure hazardous chemicals not being released into surroundings.
- **Circular Economy:** Govt must provide incentives for an ecosystem to flourish related to the chemical industry. Clusters when formed will facilitate spread of good practices.
- **Cold Chain:** All cold chains within the country should be linked to segment and identify those related to Chemical Industry. From a safety perspective this is critical to monitor accidents.

Key Highlights of panel discussions were:

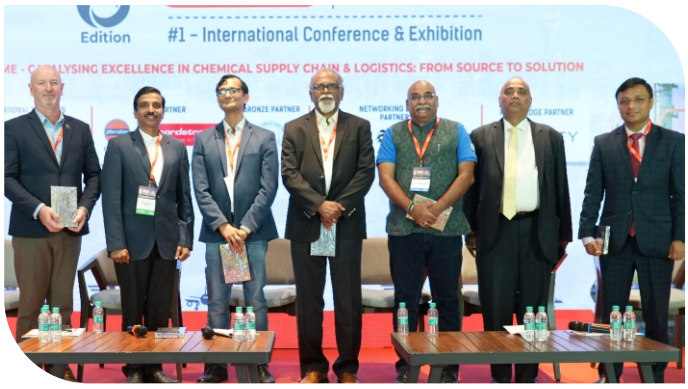
- **Safety:** Safety is paramount due to the potentially harmful nature of chemicals involved. Strict protocols, training, and equipment are necessary to prevent accidents and protect employees, the environment, and the community. Proper storage segregation is crucial to prevent chemical reactions and cross-contamination. Different classes of chemicals should be stored separately with clear labelling and safety measures in place. Warehouses storing chemicals must prioritize fire safety with robust systems like sprinklers and alarms. This investment helps minimize the risk of fire-related accidents and ensures a rapid response in case of emergencies.
- **Equipment:** Personal Protective Equipment (PPE) is mandatory for workers handling chemicals. Proper PPE usage, including gloves, goggles, and protective clothing, safeguards against chemical exposure and accidents.
- **Risk Assessment:** Hazard Identification and Risk Assessment (HIRA) is an essential process to identify potential risks and develop mitigation strategies. It helps the chemical supply chain industry proactively address and reduce risks, enhancing overall safety. Effective risk management and a well-defined risk policy are imperative in the chemical industry due to the potential hazards associated with the handling and transport of chemicals. These measures are essential to ensure safety, compliance, and resilience in the face of unexpected challenges.

- **Capacity Augmentation:** Capacity constraints, particularly in terms of manpower, can be a significant challenge. The chemical industry requires a skilled and adequately staffed workforce to manage and oversee complex operations in warehouses. A significant portion of chemical raw materials is in liquid form, making proper handling and storage crucial. Liquids can be more challenging to manage due to factors like volatility, flammability, and chemical reactivity. The safe and efficient transportation, storage, and handling of liquid chemicals are critical in the supply chain to mitigate risks and ensure product integrity. Maintaining precise temperature control in chemical warehousing is challenging, as different chemicals may require specific temperature ranges to prevent degradation or hazardous reactions. Ensuring temperature consistency is crucial to preserving product quality and safety. While both FMCG (Fast-Moving Consumer Goods) and pharmaceutical companies require storage, there are differences in their warehousing needs. Pharma companies, for example, demand stringent temperature-controlled facilities due to the sensitivity of their products, unlike some FMCG items. Variations in temperature requirements between different chemical products necessitate specialized storage facilities. Some chemicals require cold storage to maintain stability, while others may demand ambient or controlled temperature conditions, making tailored storage solutions imperative.

7. NAVIGATING THROUGH THE MAZE OF REGULATION TO TRANSPORT PACKAGED DANGEROUS GOODS SEAMLESSLY. (2:30 PM-3:30 PM)

Moderator:

- Radharamanan Panicker, Managing Director, DGM India Pvt ltd.



Panellists:

- Stefan Becker, Technical Director, Cordstrap
- Dhruv Bansal, Asst General Manager, msc
- Prakash Wagh, Head, Country Transport Safety, Clariant
- Mayur Kapasi, Custom & Foreign Trade Operations, BASF
- Ramratan Singhi, CEO, Sure Group
- Laksmhinarayanan, Managing Director, Orient Star
- Raghavan Santhanam, Director – School of Ports, Terminal Management and Logistics, SSPU

Recommendations:

- **Costs of Regulatory Compliance:** Industry needs to prepare and agree on how costs of regulation are absorbed by different partners.
- **BIS:** The implementation of the Bureau of Indian Standards in 2023 is not yet mandatory. This emphasizes the importance of advocating for standardized safety measures and compliance in the chemical supply chain, even before government regulations enforce them.
- **Skill Development:** Lack of skilled officers with technical experience on specific vessels like Chemical or crude tankers is a reality. It is important that for any industry to thrive, young talent needs to be attracted and nurtured. Industry should work with academia to upskill, reskill.

