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# DMAI Newsletter

The Dyestuffs Manufacturers Association of India

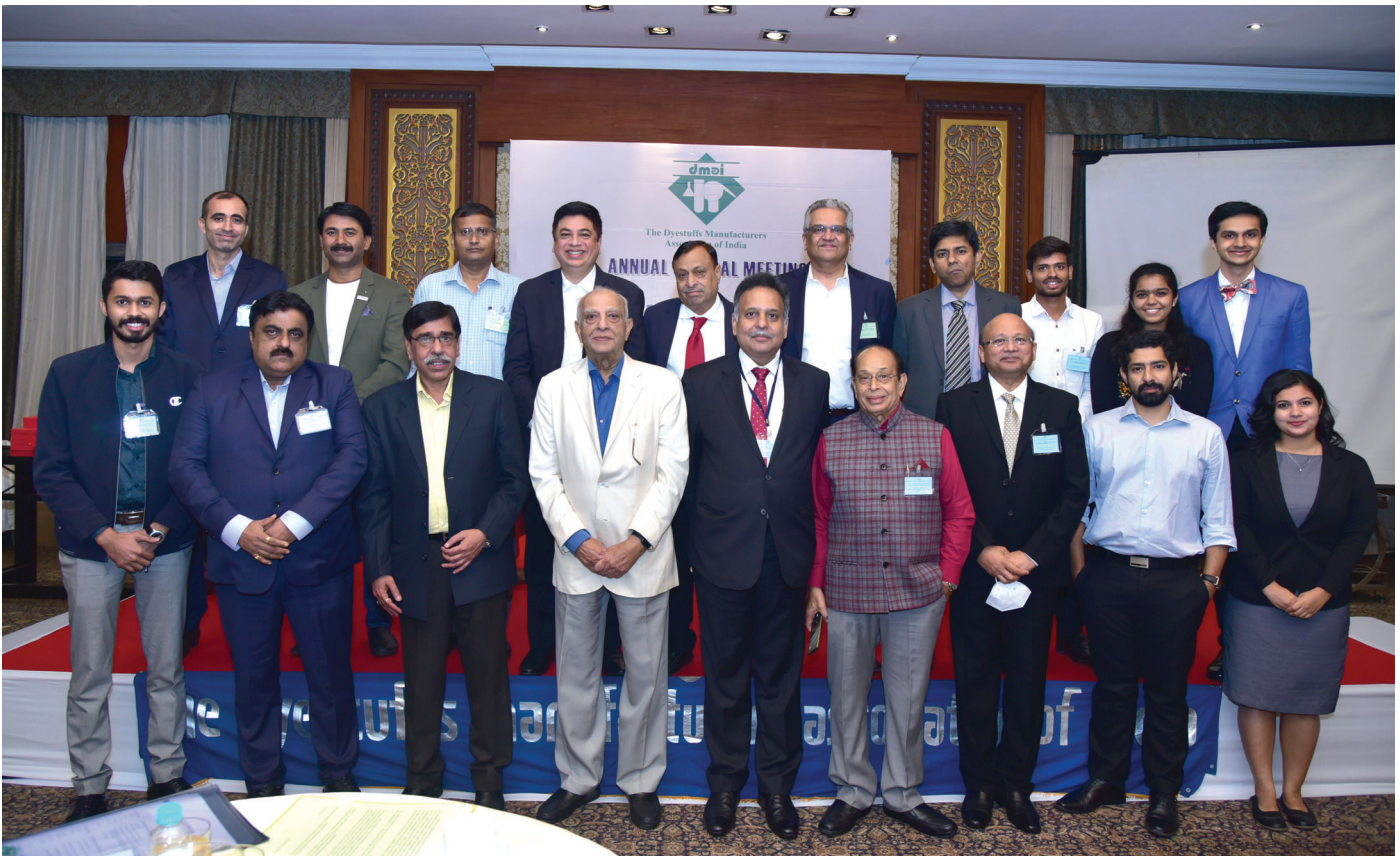
Vol. XLII

Issue 2

November 2021 - March 2022

## Cover Story

### 71st Annual General Meeting and Awards Presentation function



## Award Winners



**devarsons**

*Group Estd. 1923*

*The Colour Solution Company*

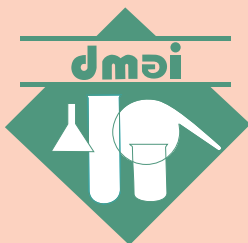
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441 GIDC, Odhav Ahmedabad 382 415 India.

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The Dyestuffs Manufacturers  
Association of India

# DMAI Newsletter

**Published by**

S. Balasundaram  
Executive Secretary

## The Dyestuffs Manufacturers Association of India

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### **Designed & printed by**

Colour Publications Pvt. Ltd.  
Tel.: 2430 6319  
Email: colorpub@colorpub.in

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**Mr. Ram Ajekar**  
Honorary Editor



**Rtn. Virendra Widge**



**Prof. Vinod Kanetkar**



**Mr. Vinit Shah**



**Mr. Sandeep Shah**

Dear Readers,

As informed earlier, DMAI had successfully conducted its Annual General Meeting (AGM) in physical form in November last year. It is a matter of satisfaction and appreciation that despite the adverse situation prevailing during the last two years due to COVID 19, DMAI was successfully carrying on various activities like online seminars, meetings, representations on various issues concerning the Colorants industry to the respective govt. departments and the recent half yearly meeting in Assam. With the vast improvement in the Covid situation all the sectors of the economy have opened and are fast inching towards optimum level. With the international flights fully resuming after a gap of two years, the business and leisure travel is expected to reach full potential soon. We hope the Covid 19 is fully eradicated and full normalcy returns very soon with no new variants of the virus appearing anywhere in the world in future.

We see several areas of Indian economy witnessing growth momentum and concrete signs of continued robust growth in the near future. Overall GDP growth of over 9% forecast for FY 2022 is sure to be achieved and the trend is widely expected to be maintained for FY:2023 aided by a big jump in domestic consumption, controlled inflation, huge investments by domestic and overseas players, reform measures by the Govt., our country achieving competitiveness vs China in manufacturing leading to shifting of supply chain to emerging economies, India being a leader etc. Besides, various other welcome measures by the govt. such as production linked Incentive scheme, tax incentives, healthy ecosystems for start-ups, investment in chemical skill development, infrastructure development and huge capital expenditure will help in sustained growth of the economy.

Contrary to popular belief that the Union budget for FY 2022-23 would be a populist one on account of elections in a few states, the Finance Minister presented a growth oriented budget with proposals for several favourable measures to boost economy such as further raising capital expenditure by a staggering 35%, stimulate private investment, incentives to domestic manufacturing to realise the objective of self-reliant India, "Atmanirbhar Bharat". The proposals also include customs duty rationalisation, support to rural economy, deepen digital penetration to improve delivery of services to a number of areas such as education, health, agriculture etc. The tax on long term capital gain is capped at 15%.

India's food grains production is estimated to hit an all time record at 316 million tonnes during 2021-22. Govt. has allowed farmers to export wheat which will increase their incomes. India's merchandise exports crossed \$400 billion, the highest ever, for FY 2022, registering 37% increase over FY 2021 despite adverse conditions such as Covid and Russia Ukraine war. MSMEs have made a significant contribution to this achievement. In a welcome step RBI continues maintain easy liquidity stance with steady interest rate.

The demand for Colorants has improved during the last two quarters and is expected to maintain the momentum. The raw material price fluctuation, though not as steep as in the past, still remains. We wish all of you, all the best for FY 2022-23.

**Ram Ajekar**  
*Honorary Editor*



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At the outset, I extend my hearty New Year Greetings to all of you and your family members.

When we thought that COVID pandemic had ceased in our country, unfortunately the variant of the pandemic struck somewhere in September 2021. Due to vaccination of more than 100 crores of the populace and inoculation of even the children above 12 years of age and strict compliance of the protocols, its impact was not felt very significantly. Its spread was also arrested to a great extent without causing any severe damage. During the last few months, it appears from the various data published that the pandemic is almost under much control. In many parts of the country, the lockdown measures are either partially or completely withdrawn with overall situation returning to almost normal. The regulatory authorities and the general public deserve kudos for this appreciable change.



