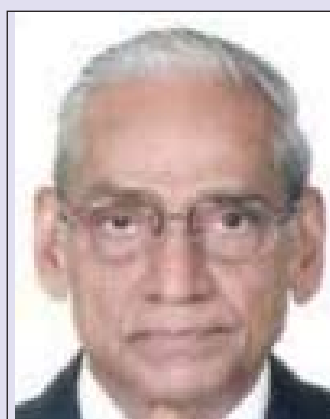


HORIZONS

Inside

**We are proud to
associate with....**



Page 3
President's Message

Page 8
Timely Payments to MSMEs are crucial – Pawan Bindal

Page 11
Dr. K. S. Murthy – Man Behind the "Horizons" (ISCMA Newsletter)

Page 12
Time Management in the New Millennium

Page 15
Advanced Green Composites by Prof Anil Netravali, Cornell University

Page 18
ISCMA welcomes Mr. Dilip Raghavan & wishes the best for Chroma Texchem Exhibition on 14-15 November 2019 at Bombay Exhibition Centre, Mumbai.

Page 18
Laghu Udyog Bharati

Page 19
ISCMA Members meet with U.S. Consulate on 10th July 2019

Page 21
We are proud to associate with
- Dr. Kishore Manilal Shah, PhD, Presented with the Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who
- Mr. Vinay D Patil receives UAA - ICT Alumina award
- Mr. Deepak V. Bhimani – A Man of Great Perception
- Archroma to acquire stilbene-based oba business for paper and powder detergent applications

Page 26
Glimpses of Chemspec India 2019

CONTENTS

EDITORIAL BOARD

Dr. K. S. Murthy
Shri. Vinayak M. Natu

Fastest growing manufacturer in speciality chemicals offers its national and international clients innovative range of performance chemicals such as:



❖ **POLYMER ADDITIVES & WAXES**

- ❖ Polyethylene Waxes (Oxidised, Non Oxidised)
- ❖ Internal / External Lubricants for PVC
- ❖ Release Agents for Plastics
- ❖ Fatty Bisamide Waxes
- ❖ Antistatic Agents for Plastics
- ❖ Synthetic Waxes
- ❖ Fatty Acid Esters
- ❖ Processing Aids



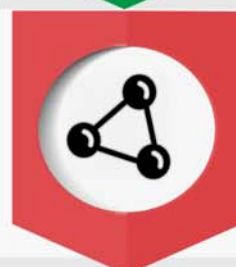
❖ **AQUEOUS WAX ADDITIVES**

- ❖ Paraffin Wax Emulsions (Anionic, Non Ionic & Cationic)
- ❖ High Density Polyethylene Wax Emulsions (Non- Ionic)
- ❖ Low Density Polyethylene Wax Emulsions (Non-Ionic, Cationic)
- ❖ Carnuba Wax Emulsions (Non-Ionic)



❖ **LUBE OIL PACKAGES / METAL WORKING FLUIDS**

- ❖ Soluble Cutting Oil Additive Package
- ❖ Rust Preventive Oil Additive Package
- ❖ Knitting Oil Emulsifier Package
- ❖ Semi Synthetic Cutting Fluid
- ❖ Drop Point Improver for Grease



❖ **ADDITIVES / ESTERS / AMIDES**

- ❖ Esters: Sorbitan, Mono, Di Esters, Glycerol, Polyol etc.
- ❖ EP/ Antiwear Additives – Phosphate Esters.
- ❖ Corrosion Inhibitors – Alkyl Imidazoline, Amine Borate, Amides.
- ❖ Biocide - Triazine.



OUR BRANDS



Industries / Applications :

**Metal Working Fluids | PVC Stabilizers | Rigid PVC Pipes & Fittings | Construction Chemicals
Mould Release Agent | Printing Inks | Textile | Hot Melt Adhesive | Explosive | Master Batches
Paint & Paper | Personal Care | Leather | Road Marking Paints & Many More.**

Corporate Office:
1104-1105, Cyber One, Plot No. 4-6, Sector No. 30 A, Vashi, Navi Mumbai-400703,
Maharashtra, India.
Contact: +91-022-68172100 (100 Lines), Email: info@qci.in / sales@qci.in, Visit- www.qciindia.com
Works: Khalapur, Dist. Raigad, Maharashtra, India.

From the President's Desk



Dear Members,

We have immense pleasure in releasing the next issue of our newsletter containing activities conducted by ISCMA during the period April-August 2019. We have received an overwhelming response from our members for the workshops conducted on Time Management and Advanced Green Composites.

An increase in participation by our members has given us the confidence in organising more such events in future, which will be useful to our members specially SME & MSME. I would like to mention about the active participation of the meeting with U. S. Consulate and am thankful to the Managing Committee for extending their support.

There is a slow-down in the overall situation of Industries, but at the same time there are more opportunities to overcome all the negative factors, particularly for exports. Looking into US-China trade situation, India has to gear up to take on as the global manufacturing hub focusing on speciality chemical manufacturing and related services. Most of the countries are now looking towards India for collaborating with Indian manufacturers' in terms of Joint venture, Technology transfer, knowledge partner or as an alternate source to China as a sourcing hub.

We should focus to raise our standards to international level to meet the expectation of buyers.

I appeal to all our members to actively participate in the forthcoming workshops being organised on 16th August 2019 and 13th Sept. 2019 on the topics "High Potential Leadership" and "Winning the game of marketing" respectively.

Thanking You.

Vinay D Patil
President ISCMA



ISCMA (Indian Specialty Chemicals Manufacturers' Association) founded in 1952. It is all India body representing manufactures of Indian Specialty Chemicals dedicated to the growth of Indian Specialty Chemicals Industry. The association members consists of large, medium, small scale, traders and technocrats.