Key Highlights of discussions were:

- **Cost of regulatory compliance:** Regulation and cost of regulation in Chemical industry as well as movement and handling of dangerous goods are not decreasing anytime soon. It is important for industry to proactively embrace it by looking and learning from other industries if need be. For instance, the banking industry has embraced higher regulations related to data security by passing on costs of assurance to third party vendors as a prerequisite to providing service. This same model can be looked at. Responsibility of Shipping lines needs to be fixed.
- **Skill Development:** Educating shippers about the significance of documentation, such as Safety Data Sheets (SDS), is vital. It promotes awareness of safety information, handling instructions, and regulatory compliance, contributing to safe and responsible chemical shipments. Lack of skilled officers with technical experience on specific vessels like Chemical or crude tankers is a reality. It is important that for any industry to thrive, young talent needs to be attracted and nurtured. Chemlog has done a brilliant thing by allowing students to volunteer at this conference. Students of Logistics and Supply chain management get to see some stalwarts of this industry.
- **Ports Infrastructure:** India's port infrastructure is a critical factor in the chemical supply chain. Limited port capacity can lead to logistical challenges and delays in handling large cargo and shipments, highlighting the need for investment and expansion. Government initiatives like "Sagarmala" play a pivotal role in developing port infrastructure. Such policies aim to enhance port capacity and efficiency, facilitating smoother chemical logistics and enabling India to better handle large cargo and shipments.
- **Dangerous Chemicals:** Super cargo involves challenges and adopting innovative solutions is key. Knowledge and Training related to transportation on barges and stowing on or below decks depends on the goods and expertise related to dangerous chemicals.
- **Tankers:** The challenge of finding tank containers for denser weight transport capacity caused extraordinarily high rates
- **No of forms for Dangerous goods:** GHS: Adopting the Globally Harmonized System (GHS) is crucial in chemical supply chain management. Safety Data Sheets (SDS) must align with GHS standards, ensuring consistent and standardized hazard communication globally, thereby enhancing safety and regulatory compliance. Complexity and no of forms for dangerous goods can be looked at. SDS and MSDS have different purposes. Training is key to ensuring the Vessel's document of compliance accuracy is increased. Complexity is inherent. Even China's advance reporting requirements have differentiated containership and non-containership for submitting. EU is more on cargo type rather than ship type. So, we should develop regulations that considers our country's reality. One of the ways to prevent overload of duplicate forms is to again look at enterprise wide risk management technology systems adopted by the finance and banking sector. When you allow risk-based processes to be triggered automatically for complying documentation, the costs can be managed. A one size fits all approach is eliminated. Also, with dangerous goods and classifications, need for training can be managed by allowing technology to guide and provide information

The event ended with enthusiasm and optimism about the country reaching its ambitious goal of being a developed country by 2047. The Chemical Industry is poised to contribute to develop the Indian economy both domestically and in exports. The industry will be even more innovative through use of Technology will be among the best in the world.

1st SUPPLY CHAIN INNOVATION AWARDS

Another significant addition was the 1st edition of Supply Chain Innovation Awards (SCIA)

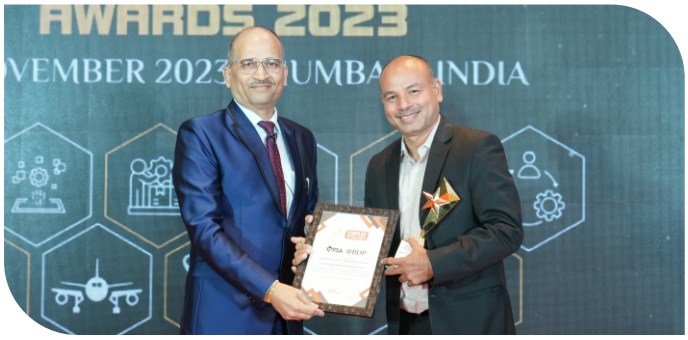
To support and encourage industry players who strive hard to bring a transformational change in Supply Chain with ground-breaking innovations & initiatives, CHEMLOG India launched 1st Supply Chain Innovation Appreciation (SCIA) program.

The Supply Chain Innovation Award recognizes excellent initiatives that have revolutionized traditional supply chain processes. This award celebrates Supply Chain Leaders & innovators who have immensely contributed to developing disruptive strategies, technologies, or process methodologies to optimize their supply chains and drive exceptional results. The recipient of this award will be a shining example of creativity, efficiency, and forward-thinking individual, inspiring others to push the boundaries of supply chain excellence.

The SCIA program is designed in a manner and will be conducted methodically to draw out the best in the industry through a process driven robust approach and a neutral jury comprising of champions from various facets of the supply chain industry.

The response to the awards was encouraging and out of the received entries the following were the winners;

TECHNOLOGY & PRODUCT INNOVATION OF THE YEAR



BDP UGL Global Logistics India Pvt. Ltd.

START-UP OF THE YEAR

Accex Supply Chain Solutions Pvt. Ltd.