Economy is on the upsurge. The uncertainties of demand and supply are almost behind us. In the Union Budget presented by Smt. Nirmala Sitharaman to the Parliament in February 2022, she has projected an appreciable outlay of funds for infrastructural projects, taking into consideration the revival in the economy. It is hoped that it will generate many employment opportunities in the country alleviating the sufferings of the poor.

The recent Ukraine war may perhaps dent the economic growth with the prices of oil skyrocketing of late. It is hoped that the dialogue in progress between Russia and Ukraine will pave the road for cessation of hostilities shortly.

On the Association front, I am happy that our Annual General Meeting and Award function was conducted physically after the lapse of one year from the last event on virtual mode. Many of our members with their spouses attended the function in large numbers. It was a feather to our cap that we could successfully organize our Half yearly Meeting during February March 2022 in the North Eastern parts of the Country viz. Shillong, Kaziranga, Guwahati and Tawang. I am sure all the members, who had participated in this gala event with their spouses might have enjoyed their vacation and sojourn thoroughly.

Many of the vital issues concerning the colorant industry like Shortage of Raw Materials for Speciality Chemical Industries, change in Product Specific Rules in the context of Rules of Origin, Imposition of export ban on Sulphuric acid under HS Code 28070010, pollution related matters etc were taken up with the concerned authorities for necessary redressal. I am very happy to inform you that the senior officials at DCPC and other Govt. agencies have assured us that remedial measures would be contemplated so as to enable the industry move ahead without any interruption. I am thankful to all of them for their supportive and pro-active role.

Based on the grand success of organizing a Conference in Ludhiana in 2016, I am happy that DMAI is organizing a similar conference styled as "Conference on Textiles: Business & Environment Sustainability – Challenges for the Colorants Industry" on 21-22 April 2022 in Ludhiana once again. The topics and speakers are selected on their own merits so as to benefit the participants significantly. I urge upon all of you to participate in this conference, which I am sanguine you will not be disappointed.

Once again my best wishes to all of you.

JANAK MEHTA

## 71st Annual General Meeting and Awards Presentation function

# “Industry should strive to grow from Small Scale to Medium and Medium to Large”, exhorts Mr. Yogendra Tripathi, Secretary, Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, GOI

The 71st Annual General Meeting and Awards Presentation function of the Dyestuffs Manufacturers Association of India (DMAI) was held on Friday, the 12th November 2021 at Hotel Sea Princess, Juhu, Mumbai.

Shri Yogendra Tripathi, Secretary, Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, GOI was the Chief Guest. Padma Bhushan Rajju Shroff, Chairman, UPL Ltd graced the occasion as the Guest of Honour. More than 80 members of the Association with their spouses, special invitees, guests & other dignitaries and press attended the meeting.

### Business session

At the outset, President Mr. Janak Mehta welcomed the members.



**Dr. Shavak Bhungara**

While presenting the Annual Report for the year 2020-2021, Hon. Secretary, Dr. Shavak Bhungara highlighted the various activities of the Association as under Submitted suggestions/representations on various issues concerning the colorant industry to DCPC and other agencies on different dates.



**Janak Mehta**

- On 24th August 2020, DMAI submitted additional information/clarification to the queries raised by CPCB regarding their First Technical Committee meeting on Deep Sea Discharge Norms, clarification on studies received from NIO, CSMCRI and NEERI on 23rd October 2020 to Mr. Dinabandhu Gouda, Additional Director & I/C IPC-I, CPCB regarding their shared comments on “Available EIA-related Information for Relaxation” of COD norms for waste water disposal and comments to CPCB on 29th January 2021 on Deep Sea Discharge norms revision. Our Inputs were also submitted to DCPC on 22nd February 2021 regarding proposed Rationalisation of current COD/BOD norms for Deep Sea Discharge of industrial treated waste water.
- Representation made to the Additional Chief Secretary, Industry Ministry, Govt. of Gujarat on 30th March 2021 regarding Gujarat Industrial Development and Deep Sea Discharge Norms.
- Recommendation sent to DCPC on 22nd April 2021 regarding inclusion of Import / Export in Essential Services List.
- Representations sent to DCPC regarding 'Dyes and Pigments Industry Predicament on Raw Materials Pricing – Acetic Acid' on 9th May 2021 and Aniline on 21st May 2021



- Representation made on 1st September 2021 to Hon'ble Minister for Chemicals and Fertilizers, Ministry of Chemicals and Fertilizers, Govt. of India regarding Exclusion of Organic Chemicals covering dye-intermediates from the scheme guidelines and Rates of Remission of Duties & Taxes on export products.
- Contribution of matter for insertion of DMAI page in Colourage of Colour Publications regularly.
- Conduction of Webinar on implementation of REACH like KKDIK Regulation in Turkey and UK jointly with GDMA on 14th July 2020 and on the Dynamic Fortune of the Indian Colorant Industry post
- COVID jointly with Colour Publications and GDMA on 25th September 2020.
- Conducted 70th Annual General Meeting through video conference on 9th October 2020
- Regular interface meetings with senior officials of DCPC and other agencies on various issues concerning the colorant industry.
- Organized two webinars on Safety Measures for the colorants industry on 21st June 2021 and 20th August 2021
- Publication of DMAI NEWSLETTER at regular intervals

Mr. Dilip Lakhani, Hon. Treasurer presented the Audited Income & Expenditure Account for the year ended 31st March 2021 and Balance Sheet as on 31-3-2021.

Mr. Dilip Udas and Mr. Siddharth Udas of Ultra Conserve Pvt. Ltd thereafter made a presentation on their utility services provided to the chemical industries, which was very much appreciated by the audience.



**Siddharth Udas**

### Open Session

Jt. Hon. Secretary Mr. Piyush Maheshwari moderated the proceedings.

At the instance of President Mr. Janak Mehta, two minutes silence was observed before commencement of the proceedings in the memory of many of our members and near and dear of some members due to the unprecedented COVID 19 pandemic during the last more than one and half years as a mark of respect to the departed souls.



**Dilip Lakhani**



**Piyush Maheshwari**

In his welcome address, President Mr. Janak Mehta, at the outset, welcomed the members for the 71st Annual General Meeting and Awards Presentation Ceremony. He thanked Mr. Yogendra Tripathi, Secretary, Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, GOI for having accepted our invitation to be the Chief Guest for the function. He also thanked Padma Bhushan Rajju Shroff, Chairman, UPL Ltd to grace the occasion as the Guest of Honour.

Mr. Mehta stated that COVID 19 had created many hardships to the populace for more than one and half years. The stringent lockdown measures imposed by the authorities in various parts of the country had also dented the economic activities to a great extent. Due to vaccination of more than



100 crore of the population with at least one shot has reduced the threat of its spread considerably. He cautioned the members to take adequate care and strictly adhere to the safety measures like wearing of mask, maintaining of social distance etc. as protective steps from the pandemic.

Janak Mehta

Mr. Mehta further referred to his personal discussion with the senior officials of DCPC on a few occasions on issues concerning the industry and thanked them for their positive response. Like the recent surge in the share markets, export of colorants also had surpassed the estimates convincingly during the last many years. The pandemic had, however, its negative effect on our export front. Nonetheless, Indian colorant industry accounts for about 16% of the global market share in the manufacture of colorants and is poised for substantial growth in the coming years, he added. Our Action Plan for the current decade 2021-2030 could not be, however, submitted due to the pandemic. As a positive, it has also opened up many opportunities to even achieve the Atmanirbhar Abhiyan.



**Janak Mehta**

One of the impediments affecting the industry is the exorbitant price hike of basic raw materials, which have gone haywire in the recent times, Mr. Mehta pointed out. In certain cases, there has been a hike of more than 300% in the prices. Consequently, some of the units were forced to close their operations adding to the problem of unemployment under SME sector, Mr. Mehta stated. He also mentioned about the dumping duty being imposed on many imports. He cited the example of COVID tax, which was on the anvil for implementation, in addition to levying of multiple taxes. DMAI had to fight tooth and nail from its implementation, which it ultimately succeeded. Levying of dumping and legal expenses for anti-dumping duties affects the operational cost and consequently the growth trajectory adversely. He requested the authorities to be more judicious while contemplating levying of additional taxes.