ISCMA Broadly serves the following objectives:

- The association promotes and safeguards the interest of the specialty chemical industry.
- To make representation with Govt authorities or bodies on any matter affecting the specialty chemicals trade and industry.
- To promote better service to members, information on safety, health, environment, sustainability, responsible care initiatives under the structured of self-regulation.
- To recognize services for promotion of specialty chemical industry.
- Exchange of views to members.
- Providing facilities for conferences, exhibitions, seminars, technical training relating to specialty chemicals.
- To promote technical knowledge and other information for the benefit of others.
- Promote co-operation among Indian specialty chemical manufacturers.
- To promote and preserve high standard of business integrity and principals.
- To promote trade connected with specialty chemicals in India.
- Coordinating with all other associations or bodies in India as well as other countries.
- To extend and maintain international liaison.

FOR YOUR REQUIREMENTS OF

- ▶ Nonyl Phenol Ethoxylate 9.5 Mole
- ▶ Lauryl Alcohol Ethoxylate 5 Mole
- ▶ Lauryl Alcohol Ethoxylate 7 Mole
- ▶ Lauryl Alcohol Ethoxylate 9 Mole
- ▶ Lauryl Alcohol (C12-C14)
- ▶ Ethylene Diamine (EDA)
- ▶ Diethylene Triamine (DETA)
- ▶ Triethylene Tetra Amine (TETA)
- ▶ Tetraethylenepentamine (TEPA)
- ▶ PVA JP 05Y
- ▶ PVA JP 20/20Y
- ▶ PVA JP 24
- ▶ PVA JP 27
- ▶ PVA JF17
- ▶ PVA 2488
- ▶ PVA 2688
- ▶ PVA 1799
- ▶ PVA 2699
- ▶ LAB
- ▶ Diethanolamine
- ▶ Di Methyl Ethanolamine (DMEA)
- ▶ Methyl Diethanolamine (MDEA)
- ▶ Perchloroethylene
- ▶ Trichloroethylene
- ▶ Crude Glycerin
- ▶ Refined Glycerin
- ▶ Glyoxal 40 %
- ▶ Paraformaldehyde 91%
- ▶ Sodium Tri Poly Phosphate (STPP)
- ▶ Sodium Hexa Meta Phosphate (SHMP)
- ▶ PE Wax
- ▶ Parafin Wax
- ▶ Microcrystalline Wax 725
- ▶ Microcrystalline Wax 725D
- ▶ Microcrystalline Wax MMP
- ▶ Microcrystalline Wax 70
- ▶ Montan Wax
- ▶ PP Wax
- ▶ Vegetable Wax
- ▶ Palm Wax




CHEMI CARE


• IMPORT • GLOBAL SOURCING • EXPORT



Export inquiries solicited

 @chemicareindia

 chemicare

 +91 8104853001

Tel: +91 22 40226980 / 64 | E: info@chemicare.com | W: www.chemicare.com



**INDIAN SPECIALITY CHEMICAL
MANUFACTURERS' ASSOCIATION**

PAST PRESIDENTS OF THE ASSOCIATION

- | | | |
|-----|------------------------|-------------|
| 1. | Shri N. R. Soman | |
| 2. | Shri S. M. Mistry | |
| 3. | Shri M. D. Dhamankar | - 1974-1975 |
| 4. | Shri D. M. Neterwala | - 1976-1978 |
| 5. | Shri B. S. Malvi | - 1979-1980 |
| 6. | Shri. R. Hormazdiyar | - 1981-1982 |
| 7. | Shri S. Sivashankar | - 1982-1983 |
| 8. | Shri C. I. Bhuva | - 1983-1987 |
| 9. | Shri S. K. Parekh | - 1988-1990 |
| 10. | Shri L. N. Gandhi | - 1990-1992 |
| 11. | Ms S. F. Vakil | - 1992-1994 |
| 12. | Shri S. M. Kelkar | - 1994-1996 |
| 13. | Shri C. V. Somaiya | - 1996-1997 |
| 14. | Shri Narendra R. Mehta | - 1997-2000 |
| 15. | Shri N. K. Parekh | - 2000-2002 |
| 16. | Shri M. B. Malvi | - 2002-2004 |
| 17. | Shri Narendra R. Mehta | - 2004-2007 |
| 18. | Dr. Kishore M. Shah | - 2007-2012 |
| 19. | Shri Deepak Bhimani | - 2012-2016 |
| 20. | Shri Kashi C. Murarka | - 2016-2018 |



Managing Committee Members for the year 2018 - 2020



Shri. Vinay D. Patil
President



Dr. Subhash V. Udeshi
Vice President



Shri. Gunjan J. Yajnik
2nd Vice President



Shri. Vinit M. Patel
Hon. Treasurer



Shri. P.M. Kundalia
Committee Member



Shri. Yashwant Jhaveri
Committee Member



Shri. Ashok S. Pathare
Committee Member



Shri. Anjani K Prasad
Committee Member

Co-opted Members



Shri. Kashiprasad C. Murarka
Past President (2016-2018)



Shri. Deepak V. Bhimani
Past President (2012-2016)



Dr. Kishore M. Shah
Past President (2007-2012)

Invitees



Shri. Harshad Shah
Member



Shri. Hardik Sampat
Member



Shri. J.B. Purohit
Member

Timely Payments to MSMEs are crucial – Pawan Bindal

It is a well-known fact that the economic success of developed economies is driven significantly by micro, small and medium enterprises (MSMEs). MSME development, especially access to finance, has been a focus area in India too.

However, despite being a prime policy focus, MSME access to finance remains a vexed challenge. In fact, credit extended to MSMEs actually declined by approximately 3% over the last two years.

As per Reserve Bank of India (RBI) analysis, against an estimated total finance demand of Rs32.5 trillion (Rs26 trillion in debt and Rs6.5 trillion in equity), the total loan disbursement as of March 2016 was only Rs11.1 trillion.

The declining bank credit to the MSME segment can be attributed partly to risk aversion among banks due to rising non-performing assets (NPAs). Interestingly, more than 80% of NPAs are attributed to large corporate entities. Consequently, MSMEs are suffering from a credit squeeze that has arisen largely from the failures of large companies.