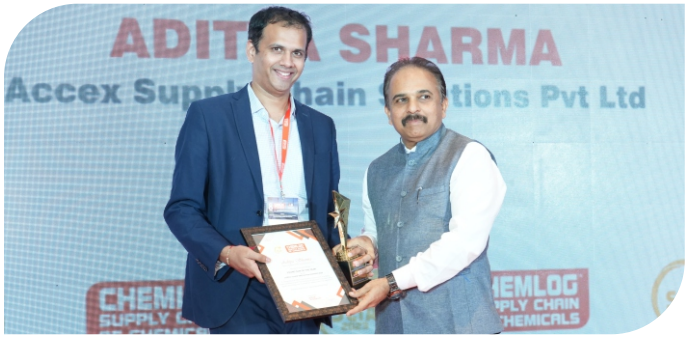
TECHNOLOGY & PRODUCT INNOVATION OF THE YEAR

IOL Chemicals and Pharmaceuticals Limited

TRAILBLAZER OF THE YEAR

Dhiraj Asthana, Atul Ltd.

TRAILBLAZER OF THE YEAR



Aditya Sharma, Accex Supply Chain Solutions

TRAILBLAZER OF THE YEAR

Ankit Dekivadiya, Best Value Chem

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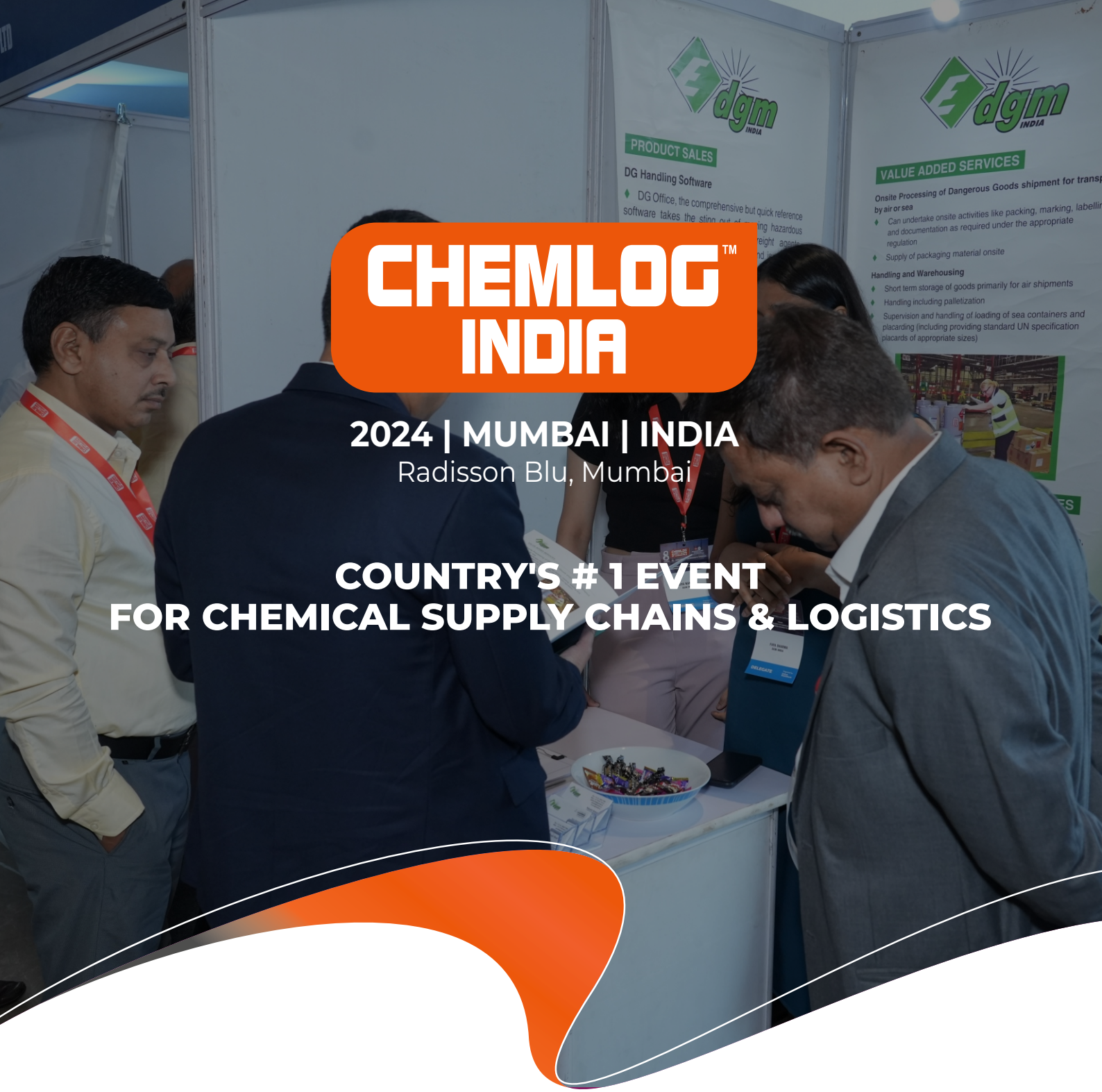

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