Another serious issue relating to the colorant industry is the stringent pollution control norms. Despite scientific studies having carried out by reputed and experienced organisations and their reports having been submitted to the authorities, arbitrary norms even for deep sea discharge are fixed, which affects the industry very adversely. Mr. Mehta requested the Secretary to arrange for meetings with the Ministry of Environment, Forests and Climate Change along with CPCB so that amicable and pragmatic norms could be fixed for better operations.

Mr. Mehta further mentioned that the biennial Convention on Colorants (COC) could not be organized during 2021 due to circumstances beyond our control. It is one of the best examples of working together among the industry, academia and the Government, which has proved very advantageous with win-win situation to all. The next COC would be conducted in the beginning of 2023 in consultation with ICT, wherein a world class department has started functioning recently, Mr. Mehta stated.

While concluding his address, Mr. Mehta also mentioned about the forthcoming Chroma TexChem Exhibition in October 2022 in Mumbai, which is being supported by DMAI and GDMA and a sequel to China Interdye. It would be an ideal platform for the colorant industry to showcase its wares to the globe, as many foreign delegates would be visiting the exhibition.

The Chief Guest and Guest of Honour were thereafter welcomed with flower offerings as a mark of our respect. Mrs. Sandra Shroff was also felicitated with flower offerings.

Mr. Yogendra Tripathi and Mr. Rajju Shroff then presented the Annual Awards to the recipients from the industry for the years 2019-2020 and 2020-2021 for excellence in several fields like excellent performance in the exports of Dyestuffs, Pigments, Optical Whitening Agents, Domestic Market,

Merchant Exporter, Pollution and Safety & Hazards Control, Conservation of Energy and Water under different categories. Dr. Shavak Bhungara, Hon. Secretary, DMAI and member of the Awards Committee declared the award winners under each category (list enclosed). Citation was also conferred on the technical awardees. Certificate was also presented to a member having obtained ISO 9001 & 14001 accreditation during the year. The prestigious Anil Mehta award for Best Member unit under SME category for 2019-2020 was bagged by Colorant Ltd.



**Award Winners**

While acknowledging receipt of the award, Mr. Subhash Bhargava, Managing Director of Colorant Ltd attributed and hailed the excellent team work and proactive response of the Management for the success of the unit in scaling higher growth in its operations.



**Subhash Bhargava**

Cash prize of Rs.10,000/- each with a trophy sponsored by our member units and certificate were also presented to the students of ICT, Mumbai, who had topped their respective disciplines for the years 2018-2019 and 2019-2020.

Mr. Dilip Lakhani, Hon. Treasurer thereafter introduced Padma Bhushan Rajju Shroff, Chairman, UPL Ltd to the audience.



**Subhash Bhargava receives Anil Mehta Award**

Padma Bhushan Rajju Shroff in his address thanked DMAI for inviting him to be the Guest of Honour for the 71st Annual General Meeting and Awards Presentation function. He fondly recalled Late Mr. Anil Mehta, who was his college mate. While Mr. Shroff continued his family's trading business in dyestuffs, Late Shri Mehta started his own manufacturing unit under SME for dyestuff in India. During those days, there were License and Permit Raj in addition to various bottlenecks like intermittent power cuts, lack of infrastructure etc posing many problems in running the business. Nevertheless, the industry over a period of time grew steadily. The exports for the last year were US\$ 2.5 Billion, Mr. Shroff added and was optimistic that the industry has a bright future ahead.

Mr. Shroff further stated that chemical industry despite being the mother of the manufacturing



**Rajju Shroff**

sector, its important role is not yet acknowledged by many authorities, which should be made known to them by the industry. He declared that generation of every dollar by the chemical industry leads to four times revenue addition in dollar terms. Chemical production is closely correlated to industrial and manufacturing sector resulting into economic acceleration and consequently GDP growth in the country, Mr. Shroff averred. Whereas chemical sector was globally valued at US\$ 170 Billion in 1970, it registered US\$ 5400 Billion in 2018 with phenomenal growth. He, however, lamented that India's contribution in the chemical industry is relatively very small at US\$ 178 Billion,

which accounts for 4% of the global market having US\$ 2210 Billion in exports, whereas India's share is less than US\$ 50 Billion denoting a huge opportunity for its expansion and growth.

Mr. Shroff further mentioned that during the last decade, share of manufacturing sector in India's GDP has considerably declined from 17% to 13% at US\$ 340 billion, which is substantially lower than agriculture sector's contribution of US\$ 481 Billion in 2020. Augmentation of chemical production will also laterally expand the manufacturing sector and promote export of merchandise, thereby resulting into generation of considerable employment opportunities. He solicited Government support and co-operation to remove the hurdles and make ease of doing business more smooth and effective.

It is one of the paramount responsibilities of the industry to change the general public notion of chemical sector as a major contributing factor to environmental problems. With the abundant availability of skilled labour and world class engineering skill in our country, Mr. Shroff was sanguine that chemical sector has a bright trajectory for fast development. Towards this end, the concerned authorities should be lenient to remove unwarranted restrictive regulatory policies. He was happy to note that there has been, of late, a positive transition on the part of the regulatory authorities attitude.

Turning to environmental related issues, Mr Shroff cited that COD norms for discharge of effluents to deep sea in India is about 500 PPM, whereas in USA it is 4300 PPM. Removal of ammoniacal nitrogen is very expensive in the country and difficult too, whereas there is no limit for the same in USA. He requested the Chief Guest Mr. Tripathi to take up the issue with the Ministry of Environment, Forests and Climate Change, so as to create a level playing ground for exports to excel in the competitive global market rendering it more cost effective and not at disadvantage.

While the industry has taken adequate preventive measures, certain accidents have unfortunately taken place in the chemical sector. Mr. Shroff craved for the intervention of the authorities and treat them more realistically and sympathetically without taking punitive measures against the owners drastically. He quoted a few instances of worldwide units like Bayer, BASF, Dupont, FMC, Dow and others, where accidents had taken place and the authorities were quite sympathetic and helped the industry to sort out the problems.



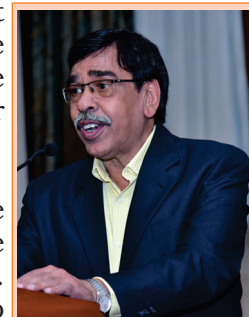
**Rajen Shah**

While concluding, Mr. Shroff appealed for interface meetings with the authorities, wherein the issues could be discussed at length and pragmatic and acceptable solution could be arrived at.

Mr. Rajen Shah, 2nd Vice President, thereafter introduced the Chief Guest to the audience.

At the outset, Mr. Yogendra Tripathi thanked DMAI for inviting him to participate in the AGM as the Chief Guest. He heartily congratulated the award winners from the industry for their excellent performance, despite the pandemic threats and students from ICT for their splendid achievements. He wished them for scaling still new heights in the coming days to win more such laurels.

Mr. Tripathi stated that notwithstanding many challenges, the industry since 1991 has been growing steadily over the years. With liberalization of the economy the industry has been eking out excellent performance, without much Government interference. The Government role is more or less as a facilitator in nature rather than administrator. In the growing economy chemical sector forms a nucleus to other industries with value addition. Colorant industry is also hugely contributing to the national exchequer and it has a bright future, Mr. Tripathi declared.



**Yogendra Tripathi**

SME sector has been substantially contributing to the national building despite many challenges and its role cannot be undermined. Mr. Tripathi exhorted the industry to grow from small scale to medium and medium to large. Notwithstanding many hurdles and bottlenecks, Mr. Tripathi was happy to mention that the industry is having high potential to double its exports, if proper understanding among the stake holders is created with appropriate strategy for its business growth. He extended Govt. support for this endeavour.

Mr. Tripathi also conceded that the environmental related issue is the paramount one as far as the colorant industry is concerned, which requires urgent resolve. The industry has also to be more vigilant in protection of the environment, which is a continuous process. Potable water, being the rare resource has to be reached to all the villages in the country. He emphasised the need for the industry to adhere to standard norms, including deep sea discharge. Activism plays an important role in dealing with the authorities for more realistic and pragmatic deep sea discharge norms. He was happy that the colorant industry is moving ahead patiently and systematically in the matter. Mr. Tripathi expressed his optimism that suitable and acceptable norms for deep sea discharge norms will be fixed based on scientific studies with proper retrospection and change of mind set at the administrative level.