For Indian MSMEs, difficulty in accessing finance reduces their competitiveness. The lending rate to MSMEs in India varies between 11% and 18%, versus a rate of about 3% in the US and UK and about 8% in China.

But while access to finance is indeed a concern for MSMEs, it raises the question—why is there such a need for finance? Given their smaller balance sheets, MSMEs depend acutely on cash flow from customers—large corporate entities in particular. Consequently, the payment habits of large companies have a significant impact on MSME cash flows.

In this context, we looked at the Dun & Bradstreet database to find out whether MSMEs receive payments on time.

Sample data from 2016 reveals that micro businesses (turnover < Rs10 crore) had a greater burden of delayed payments with median days sales outstanding (DSO) of 79 days, followed by small businesses (turnover < Rs50 crore) at 72 days. Comparatively, large companies enjoyed much quicker payments at a DSO of 56 days. The construction sector was the worst hit, with micro businesses waiting 180 days to receive payments. In manufacturing, micro businesses had a DSO of 85 days compared to 54 days for large corporate entities.

Evidently, smaller businesses have less bargaining power when it comes to getting their dues on time. In contrast, large corporations not only receive their dues faster, but also benefit from cheaper bank finance. Therefore, MSMEs face a considerable challenge when it comes to working capital, often threatening their survival.

There exists legislation for tackling delayed payments in the MSME Development Act of 2006, which effectively makes it mandatory for buyers to pay MSMEs within a period of 45 days. However, as the data shows, MSMEs prefer to wait for payments rather than taking legal action, given the difficulties in enforcement.

Notably, other countries such as the UK and US have done better in tackling the problem.



Pawan Bindal
Cofounder TimePay

The UK has developed a vibrant factoring market, with a turnover of about €377 billion as of 2015, which is estimated to be 100 times bigger than that of India. The US launched the Quick Pay initiative in 2011 which accelerated payments of over \$220 billion to federal contractors. In 2014, the Barack Obama administration launched the Supplier Pay initiative, which was the private sector's equivalent of the Quick Pay initiative.

In India too, the RBI has championed the Trade Receivables Discounting System (TReDS). TReDS will enable MSMEs to sell their receivables at market prices to multiple financiers. Even as regulatory and systemic initiatives are under way, there remains a need to correct the often cited problem regarding MSME finance—lack of adequate information or information asymmetry. Within the ambit of banking credit, the development of credit bureaus and rating agencies in India has partly addressed this problem.

However, on the trade credit side, i.e. with respect to payments and receivables, information availability remains a major challenge. Consequently, there is nothing to deter a buyer (especially a large corporation) from delaying payments to MSMEs. There is a need for developing shared information networks that serve effectively as “credit bureaus” for trade payables and receivables. Such information networks would enable MSMEs to distinguish slow-paying customers from those that pay on time.

Perhaps the best news for MSMEs in India is the rapid adoption of technology, data and analytics by various non-banking financial companies and banks. Importantly, many start-ups are focusing on developing innovative digital solutions around MSME financing needs. With the government's focus on digitization and implementation of the goods and services tax, MSMEs will increasingly join the chain of organized commerce, and have a credible trail of operational business performance.

This digital trail can be used as the basis for favourable financing terms for MSMEs by modern data and analytics-oriented financiers.

It is estimated that if Indian MSMEs were to receive their payments from large companies in a timely manner, their profitability could go up by at least 25%. Considering the wide base of MSMEs in the country (they are estimated to number about 51 million), one can only imagine the huge positive impact this would have on the Indian economy.

Welcome to new members

M/s. Pahwa MetalTech Pvt. Ltd.

M/s. Indo Global Chemicals

M/s. Petcojas chemicals

M/s. Belami Fine Chemicals Private Limited

M/s. G.B.Chemicals

M/s. Gujarat Halogen Petrochem Corporation

M/s. Dorado Chem Pvt. Ltd.

M/s. Eastern Petroleum Private Limited



Organizer



Deadlines for
abstracts:
July 31, 2019



2nd International Conference on "Protective Coatings & Surface Treatment"

PCST 2019

Date: November 18-19, 2019

Venue: Hotel Holiday Inn, Mayur Vihar, New Delhi



Convenor & Chief Technical
Prof. A. S. Khanna
Chairman, SSPC India
Proprietor, Surface Engineering & Coating Consultant
Fellow NACE, Fellow ASM

With a focus on

- Organic Paint Coatings,
- Inorganic Metal Coatings such as Hot Dip Galvanization & aluminium coatings
- Thermal Spray Coatings &
- Surface Modification using, CVD/ PVD and Laser Surface Treatment

Knowledge Partners



Media Partners



Organizer



Co-Organizer



For registration please contact:

Swati Pawal, M.: +91 9773776934, E: contact@industrialcoating.in
Priyanka Bose, M.: +91 7428400320, E: technical@industrialcoating.in
Website: www.industrialcoating.in

Dr. K.S. Murthy – Man Behind the “Horizons”(ISCMA Newsletter)

Dr.K.S.Murthy is Technical Consultant at Pidilite Industries Limited since March 2002 working on regulatory aspects of Textile dyes, Speciality chemicals and Pigments. He is graduated in Technology of Intermediates and Dyes from UDCT (now ICT) in 1961 followed by Junior Research Fellowship under the supervision of Prof K.Venkataraman on “Constitution of Azoic Coupling Components and Dyes derived from Cyanuric chloride” during 1961-63 at National Chemical Laboratory, Pune. Subsequently he obtained PhD under the guidance of the discoverer of Reactive dyes, Professor Ian D Rattee, OBE at the Department of Colour Chemistry & Dyeing at the University of Leeds with Research Assistantship in 1967. “Effect of Temperature on the Kinetics of Hydrolysis of Dichlorotriazinyl Reactive dyes” was published in JSDC August 1969.