In conclusion Mr. Tripathi once again thanked DMAI and assured his department's full support for all its activities for the sustained growth of the colorant industry as in the past. He extended his best wishes to the industry and hoped that it will march ahead despite COVID threat, which is now quite manageable.



**Colourful and Attentive Audience**

Mr. Piyush Maheshwari thereafter proposed a vote of thanks. The meeting was followed by cocktails and dinner as in the past.



## **DMAI AWARDS WINNERS FOR THE YEAR 2019-2020**

- I. Excellent performance in exports of Dyestuffs  
First Award for Large Scale Unit - BODAL CHEMICALS LTD  
Second Award for Large Scale Unit - SPECTRUM DYES & CHEMICALS PVT.LTD
  
- II. Excellent performance in exports of Optical Whitening Agents  
Award for SME Unit - UNITED SPECIALITIES PVT.LTD
  
- III. Excellent performance in exports of Dyestuffs/ Intermediates/ Pigments/ Optical Whitening Agents by a Merchant Exporter  
Award - KEVIN DYES & CHEMICALS PVT.LTD
  
- IV. Outstanding performance in Domestic Market  
Award for SME Unit - COLORANT LTD  
Award for Large Scale Unit - SPECTRUM DYES & CHEMICALS PVT.LTD
  
- V. Excellent performance in Pollution Control  
Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD
  
- VI. Excellent performance in Safety & Hazards Control  
First Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD  
Second Award for Large Scale Unit - ARCHROMA INDIA PVT.LTD
  
- VII. Excellent performance in Energy Conservation  
Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD
  
- VIII. Excellent performance in Water Conservation  
First Award for Large Scale Unit - CLARIANT CHEMICALS (INDIA) LTD  
Second Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD
  
- IX. Anil Mehta Award for Best Member Unit  
SME Unit - COLORANT LTD



## DMAI AWARDS WINNERS FOR THE YEAR 2020-2021

- I. Excellent performance in exports of Dyestuffs
  - First Award for Large Scale Unit - BODAL CHEMICALS LTD
  - Second Award for Large Scale Unit - SPECTRUM DYES & CHEMICALS PVT.LTD
  - Award for SME Unit - AVANI DYECHEM INDUSTRIES
  
- II. Excellent performance in the field of exports of Pigments
  - Award for Large Scale Unit - SUDARSHAN CHEMICAL INDUSTRIES LTD
  
- III. Excellent performance in exports of Optical Whitening Agents
  - Award for SME Unit - ESKAY DYESTUFFS & ORGANIC CHEMICALS PVT.LTD
  - Certificate of Merit for SME Unit - UNITED SPECIALITIES PVT.LTD
  
- IV. Excellent performance in exports of Dyestuffs/ Intermediates/Pigments/Optical Whitening Agents by a Merchant Exporter
  - First Award - KEVIN DYES & CHEMICALS PVT.LTD
  - Second Award - AMAR IMPEX
  - Certificate of Merit - ARCHROMA INDIA PVT.LTD
  
- V. Outstanding performance in Domestic Market
  - Award for Large Scale Unit - SPECTRUM DYES & CHEMICALS PVT.LTD
  - Award for SME Unit - COLORANT LTD
  
- VI. Excellent performance in Pollution Control
  - Award for Large Scale Unit - CLARIANT CHEMICALS (INDIA) LTD
  
- VII. Excellent performance in Safety & Hazards Control
  - Award for Large Scale Unit - ARCHROMA INDIA PVT.LTD
  
- VIII. Excellent performance in Energy Conservation
  - First Award for Large Scale Unit - CLARIANT CHEMICALS (INDIA) LTD
  - Second Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD
  
- IX. Excellent performance in Water Conservation
  - Award for Large Scale Unit - HUNTSMAN INTERNATIONAL (INDIA) PVT.LTD



## Cover Story

### **TOPPERS : DYESTUFF TECHNOLOGY DEPT., ICT, FOR THE YEAR 2018-2019 AND THEIR SPONSORS**

- 1) Award For Topper in F.Y.B.Tech  
Examination in Dyestuff Technology Dept. of ICT for 2018-2019  
SAI NEHETE  
Sponsored By :  
UNITED SPECIALITIES PVT.LTD
- 2) Award For Topper in S.Y.B.Tech  
Examination in Dyestuff Technology Dept. of ICT for 2018-2019  
MALLIKA CHAUKAR  
Sponsored By :  
ASTIK DYESTUFF PVT.LTD
- 3) Award For Topper in T.Y.B.Tech  
Examination in Dyestuff Technology Dept. of ICT for 2018-2019  
ATHARWA THIGALE  
Sponsored By :  
K. PATEL CHEMOPHARMA PVT. LTD.
- 4) Award For Topper in Final Year B.Tech  
Examination in Dyestuff Technology Dept. of ICT for 2018-2019  
NIKITA NIKHIL GULGULE  
Sponsored By :  
RAVI DYEWARE CO.PVT. LTD.

No toppers for M.Tech 1st and 2nd year Examinations Trophies carry with them a cash award of Rs.10,000/-



## Forthcoming Events

### **Conference in Ludhiana**

Based on the successful conduct of Conference on “Textiles : Business Environment Sustainability - Challenges for the Colorants Industry” in Coimbatore in 2013 and Ludhiana in 2016, DMAI now proposes to organize similar conference in Ludhiana on 21-22 April 2022. Detailed circular with brochure etc. for the conference in Ludhiana will be issued to our members shortly.





The Dyestuffs Manufacturers  
Association of India

Conference on

# Textiles: Business & Environment Sustainability

- Challenges for the Colorants Industry



Department of Chemicals & Petrochemicals  
Ministry of Chemicals and Fertilizers  
Government of India

Thursday 21<sup>st</sup> & Friday 22<sup>nd</sup> April 2022, Ludhiana

The Textile Industry occupies a unique position in the Indian context. It employs around 4.5 crore workers including 35.22 lakh handloom workers across the country. The industry contributed 7% to the industry output (by value) in 2018-19. The Indian textiles and apparel industry contributed 2% to the GDP, 12% to export earnings and held 5% of the global trade in textiles and apparel in 2018-19. Exports of textiles (all textiles, cotton yarns/fabs./made-ups/handloom products, man-made yarns/fabs./made-ups, handicrafts excl. handmade carpets, carpets and jute mfg. including floor coverings) stood at US\$ 22.89 billion between April 2021 and October 2021. The Indian textiles market is expected to be worth >US\$ 209 billion by 2029.

Textile Processing is a vital link in the entire Textile Supply and Value Chain. It is an area of the maximum value-addition, complexity on account of technology and challenges in terms of environmental considerations. At the heart of processing is coloration (dyeing and printing), which highlights the vital role that colorants play in the textile industry. While the industry is highly fragmented, it has certain important hubs and clusters which significantly influence the fortunes of the textile and textile processing industry.

Ludhiana and nearby areas are unarguably the leading textile hub in North India. It is a leading producer of woollen and acrylic knitwear. Cotton, synthetic fibers and blends also find wide usage and application. These are converted into a wide range of fabrics, hosiery, knitwear and ready-made garments. What is noteworthy is the existence of over 10,000 hosiery units in Ludhiana, predominantly from small and medium-scale sector. This is adequately complimented by the presence of a healthy number of organized textile undertakings in the region, allowing for a robust industry growth. Besides catering to the domestic market, it is an export hub for T-shirts, sweat shirts, semi-winter and winter apparel. About 90% of the demand for woollen hosiery in India is met by the Ludhiana industry.

The Dyestuffs Manufacturers Association of India (DMAI), with the support of Department of Chemicals & Petrochemicals, Ministry of Chemicals and Fertilizers, Government of India, deemed it appropriate to organize a 2 days Conference at Ludhiana to address the role and importance of colorants in the textile business, and the same is aptly titled "Textiles: Business and Environment Sustainability - Challenges for the Colorants Industry"

At this conference, true to its theme, Speakers from both Colorant Manufacturing industry and their users in the Textile processing, will present their views on available Colorants, their problems, expectations, trends and possible solutions. The Conference will aim to bring together manufacturers of colorants, and also their users from the textile industry from Ludhiana and nearby areas. It will aim to address matters of relevance to both segments, and also capture contemporary technologies, especially those which offer solutions that are consistent with increasing environmental and legislative demands.