Besides Pidilite, his 50 years stint in the colorant industry entails technical service, sales and marketing for BASF, Hoechst Dyes & Chemicals Ltd/Mafatlal Dyes & Chemicals Ltd and Indokem Ltd at textile units. It also includes 20 years of techno-commercial journalism passionately pursuing and covering events prolifically as honorary writer for the benefit of readers and archives. This includes speciality chemicals, dyes, textiles, chemical engineering besides medical in industry journals such as Colour Publications, Chemical Weekly, Chemical Industry Digest, Indian Dyechem Bulletin and Consumer Guidance Society of India.

The Trustee Board of the UK-based Society of Dyers and Colourists conferred Silver Medal of the Society for his 'Sustained Support to the Indian Textile Industry' at a function held in Bradford, UK on April 26, 2013. Some past SDC Gold Medallists include Prof Ian D Rattee (also Perkin Medallist) and Harry H Sumner (ICI Organics and University of Manchester Institute of Science & Technology) his thesis examiner. He feels honoured to be given a small niche in this 'Hall of Fame' featuring such stalwarts, albeit at a different level and is pleased that his work and years of committed efforts have been recognised and acknowledged by SDC internationally.



Forthcoming Events at ISCMA office

Workshop on High Potential Leadership by Mr. Sidharth Shah
16th August, 2019 at 4:30 p.m.

A. G. M. followed by presentation on
The Trek to The Three Grand Shrines in Kumano in Southern
Penninsula, South of Kyoto, Japan.
by Past President Mr. Deepak V. Bhimani
4th September, 2019 at 4:00 p.m.

Workshop on Winning the Game of Marketing by Mr. Sidharth Shah
13th September, 2019 at 4:30 p.m.

Time Management in the New Millennium

Whatever the mind conceives and believes the mind can achieve, said Napoleon Hill. What you think and believe, you can achieve. Conception happens from the mind, ideation, belief system in harmony followed by achievement, unrelentless action towards goals. Mr. Siddharth Shah of Think & Grow Rich Academy, Rank holder in Chartered Accountant, Gold Medallist in MBA, Business Coach from Napoleon Hill Foundation USA, Entrepreneur, Think, Believe and Act-Achieve Book author and TedX speaker rejuvenated the members with his talk and discussion in a workshop on Time Management on 12th June 2019 at ISCMA Hall. Siddharth advocated master time management, become super productive; develop razor sharp focus, pay attention to goals; learn how to develop success habits; improve self-discipline and create your own future.



Simon Corey was one of the Gurus of Time Management who said that time and money are precious and must be managed. CEO Howard Schultz's productive working day is that secret of Starbucks' brand success. What is the one thing you could do, which you are not doing now that if you do on a regular basis would make positive difference in your personal, professional and business life. Think and write down the answer to this question in a couple of minutes. Urgent matter is visible and it requires immediate attention, press on and insist on action. It also means tension and may be pleasant, easier and fun to do. Important matter requires initiative, proactive, act to seize the opportunity and not to react, which means vision, value system and results contributing to quality goals, relationships and health. In time management, one must be clear about demarcation between urgent and important.

Time Management Matrix - Activities containing 4 boxes classified with important and non-important of urgent and not urgent nature and results demonstrated in a leaflet in interactive discussions.

Box No. I marked urgent and important activities viz. crises in family or business; pressing problems of machinery affecting delivery and deadline driven projects for shipments against schedule.

Box No. II not important and urgent activities such as prevention of some issues, capability improvement e.g. server to do efficiently; relationship building with customers, family; recognising new opportunities like trade shows, exhibitions, digital press release and planning and recreation take time off, network with friends and trade associations.

Box No. III urgent but not important like activities, interruptions like messages received and callers; some mail and reports; some meetings repeatedly; proximate, pressing matters like water problem and popular activities become Urgent.



Box No. IV not urgent and not important activities trivia, busy work; some mail; some phone calls; time wasters; and pleasant activities.

Time Management Matrix – Results marked important and not important

Box No. I: urgent and important - stress with urgency; burn-out; crises management; and always putting out fires.

Box No. II: not urgent and important - vision, perspective; balance; discipline; control; and few crises.

Box No. III: urgent and not important – short term focus, crises management, reputation – chameleon character with examples from domestic and office and never say no; see goals and plans as worthless; feel victimised and out of control; shallow or broken relationships.

Box No. IV: not urgent and not important – total irresponsibility; fired from jobs and dependent on others or institutions for basics.

Deadline-driven projects: Focus on time, planning, prevention and decision making by improving capability. 85% public comes to the Box No. II and the rest either did not understand the question properly or haven't applied thought process.

How do we go in Box No. II: Time management challenge is significantly important and more so for working women. Take a typical day either holiday, attending office or travelling and bifurcate your day in one-hour slots and write on breakdown of your activities and find out quadrant which activities and questions related to such activities go in what box (I – IV). Planning a weekly design system is another matter. Convert travel time into productive time. Time pass, recreation and meditation are other points and if one hour becomes four, it enters Box No. 4 (time waste).



Box No. II activities are important and maximum time. Time used to listen to music, talking on phone and reporting. Creativity grows and new ideas develop. Identify activity which is not in Box No. II i.e. Box No. I, III and IV. Register real time on excel sheet and record activity done in previous hour. Identify activities coming in Box No. III and IV and delete them. Saving such time will result in productivity. Just as time goes to Box No. II, Box No. I will shrink due to prevention, more capability improvement and less of crisis. Expert time manager can make III and IV zero but not I. 85-90% time is No. II and 10% in No. I and that should be the vision of going forward in time management. The first step starts in quadrant III and IV and quadrant I shrink to quadrant II and it is a cycle effect and technique is to say no. Focus on goals, relationships and vision which empowers to say no.

Mails not relevant to your work may be unsubscribed and similarly reports. Identify one activity that enters which box and avoid activity in I, III, and IV. SMS and email and not

WhatsApp. Whatever platform used like LinkedIn, Facebook for social media, rule your technology, don't let technology rule you.

Efficiency and Effectiveness: Efficiency is doing things right whereas effectiveness is doing right things. Never bring efficiency in relationship since the result will not be effective. Listen to the person more so that your work will be done effectively. Don't reinvent the wheel, since the wheel has already been invented. Follow these principles and you will achieve your goals.

They studied 500 successful men and the principles are based on hard core results. Henry Ford, J.D. Rockefeller, Gillette, Wright Brothers, Thomas Edison, Graham Bell. Desmond Johnson, Oprah Winfrey. Deshbandhu Gupta founded Lupin in 1968 with a start-up capital of ₹5000 borrowing money from his wife. Under his leadership, Lupin became a global pharmaceutical company. Qimat Rai Gupta, founder, former chairman and managing director of Havells, global electrical company. Qimat was among the 100 richest Indians, and on Forbes list of global billionaires.

Bruce Lee – my definite chief aim: I Bruce Lee will be the first highest paid oriental superstar in the United States. In return I will give the most exciting performances and render the best of quality in the capacity of an actor. Starting 1970 I will achieve world fame and from then onward till the end of 1980. I will have in my possession \$10 million. I will live the way I please and achieve inner harmony and happiness. Four years later in January 1969 he was dead.

The yearly program was designed such that every 15 days there is a talk for 3 hours for the participants to learn and apply the principles. The focus is on execution and implementation. Power of subconscious mind acquires attributes of leadership and decision making and business strategy. Develop persistence to have mental alertness. Multiply brain power with the power of mastermind looking at people around you and work towards common goal.



Structure of the program – 12 pillars of success: Goal setting, Money/Financial independence; Leadership; Time management; Selling/Negotiating; Networking/Referrals; Health; Communication/Presentation; Personal development; Relationships; Accelerated learning; Legacy/Contribution. Select content. Aspects covered in entire program are potential leadership; talent building and acquisition; communication skills; how to bridge the trust of organisation; disciplines for execution; choices of a millionaire and develop grit and persistence. Transform yourself and have a millionaire mindset to create a difference to your future.

At the end of session, some attendees evinced interest in registering for Think & Grow Rich Business Mantra content on special offer for ISCMA - Self-confidence; Develop super productivity; Tap the power of subconscious mind; Attributes of leadership and decision-making and multiply brain power. 67 entrepreneurs are with them already and benchmark is 100. Value of program is 26 Action classrooms, assignments; empowering; customisation of modules; 24x7 support and certification from USA.

- Edited by Dr.K.S.Murthy

Advanced Green Composites by Prof Anil Netravali, Cornell University

ISCMA organised the above lecture on 20th June 2019 at ISCMA full house, attended by the members. With PhD from North Carolina State University, 125 publications, co-edited 2 books, 8 patents and awards to his credit, Dr. Anil Netravali is Jean and Douglas McLean Professor in Fiber Science & Applied design, Cornell University. His field of research is fibre reinforced composites and green materials and processes. Developing green resins from plant-based proteins and starches, reinforcing them using plant-based fibres to fabricate environment friendly, green composites for a variety of applications. Green nanofibers and high efficiency filtration and bacterial nitrocellulose from food and agricultural waste for composite, medical and other applications.



How long composite materials (graphite, epoxy) survive under high energy radiation and effect of water? 6-8% petroleum used as raw material for plastics, polymers, fibres and composites. Petroleum based composites have problems such as unsustainability, not environment benign, and at the end of their life end up in landfills. Therefore, using agricultural and food processing wastes, valuable products were made e.g. seed coatings, hydro mulch and bacterial cellulose.

Soy protein spun into nano fibres for use in nano filters. Green chemicals for hair stabilisation. Composites are particulates, random fibre, continuous fibre for diverse applications like aerospace, automotive, sports, electronics, medical, civil and structural using wood polymers and housing (thermoset and thermoplastic resins). Thus, changes are on the anvil to green chemistry, green and recyclable materials, biodegradable resins and polymers and products at the end of life become raw materials for the next generation products. Life cycle assessment - Reduce, Reuse, Recycle and Return to nature. Make composite materials using natural resins or synthetic resins that are biodegradable. Green materials from plants like starches, proteins, polyhydroxy alkaloids and carry out polymer processing to make products.

Soy protein is sustainable and biodegradable. It is also multifunctional protein with polar amino acids, cross linkable and behave like epoxy resin. Various fibres are combined to



make a polymer. Engineering of natural fibre hybrid composite containing soy protein and jute. Polyethylene, cheapest polymer priced at 65 cents per pound, processing cost 40 cents and that compares with \$2 of ethoxy water-based process. Green resin from nonedible proteins like jatropha and karanja seeds. Green cross linking of edible starches like tapioca, maize to make

gelatinised starch. 17 million tons of mangoes are produced in India of which 20% is the seeds and 50% of seed weight is the seed kernel with 60% starch and seed residue to resin. By products of mango processing industries contain seeds and peels.

Advanced composites are of high strength and high stiffness and graphite epoxy is a prime example used in aerospace. Graphite and ultra-high molecular weight polyethylene are the binders used. Resin and fibre of high strength are required to get the composites with fibre-resin bonding. Developments in sustainable green fibres (cellulosic) of plants and animals (protein) origin. Micro filled resin cellulose and nanocellulose or bacterial cellulose composite spider silk provide fibres to make different properties. Nature produces fantastic fibres or fibrils. So, they have added micro fibrillated cellulose material to soy protein or starch-based resin to improve their mechanical properties (strength and stiffness) that are better than the epoxy resin. Cellulose purified from wood pulp is dissolved in phosphoric acid to develop a product and that dissolved in concentrated sulphuric acid and spun using wet spinning technology. Cellulose dissolved in phosphoric acid into liquid crystalline state and spin it to make high strength fibres, biodegradable. Use viscose rayon process to cellulose and develop fibres like viscose. Modification of LC cellulose pre-treated with potassium hydroxide under tension to make composites. Starch based resin was treated with sodium bisulphite instead of potassium hydroxide to improve tensile properties of liquid crystalline cellulose. This is the highest strength (2000 MPa) for cellulosic fibres and stiffness or modulus (67 GPa). They could match high strength steel at a density of 9.8 cu.cm³.