## Who Should Attend? (from Colorants and Textile industries)

- Chief Executive Officers/Owners
- Senior Technology and Management Executives
- Production, Application and Marketing Executives
- Textile Processing Heads
- Merchandisers (Brands and Retailers)



**For registration, please contact:**

**The Dyestuffs Manufacturers Association of India**

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Web : www.dmai.org



### **TOPPERS : DYESTUFF TECHNOLOGY DEPT., ICT, FOR THE YEAR 2019-2020 AND THEIR SPONSORS**

- 1) Award For Topper in F.Y.B.Tech  
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After a gap of one year, necessitated by Covid Pandemic, our Half Yearly Meeting always held out of Mumbai (to foster camaraderie among the members), is back on track and was organized this year from 19th to 27th March in the unexplored North East (Shillong, Kaziranga, Guwahati etc.). The participated was rather limited, due to fear of another Covid wave.

The Half Yearly Meeting held on 24th March 2022 at Hotel Polo Towers, Shillong from 6.30 pm onwards. President Mr. Janak Mehta welcomed the members and also read out the list of activities carried out during the half yearly period. In the absence of the Hon. Secretary/Jt. Secretary and Hon. Treasurer, he also briefed members regarding the financial position of the association.



Thereafter in a very interesting and absorbing interactive session, matters related to pollution, exports, raw material prices, government policies and our representations were discussed. Mr. Ajay Kadakia, Mr. Jitendra Patel, Mr. Haresh Bhuta gave their valuable inputs and suggestions.

Participants were very appreciative of the arrangements made for this 8 day Trip.

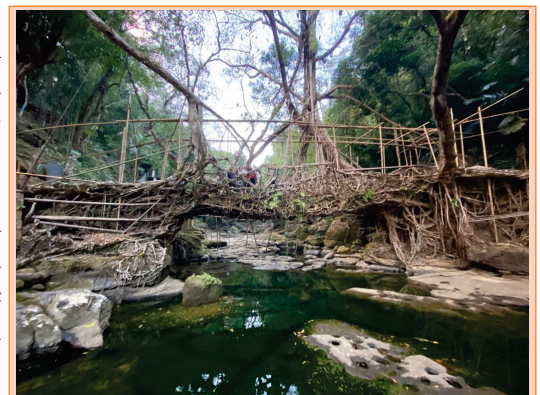
The meeting ended with a vote of thanks that was proposed by Immediate Past President Mr. Jitendra Patel. The meeting was followed by a very enjoyable lively musical evening

It was an excellent trip to North East, the unexplored India, with 16 participants.

After landing in Guwahati, checking in the hotel; after lunch and some rest we were off for an evening sunset cruise on river Brahmaputra. That was a real great experience. In cruise, we enjoyed DJ & dance.

Next day we went to the famous Kamakhya temple of Devi Kamakhya. It is a historical and old temple and going through it was a great experience. And in free time the ladies were busy with their shopping as usual.

Third day we went to Shillong. Enroute, we saw the Umium Lake. There are a number of waterfalls in and around Shillong and you can say it is the Scotland of India. Classic thing is that still you will find old architectural buildings. In



**Living root bridge - Meghalaya**



**Indo-Bangladesh border at Dawki, Meghalaya**

Shillong, we visited Root Bridge, Sky Walk and different water falls. Then we went to Cherrapunjee, known for the highest rainfall.

During the trip we visited Bangladesh border. We had boat riding in river Umgot in Dawki, having the cleanest water.

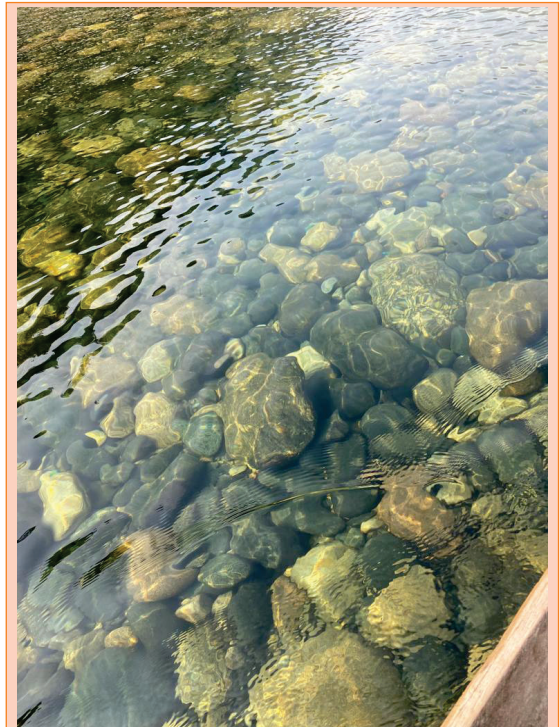


## Half Yearly Meeting

We visited the Mawlynnong village which is known as the cleanest town.

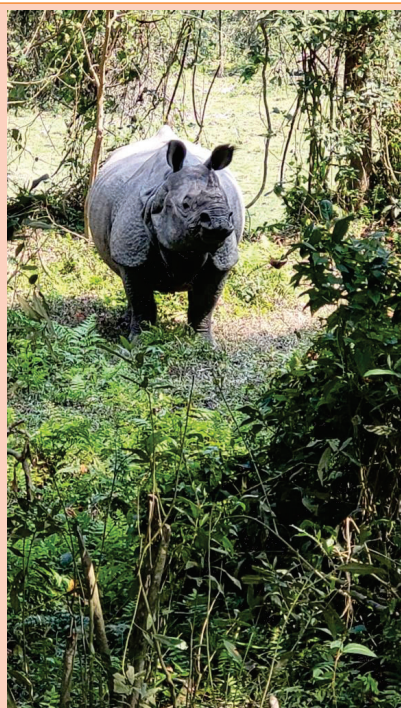


**Mawlynnong - the cleanest village**



**River umgot at Dawki - cleanest water**

After finishing Shillong, we went to Kaziranga and visited



**One horned rhino at kaziranga, Assam**

Kaziranga National Park which is famous for One Horned Rhinoceros. During our stay, Mr. Saurav Basu from Thomas Cook, who took excellent care of us, gave us a chance to watch Assamese Folk dance. This was an excellent, unforgettable experience.

We visited the Tea Estate of Mr. Raju Marfatia's relative and enjoyed superb hospitality. They took us to tea garden and tea processing unit and offered us lunch and tea.

In our Half yearly meeting, we had a guest, a Major, who gave us lot of information about the Indian Army.

8 participants extended trip to Tawang, before returning to Mumbai.

It was great to observe that the North East people are very cultured, nice, soft speaking and cooperative. Even being in hilly area, they have very good traffic sense much much better than other states.

**Contributed by: Mr. Janak Mehta & Mr. Sukesh Shah**

## Accidents in the chemical industry – Case study



# Runaway reaction

**Prof Prakash Bhate**

### Introduction

A significant increase in the number of accidents in the Indian chemical industry during the past 2-3 years prompted DMAI to conduct 2 online safety seminars in mid 2021. These seminars emphasized the critical role senior management is expected to play in minimizing unsafe practices. The contribution of safety managers in charting out a path leading to safe operations and in gleaned and utilizing safety related information available in the literature was also discussed.

Case studies are effective learning tools because these are based on actual events. An objective discussion on what went wrong in case of an accident together with recommendations aimed at minimizing, if not altogether preventing, chances of such things happening again would be of enormous value to the chemical industry. In reality, this is very difficult in our country. Although a high-level enquiry committee is immediately appointed to investigate an accident after its occurrence, its powers are rather limited. It is subjected to pressures from various interest groups. It has to struggle hard to get facts and figures. Hence, an in-depth analysis leading to identification of root causes does not take place. Finally, as its report is seldom made public an opportunity to learn is lost.

The United States is the largest producer of chemicals in the world and accounts for about one-fifth of the global production. It has had and continues to have its own share of accidents. In January 1998, the US government authorized the formation of Chemical Safety Board (CSB) to “investigate accidents to determine the conditions and circumstances which led up to the event and to identify the cause or causes so that similar events might be prevented”. It also provided in law that no other agency or executive branch official may direct the activities of the Board. In order to ensure free and complete sharing of information CSB's investigation reports are made public. To protect companies from any action or suit for damages arising out of any matter mentioned in investigation reports, no part of the conclusions, findings, or recommendations of the CSB relating to any chemical incident can be admitted as evidence in any court of law.