Green hair stabiliser - cross link hairs using green technology from straight to curly and anywhere in between and away from carcinogenic formaldehyde-based technology. So, they could cross link soy protein (amino acid) without adding external cross linkers, for the same purpose. Also, cross link wool that makes it stronger and finer that increases the value of wool.



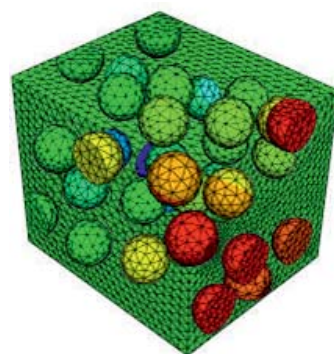
Use of nanofibers in air filtration. Particle count (m³) in Brazil in November was 600 and at the same time, Syracuse was 16 and 1.6 at Ithaca (Cornell). Filtration is used for clean rooms. Start with coarse filter and put nano fibres to arrest the particles. Controlling coarse size and making it smaller particle size. They used soy protein electro spun into nano fibres. Carboxyl, hydroxyl and amine groups inherently impart natural charges in the protein. Coarse fibres in the background and on top of that nanofibers. After filtration, the pore size is larger than the particle size, but the particles are sticking to the fibres. This is because particles come through the air and are charged positive and both positive and negative charges consequently positive charged particles attract negative and vice versa, they hit the fibres and get stuck. Airborne bacteria separated identically. 1g.m² of



nanofibers are enough to filter echo lite from the air. Bacteria is 1-2 micrometre, but virus size is in the range of about 18-100 nanometres.

Sustainable materials are plant based, bio based and at the end of their life compost without wasting any land like landfills. They are green without petroleum, toxic chemicals and mud. Super hydrophobic cotton fabrics –

utilising hydroxyl group from cotton, they have developed woven particles in different shades to inspire like lotus leaf structure and on that small particles are hydrophobic and texture of the surface giving super hydrophobicity. Cotton absorbs water because it is hydrophilic and by changing the surface structure of the fibre and impart super hydrophobicity for cotton fabric. Super hydrophobic or ultra-hydrophobic cotton fabrics which are super hydrophobic on one side and hydrophilic on the other without any treatment and leaves one dry walking in the rain. Fire resistant or retardant use 50:50 jute and soy protein. Proteins do not burn because they contain nitrogen from amino acids and peptides besides carboxyl, amine and hydroxyl groups due to which they absorb water (8-10%).



Prof Netrawali fielded the questions with viable answers, cleared doubts and misconceptions and offered advice in the interactive discussion.

- Edited by Dr.K.S.Murthy

ISCMA welcomes Mr. Dilip Raghavan & wishes the best for Chroma Texchem Exhibition on 14-15 November 2019 at Bombay Exhibition Centre, Mumbai.

Mr. Dilip Raghavan, Managing Director of M/s. Colour Publications Pvt Ltd., visited ISCMA office on 27th June 2019 and met with the President, Mr. Vinay Patil and the members of the Managing Committee.



He informed about the ChromaTexChem Exhibition to be held at Bombay Exhibition Centre, Mumbai on 14-15 November 2019, being powered by Colourage, India's oldest publication for the dyestuff and textile processing industry for over 65 years now.

The idea in a nutshell is to create a proud Indian platform to promote the interests of the Indian Dyestuffs and Specialty Chemicals Industry and showcase its offerings and capabilities to the global industry, and also lend an exposure to the key consuming industry of Textiles.

Besides, the underlying element of creating a proud Indian platform for our industry, they assure exhibitors of the business benefits that are commensurate with expectations and investments. The spirit, effort and expertise will be on the lines of what they have done with their publication for the last 6 decades.

Mr. Dilip Raghavan, has offered stalls at discounted rates to members of ISCMA and a free stall to ISCMA at the exhibition.

ISMCA is a Supporting Organisation for the same.



Laghu Udyog Bharati



Mr. Hardik Sampat, Mr. J.B. Purohit, Mr. Manohar Pitkar, Mr. Harshad Shah, Dr. Subhash Udeshi, Mr. Vinay Patil, Mr. Vinit Patel, Mr. Bhushan Marde, General Secretary, Laghu Udyog Bharati, Konkan Sambhag, Mr. Yashwant Jhaveri, Mr. Gunjan Yajnik, Mr. P.M.Kundalia, Mr. Niranjana Pandit, Executive, Laghu Udyog Bharati, Konkan Sambhag

ISCMA Members meet with U.S. Consulate on 10th July 2019

On July 10, 2019 members of the Indian Speciality Chemical Manufacturers' Association (ISCMA) met with the U.S. Commercial Service team members including Acting Principal Commercial Officer, Carla Menendez, and Commercial Specialists P. Srinivas and Sanjay Arya to discuss how to collaboratively facilitate greater commercial ties between the U.S. and Indian chemicals sector.

There is a need to facilitate greater commercial partnerships between the U.S. and Indian chemical sectors as the Indian industry seeks to strengthen its capability to comply with stronger environmental policies that are beginning to impact the chemicals and textiles sectors. Accounting for almost 15% of global chemical shipments, the United States is a world leader in chemical production and exports. The Indian chemicals sector is currently worth USD 160 billion, with specialty chemicals representing about 20% of the value. Subdued oil prices and strong domestic and export demand support the growth for this sector coupled with the tight global supply due to stringent environmental norms in China. In 2017, an estimated 40% of the chemical manufacturing capacity in China was temporarily shut down for safety inspections, with over 80,000 manufacturing units charged and fined for breaching permissible emission limits.

The vacuum created by these closures and environmental constraints presents an opportunity for Indian companies to partner with U. S. Companies to strengthen operations in the Indian market. The U.S. Commercial Service can play a crucial role in helping forge these partnerships.

The U.S. Commercial Service is the trade promotion arm of the U.S. Department of Commerce's International Trade Administration. With its network of 108 offices across the United States and in more than 75 countries, the U.S. Commercial Service of the U.S.





Department of Commerce utilizes its global presence and international marketing expertise to help U.S. companies sell their products and services worldwide.

The mission of the U.S. Commercial Service in India is to widen and deepen trade between the U.S. and India by promoting U.S. exports of products and services, facilitating inward investment in the United States, and reducing market risks for U.S. companies. The U.S. Commercial Service has seven offices in India and can be approached for assistance in New Delhi, Mumbai, Ahmedabad, Kolkata, Chennai, Bangalore and Hyderabad. To find out more about how the U.S. Commercial Service can help, visit www.export.gov

The other mandate of the U.S. Commercial Service is to facilitate greenfield investments in the United States through the SelectUSA program.

Established in 2011, SelectUSA, is the primary US federal government program to facilitate business investments in the United States. SelectUSA works one-on-one with foreign investors to offer tools, data, and other information; identify relevant federal programs; demystify federal rules and regulations; and link businesses with partners and resources. Please visit www.selectusa.gov for more information. Every year thousands of investors convene at the SelectUSA Summit to learn about the countless investment opportunities offered across the United States.

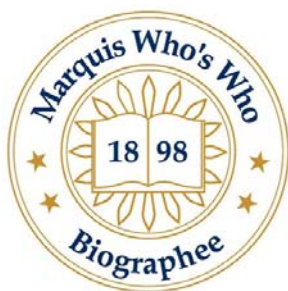
To connect with the U.S. Commercial Service write to Sanjay.Arya@trade.gov

We are proud to associate with Dr. Kishore M. Shah

Dr. Kishore Manilal Shah, PhD, Presented with the Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who

Dr. Shah has been endorsed by Marquis Who's Who as a leader in the chemistry industry Biography will be on major search engines, such as Google, Bing & Yahoo.

"Dr. Kishore Manilal Shah is the founder and long-time chair of Sauradip Chemical Industries Pvt Ltd., positions in which he has excelled since 1974."



Marquis Who's Who, the world's premier publisher of biographical profiles, is proud to present Kishore Manilal Shah, PhD, with the Albert Nelson Marquis Lifetime Achievement Award. An accomplished listee, Dr. Shah celebrates many years' experience in his professional network, and has been noted for achievements, leadership qualities, and the credentials and successes he has accrued in his field. As in all Marquis Who's Who biographical volumes, individuals profiled are selected on the basis of current reference value. Factors such

as position, noteworthy accomplishments, visibility, and prominence in a field are all taken into account during the selection process.

With a career spanning over 50 years, Dr. Shah is the founder and longtime chair of Sauradip Chemical Industries Pvt. Ltd., positions in which he has excelled since 1974. With a focus on research and innovation, Sauradip works to provide sustainable solutions for a greener planet. Prior to founding his company, he served as a senior executive of Asian Paints Ltd. in India and as an assistant research manager at Indian Dyestuff Industries Ltd. in Mumbai. Alongside his primary endeavors, Dr. Shah found success as the president of the Indian Specialty Chemical Manufacturers' Association from 2007 to 2012.

An accomplished author in his field, Dr. Shah has contributed to a number of articles published in professional journals over the course of his career. He has also penned several handbooks, including two volumes of the Handbook of Industrial Chemicals and three volumes of the Handbook of Synthetic Dyes and Pigments. Furthermore, Dr. Shah wrote the book "Studies in Heterocyclic Compound."

Prior to embarking on his career, Dr. Shah earned a Bachelor of Science from the Ramnarain Ruia Autonomous College in Mumbai in 1959. Following this accomplishment, he continued his studies at the University of Mumbai, where he obtained a Bachelor of Science Technology in 1961. Concluding his academic efforts at the Institute of Chemical Technology in Mumbai, Dr. Shah graduated with a Doctor of Philosophy in technology in 1966.

Initially recognized for his excellence with an Udyog Ratan Award for outstanding performance from the Institute of Economic Studies in 1992, Dr. Shah later accepted the award for the second time in 1993. He is also accepted a Distinguished Alumnus Award from Ramnarain Ruia Autonomous College in 2004 and from the Institute of Chemical Technology in 2011. More recently, Dr. Shah was presented with Lifetime Achievement Awards from the Indian Specialty Chemical Manufacturers' Association and the Colour Society in 2012 and 2015, respectively.

In recognition of outstanding contributions to his profession and the Marquis Who's Who community, Dr. Shah has been featured on the Albert Nelson Marquis Lifetime Achievement website. Please visit www.ltachievers.com for more information about this honor.

We are proud to associate with Mr. Vinay D. Patil

Mr. Vinay D. Patil receives UAA - ICT Alumini award

Congratulations to ISCMA President Mr Vinay D Patil for receiving distinguish Alumina award under the 1st generation Entrepreneur category on 10th May 2019 by UAA- ICT Alumina Association.

Mr Vinay D Patil completed his bachelor's degree in Textile chemistry from UDCT in 1985 and is the Managing Director of S A Pharmachem Pvt Ltd. The company is involved in sales & marketing of speciality chemicals in the pharmaceutical & textile sector. Mr Patil joined as a Director of S.A. Pharmachem Pvt. Ltd in 1993, and has ever since played an instrumental role in bring industry giants such as DuPont, KOCH & Kuraray to India. The company has setup manufacturing plants in Silvassa & Vadodara.



We are proud to associate with Mr. Deepak V. Bhimani

Mr. Deepak V. Bhimani – A Man of Great Perception

Mr. Deepak Vijaysinh Bhimani has completed graduation and post graduation in the field of Textile Chemistry from the Lowell Technological Institute at Massachusetts, U.S.A. He is the Chairman & Managing Director of Navdeep Chemicals Pvt. Ltd. founded in 1978, having its Plants and R & D Centre in Ankleshwar, Gujarat.