The CSB has, over the years, conducted countless investigations and detailed reports of these are available on its website ([www.csb.gov](http://www.csb.gov)). With a view to sensitize DMAI members to various aspects of safety in the chemical industry, the Editorial Board has decided to include a summary of a CSB investigation report in its Newsletter.

### Runaway reaction at MFG Chemical Inc.

This incident took place on April 12, 2004 during the first production batch of triallyl cyanurate. It is manufactured by the reaction of cyanuric chloride with allyl alcohol in presence of a catalyst. The released HCl is neutralized by caustic. In this case, the reaction went out of control, over-



pressurized a 15 KL reactor and released highly toxic and flammable allyl alcohol and allyl chloride into the nearby community. More than 200 families had to be evacuated. One worker received chemical burns and 154 people, including 15 police and ambulance personnel, required decontamination and treatment for chemical exposure. The reactor continued venting toxic vapor for nearly eight hours and the evacuation order lasted more than nine hours.

### **Key findings**

During its investigation, CSB held detailed discussions with the MFG management and learned that MFG had entered into a contract manufacturing agreement with GP Chemical (GPC) for supplying large quantities of triallyl cyanurate. MFG had no experience in manufacturing the product and tried to use the know-how given by GPC. During discussions with senior engineering personnel responsible for chemical process development, equipment and safety, CSB learned that the operators had added the entire quantity of each reactant, as well as the catalyst to the reactor at once. They were then unable to control the reaction.

CSB also found that MFG did not conduct an adequate evaluation of the reactive chemistry hazards involved in manufacturing triallyl cyanurate before attempting the first production batch. Readily available technical literature, including specific TAC synthesis accident histories would have alerted them to the reactive chemistry hazards involved.

### **Process development history**

GPC identified an expired American Cyanamid patent that provided a straightforward method to manufacture triallyl cyanurate and produced one laboratory-scale test batch in a three-liter flask to confirm that the basic recipe would produce a product that met the quality standards established by their customer.

GPC identified two important manufacturing considerations: 1) the chemical reaction liberated significant heat. Controlling the heat would require an adequate cooling system as well as slow, controlled addition of the chemicals, and 2) the fine powder form of one of the raw materials (cyanuric chloride) required that it be carefully added to control the reaction rate. GPC discussed these issues with MFG management and concluded that they understood these issues.

The two companies signed a confidentiality agreement, the only formal document executed for this contract manufacturing activity. While the agreement provided for GPC to review the final process details prior to the first production batch, it did not require GPC to observe or participate in the first production batch.

MFG conducted laboratory scale process development studies and then performed three pilot scale runs in a 100 lit reactor. The first two batches were carried out by adding cyanuric chloride and caustic soda to allyl alcohol in small increments while maintaining the batch temperature below 35o. In the third batch the entire quantity of allyl alcohol, cyanuric chloride and the catalyst was loaded and the temperature controlled below 10o, which was easy to accomplish in the 100 lit reactor.

### **First production trial**

For reasons that CSB could not nail down despite its detailed investigation, the procedure used for the first production trial in the 15 KL reactor was similar to that employed for the third pilot run in the 100 lit reactor. The procedure did not specify incremental addition and neutralization steps



that were used in the first two pilot runs. It contained no chemical addition rate restrictions, critical for controlling the reaction rate even though this issue was discussed by the two companies.

Again, for inexplicable reasons, the operators loaded the dry-powder cyanuric chloride into the reactor first. They chilled the reactor to 0o and ensured that the reactor cooling-jacket and chiller piping were frost covered. The entire quantity of liquid catalyst was subsequently charged through the liquid feed line into the dry cyanuric chloride already in the reactor. The operators then started the transfer of allyl alcohol directly from an iso tanker into the reactor by applying nitrogen pressure, the quantity being monitored by reading the output of a load cell associated with the reactor. They soon realized that it was going to require many hours to complete the transfer at the established flow rate. Because the procedure did not restrict the allyl alcohol fill-rate, the operators increased the nitrogen pressure and completed the transfer in less than an hour. The reactor agitator was started sometime during the transfer operation.

A short time later the reactor temperature increased from 0o to 20o, presumably due to the addition of warm allyl alcohol. Ten minutes later, the temperature had already climbed to 40o and continued to increase rapidly to 50o. Rapidly increasing pressure in the reactor caused the manhole gasket to blow out. Dense, white vapor immediately began to spray out of the manhole. The rupture disc burst open about 30 seconds later.

### **Safety oriented mindset – a key requirement for accident prevention**

Many of the readers having come thus far into this article would be aghast at the way things were done at MFG and would most likely be thinking that such things don't and cannot happen here. That would be a mistake. A quick look at MFG's history tells why.

MFG, a family-owned business, began operations in 1979. This incident took place in 2004. It is quite likely that MFG's lackadaisical approach to safety led to adoption of certain unsafe practices. Nothing eventful took place till 2004 probably because these unsafe practices, while routine in nature, were isolated from one another. Disaster struck when these happened in tandem, as uncovered by the CSB investigation.

Another runaway reaction in 2012 resulted in an explosion that sent 40 people to the hospital for decontamination. Two years later, an operator error caused a release of maleic anhydride that killed one worker and injured another. MFG had to comply with a consent decree signed with the US Justice Department and the Environmental Protection Agency for the 2012 explosion. It included a CAPEX of \$3 million in corrective measures in manufacturing plants and payment of a \$400,000 civil penalty. The company was required to commission a safety assessment of the plants. MFG also paid OSHA \$57,055 in fines related to the accident in 2012 and \$67,144 related to the 2014 incident.

In 2015, the owner appointed a safety manager having a 40-year experience in DuPont with a remit to change the safety culture at the company. He had his work cut out. But, with full support coming from the top, he was able to turn things around.

### **Some glaring unsafe practices uncovered by the CSB investigation report**

Process development done in a very casual manner, if done at all.

Having a vaguely written operating instructions.



Having operators carry out the first production batch and letting them decide how to run the reaction.

Not understanding the severity of exothermic reactions: Reactions that seem to be non-exothermic when conducted in a lab may actually be exothermic; those that seem to be mildly exothermic may actually be very exothermic. Estimating the heat of reaction by using well-known theoretical methods or by reaction calorimetry will give an idea of the severity of the reaction.

Performing an exothermic reaction by adding all reactants at one go: This is a recipe for disaster since the entire heat of reaction is released all at once; no amount of cooling will remove this heat. An exothermic reaction should always be conducted in a semi-batch manner, i.e. one reactant should be added gradually.

While the last unsafe act was the cause of the accident, it probably was not the root cause. Rather, all other seemingly 'non-serious' unsafe acts led to the evolution of a casual safety culture. This was actually the root cause

### Conclusion

MFG learned its lesson the hard way. It is hoped that publishing of such articles in DMAI Newsletter will go a long way in ensuring that this does not happen to its members.

*Dr. Prakash Bhate completed his B.Sc. from Ruia College, Mumbai in 1974 and B.Sc. (Tech.) in Dyestuff Technology from UDCT in 1977. After a two-year stint as a bench chemist in industrial R&D he proceeded to The Ohio State University where he earned his Ph.D. in Synthetic Organic Chemistry in 1984. He returned to India in 1985 as a Scientist at Alchemie Research Centre, ICI India's corporate R&D laboratories at Thane where he did exploratory work on polysaccharides. In 1987 he was transferred to ICI's Explosive Division at Gomia, Bihar where he developed emulsion explosives. In 1991 he joined the R&D laboratories of Atul Products Limited and became Vice President - Research in 2000. During his 16 year tenure with Atul, Dr Bhate and his team developed several safe, sound and environmentally friendly processes for making a variety of dyestuff intermediates, specialty chemicals, phosgenated products and fine chemicals; many of which have since been commercialized. He moved to TechNova Imaging Systems (P) Ltd in 2007 where he was responsible for developing and improving processes for photo sensitive products used for making pre sensitized printing plates. He joined as Professor in Dyestuff Technology at Institute of Chemical Technology, Matunga in 2008. He has uncovered a totally new reactive dye system based on diazonium salts. He retired from ICT in October 2018.*





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## डेड लेग (Dead legs) – हमारी आंखों के सामने छुपा हुआ एक और जोखिम !

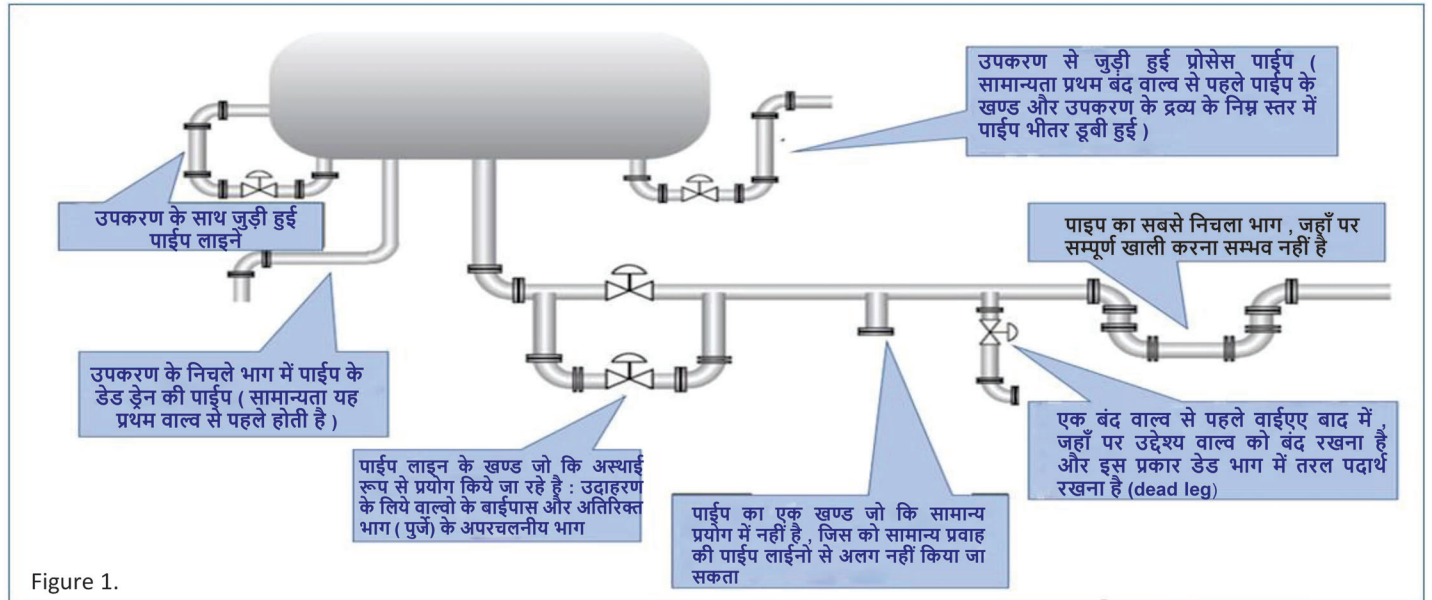


Figure 1.

### क्या हुआ ?

एक तेल शोधक कारखाने में, 12" कच्चे तेल की लाइन से जुड़ी हुई 2" ड्रेन लाइन का एक्स रे किया गया। एक्स रे से पता चला कि ड्रेन लाइन के समानान्तर खंड में जमी हुई प्रोसेस सामग्री के नीचे गहरे गड्ढे थे। और अधिक स्थानों के परीक्षणों से ऐसे बहुत से क्षेत्रों का पता चला, जहां पर बहुत अधिक मात्रा में आंतरिक क्षरण हुआ था। डेड लेग (dead leg) के संक्षारण के विशेष उदाहरण मिले। इस घटना में डेड लेग की जांच के कारण आवश्यक रूप से " नियंत्रण को खो देना " जैसी बचाने वाली स्थिति थी।

चित्र संख्या 1 में दर्शाया हुआ डेड लेग के भिन्न प्रकार हो सकते हैं।

बिकोन समिति रिलाइंस इंडस्ट्रीज़ लिमिटेड को धन्यवाद देना चाहती है, जिन्होंने इस बिकोन के अंक को प्रदान किया।

चित्र 1 के स्रोत : मोहम्मद सेड मी द्वारा लिंकेडीन लेख और डेड लेग के जोखिमों का पता लगाना

### क्या आप जानते हैं?

- डेड लेग का क्षरण प्रोसेस और उपयोगिता की पाइपों की पूर्णता को एक महत्वपूर्ण खतरा प्रस्तुत करता है।
- डेड लेग बिकूल शुरुआती समय से हो सकती है जब पाइप लाइन को स्थापित करते समय साफ, ड्रेन या द्वाब की जांच की गई थी। इस बची हुई सामग्री को लाइन को चालू करने से पहले निकालना जरूरी है।
- डेड लेग के अंदर अवश्यतः संक्षारक पदार्थ हो सकते हैं : जैसे कि दूषित पानी, या ठोस पदार्थों के अवशेष। इन का उचित निरीक्षण अनिवार्य है। यहाँ तक कि एच टू एस (H<sub>2</sub>S) जैसी गैस भी संक्षारक को सकती है।
- पाइप जिनकी आप ने सफाई की है, उन में अभी भी जोखिम भरे पदार्थ विद्यमान हो सकते हैं। इन को खोलते समय वही सावधानिया बरतनी चाहिए, जब आप भरी हुई लाइन को लेते समय करते हैं।

### आप क्या कर सकते हैं ?

- डेड लेग की संख्या के बारे में आप को सही जानकारी होनी चाहिये और उस के आधार पर इस का नियमित अवलोकन करे कि आप को इनकी आवश्यकता है या नहीं। जिनकी जरूरत नहीं है, उनको परिवर्तन का प्रबंधन का अनुसरण ( ) करते हुये बाहर निकाल देना चाहिये।
- आप की सुविधा में डेड लेग के प्रबंधन के लिए एक कार्यक्रम होना चाहिये। इस कार्यक्रम में निम्नलिखित होनी चाहिये :
  - डेड लेग को साफ करने के लिए समय सारणी
  - अपेक्षित संक्षारण दर पर निरीक्षण योजना
  - प्रोसेस जोखिमों के अध्ययन और एम ओ सी अवलोकन के दौरान विशेष ध्यान

**डेड लेग जीवित हो सकती है ! यह धारणा कभी मत बनाए कि जो पाइपे प्रयोग में नहीं है, उनका क्षरण नहीं हो रहा है !**

Courtesy:



Messages for Manufacturing Personnel  
[www.aiche.org/ccps/process-safety-beacon](http://www.aiche.org/ccps/process-safety-beacon)



## Piping Dead Legs – Another hazard in plain sight!

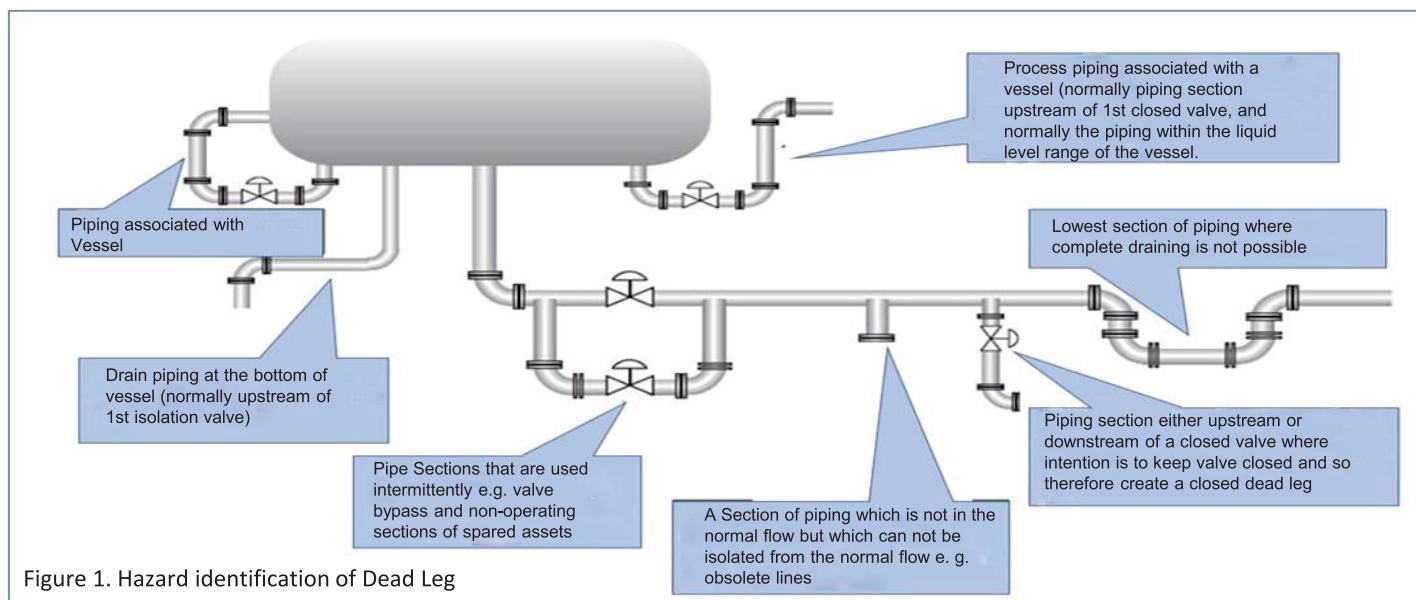


Figure 1. Hazard identification of Dead Leg

### What Happened?

At a refining site, an x-ray examination was done on a 2" drain line connected to a 12" crude line. The x-ray showed deep pits beneath deposits of process material in a horizontal section of the drain line. Further inspection of other locations identified more areas with significant internal corrosion. These were typical cases of Dead Leg Corrosion. The Dead Leg Inspection in this case certainly prevented a Loss of Containment Incident.

Various dead leg piping configurations can form dead legs as shown in Fig. 1.

*The Beacon Committee would like to thank Reliance Industries LTD. For providing the material for this Beacon.*

*Source for the Fig1: LinkedIn article by Mohammed Said Mechanical Integrity & Hazard Identification of Dead Leg*

### Did You Know?

- Corrosion in dead legs represents a significant threat to the integrity of process and utility piping.
- Dead legs can be left from initial piping installation when they were used for flushing, draining or pressure testing. They should have been removed before commissioning.
- Dead legs that contain potentially corrosive materials such as contaminated water, or deposits of solid materials require focused inspection attention. Even gases like H<sub>2</sub>S can be corrosive.
- Piping that was flushed and drained may still contain hazardous materials. Opening these lines should require the same caution as if they were full.

### What Can You Do?

- Dead legs should be identified and be subjected to a regular review to decide if they are still needed. Those that are not used should be removed following the Management of Change (MOC) procedures.
- The facility should have program for managing dead legs. The program should include:
  - A schedule for periodic flushing of dead legs
  - Inspection plan based on the anticipated corrosion rates
  - Review dead leg inspection results during Process Hazard and MOC reviews

**Dead Legs can be very alive. Never assume that abandoned piping is not corroding.**



## Seminars & Meetings

### 71st Annual General Meeting & Awards Presentation Function

The 71st Annual General Meeting and Awards Presentation function of the Dyestuffs Manufacturers Association of India (DMAI) was held on Friday, the 12th November 2021 at Hotel Sea Princess, Juhu, Mumbai. Shri Yogendra Tripathi, Secretary, Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, GOI was the Chief Guest. Padma Bhushan Rajju Shroff, Chairman, UPL Ltd graced the occasion as the Guest of Honour. More than 80 members of the Association with their spouses, special invitees, guests & other dignitaries and press attended the meeting. (Detailed report about the meeting included elsewhere in this issue)

### Stakeholder consultation meeting for preparation of 'Vision India @ 2047'

President Mr. Janak Mehta along with Consultant Mr. Jasbir Singh participated in the 1st Stakeholder consultation meeting under the Chairmanship of Mr. Samir Kumar Biswas, Additional Secretary, DCPC on 11th January 2022 through Video Conference. DMAI also submitted requisite inputs to DCPC on 15th January 2022.

### Half Yearly Meeting at Shillong, Kaziranga, Guwahati and Tawang

About 16 members with their spouse participated in the Half Yearly Meeting at Shillong, Kaziranga, Guwahati and Tawang from 19th February to 5th March 2022. Members enjoyed the picturesque places at Shillong, Kaziranga, Guwahati and Tawang. (Detailed report about the meeting included elsewhere in this issue)



## News

- Submitted our comments/inputs in various issues concerning the colorant industry to DCPC like Australia-India CECA- views on requests list of Australia, High priority lines under chapter 28 & 29 for consideration under Ro DTEP scheme India – China Bilateral Trade, Shortage of Raw Materials for Speciality Chemical Industries, India-Korea inputs w.r.t. change in Product Specific Rules in the context of Rules of Origin, Imposing Customs Duty on imports from USA, Domestic Manufacturing opportunities identified from Trade Data, India-Australia Tariff Lines, Stakeholder Consultation for Vision India @-2047, Imposition of export ban on Sulphuric acid HS Code 28070010, Chemical names imported under three HS Tariff Lines, Measures to increase the domestic production of Titanium Dioxide (TiO<sub>2</sub>).



## Membership

### New MEMBERS

#### Life Member - Non SME

Membership No.	Name of the Company	Contact Person
LN/S-41	Shree Pushkar Chemicals & Fertilizers Ltd	Dr. N.N. Mahapatra

### APPEAL

A strong membership base the strength of any associations, helps in commanding due respect and attention, enabling the association to take up industry problem effectively with the concerned authorities it helps the Industry to face the problem unitedly, and to work for its betterment. We therefore appeal to you to introduce new members to the Association.



## Atul Ltd expands Sulphur Black manufacturing capacity to 26,000 MTA – completes 70 years of operations

Atul Ltd (Atul) has recently completed the expansion of its Sulphur Black manufacturing facility – the production capacity will increase from 9,800 tonnes per annum to 26,000 tonnes per annum. Atul is one of the leading producers of Sulphur Black in the world. The state-of-the-art integrated plant will produce both, liquid as well as powder formulations. The automated packing and stacking system with zero manual intervention will further increase production efficiency. The plant will be equipped with a zero liquid discharge facility in line with the commitment of the Company towards sustainability. The products are GOTS approved and Oeko-Tex Standard 100 compliant.

Atul started its manufacturing operations 70 years ago on March 17, 1952, as a dyes manufacturer to meet the needs of the then growing textile industry and make the country self-reliant in its requirement of dyes. The first Sulphur Black plant of the Company was commissioned in 1952 and had a production capacity of 2,500 tonnes per annum. Sulphur Black production capacity has steadily grown in the last seven decades, catering to the Textile, Paper and Leather industries.

Atul is also one of the leading producers of Vat dyes in the world and offers a range of Reactive, Disperse, Acid and Direct dyes and some high performance pigments. Colors Business of the Company serves customers in about 40 countries with a diverse product portfolio.

### **About Atul Ltd:**

Founded by Mr Kasturbhai Lalbhai on September 05, 1947, Atul is one of the leading integrated chemical companies of India. The Company manufactures about 900 products and 400 formulations and owns 140 brands. It serves a wide range of customers belonging to over 30 industries in around 90 countries and has established subsidiary companies in Brazil, China, the UAE, the UK and the USA. The Company offers a wide range of products and applications used in the Agriculture, Adhesives, Animal Feed, Automobile, Composites, Construction, Cosmetic, Defence, Dyestuff, Electrical and Electronics, Footwear, Food, Fragrance and Flavour, Glass, Home Care, Horticulture, Hospitality, Paint and Coatings, Paper, Personal Care, Pharmaceutical, Rubber, Soap and Detergent, Sport and Leisure, Textile, Tyre and Wind Energy industries. The production facilities of Atul and its associate, joint venture and subsidiary entities are at Ambernath, Ankleshwar, Jodhpur, Panoli, Tarapur and Valsad in India and Somerset in the UK. The first manufacturing site of the Company in Atul, Gujarat is spread over 1,250 acres.



## Tariff for Advertisement in DMAI Newsletter

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<b>POSITION</b>	<b>For Members</b>		<b>For Non-Members</b>	
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Back Cover	24000	28320	28500	33630
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Color Page	14500	17110	17000	20060
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\* REACH is the European Union Regulation (No 1907/2006) on Registration, Evaluation, Authorisation and Restriction of Chemicals



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