Plastic, textile, paper, intermediates for pesticide, pharmaceutical and health-care industries, oilfield activities are some of the areas where speciality chemicals manufactured by Navdeep finds application.

Navdeep Chemicals has received several awards for excellence in exports from CHEMIXCIL and ISCMA and is also a recipient of Best Corrosion Laboratory in the private sector by NACE India.

Mr. Deepak Bhimani is the Past President of the Indian Speciality Chemicals Manufacturers' Association (ISCMA).

He is a man of various and divergent hobbies and a Trustee of various Institutions which run schools and hospital in Gujarat and Maharashtra.

While studying and practicing chemistry, his passion for Astronomy kept his interest in Observational Astronomy alive resulting in building his own telescopes of various sizes. A small Astronomical Observatory has been set up on his company Navdeep's Housing Colony where many who are interested including students from Ankleshwar and Mumbai have viewed from this observatory on number of occasions.

He is the past President of the Amateur Astronomer's Association of Mumbai (based in St. Xavier College, Mumbai). His love for Astronomy has led him to travel to various parts of the world chasing Total Solar Eclipse Besides he has also taken photographs of heavenly objects on various occasions including transit of Venus across sun on both occasions from Jaisalmer.

In recognition for spreading and popularizing the knowledge and interest in Astronomy to the youngsters, The Indian Planetary Society has bestowed on him the prestigious "Journalist Late Shri Manubhai Mehta Award" for the year 2009 and Shri Balvantbhai Parekh Gold Medal for 2011.

He joined Rotary in the year 1968, as a member of Rotary Club of Ambarnath, was President of the Club in the year 1974 – 75 and presently is a member of RC of Mumbai South.

Trekking is another hobby which he enjoys. As an active member of the Himalayan Club and Saad Mountaineers, he has trekked to the Mt. Everest Base Camp during the 50th anniversary of the Climb,

During his trek to the Himalayas, he has used his photographic skills to capture the beauty of the vast mountain ranges.

A Journey through my Lens, an exhibition, was not just showcasing his photographs but a confluence of his three different hobbies – Photography, Trekking and Amateur Astronomy where he has captured, through his camera the splendour of different peaks of the Majestic Himalayas and the beauty of the skies.

We are proud to associate with Archroma India Pvt. Ltd.

Archroma to acquire stilbene-based oba business for paper and powder detergent applications

Archroma, a global leader in color and specialty chemicals towards sustainable solutions, today announced that Archroma India Private Limited and BASF India Limited (BIL) have signed an agreement for the acquisition by Archroma of BASF's stilbene-based OBA (optical brightening agents) business for paper and powder detergent applications.

The transaction includes BASF's manufacturing unit at Ankleshwar, India, where approximately 100 people are currently employed.



**Anjani Prasad
MD Archroma**

Archroma is a member of the SK Capital Partners group. In July 2015 the company acquired the global textile chemicals business of BASF, and, between 2014 and 2018, M. Dohmen, an international group specializing in the production of textile dyes and chemicals for the automotive, carpet and apparel sectors.

"We are extremely pleased with this opportunity to further consolidate our position as a global leader in the chemical industry by expanding both our supply capacity and application markets," said Marcos Furrer, President of Packaging & Paper Specialties, Archroma. "This acquisition will not only allow Archroma to strengthen our OBA supply to customers in the packaging & paper industry, in particular in India and Asia; it will also help us develop our portfolio offering to customers in the detergents market with high performance powder OBAs".



Archroma India Private Limited and BASF India Limited (BIL) have signed an agreement for the acquisition by Archroma of BASF's stilbene-based OBA (optical brightening agents) business for paper and powder detergent applications. In the picture: Narayan Krishnamohan, MD, BIL and Head, South Asia (Left) and Alexander Wessels, CEO, Archroma group

"In line with BASF's strategy of actively managing its portfolio, this transaction allows us to better fulfill our business potential," said Narayan Krishnamohan, Managing Director, BASF India Limited and Head, South Asia. "Archroma is a global leader in color and specialty chemicals. Ensuring a smooth transition of our customers, suppliers and employees to Archroma will be a priority."

The transaction is expected to be completed in the fourth quarter of 2019.



LEELA

FINCARE

DEBT SYNDICATION · CORPORATE ADVISORY · AUDIT & TAXATION

ABOUT US

Leela Fincare is an all-round financial partner for business corporate and individual. Started in 2014 as a one - division company that focused on debt syndication. Within a short span of 3 years it has now grown multi - fold to become an All - In - One financial resource for your business. Our name, Leela Fincare, signifies the care and concern we hold for your business requirements. Named after the mother of our director, at LEELA Fincare, we emphasize on qualities of love, focus, care and hard work. These have been instilled in our daily working. We at Leela Fincare, give the assurance, that once you are in our family, all you need to do is focus on your business operations and leave the rest on us.

DEBT SYNDICATION

- Loan against property.
- Home Loans.
- Business Loan.
- Working Capital Loan.
- Term Loan, Project Finance.
- Trade Financing.
- Import/Export Facilities.
- Factoring/Invoice or Bill Discounting.
- Private Equity.

While making the debt plan for your company, we create customized & most cost-effective solution, which suits best your business model, provided only after a thorough analysis of all the banking products available in the banking sector. We at Leela Finance, provided 360-degree support at each step of the loan process till we implement the debt solution in your business.

ADVISORY SERVICES

- Virtual CFO.
- Growth.
- Development of customized MIS.
- Quarterly financials to monitoring company.
- Accounting supervision and financial planning.
- Ensure timely statutory compliances i.e. GST, TDS etc.
- Restructuring & turn around.
- Merger & acquisition, Internationalization.

We believe that capital solutions aren't just a one way process. They require creativity, careful planning, tremendous eye for detailed risk analysis of each segment and ability to take decisions beforehand to keep the business on growth path. We at Leela, become the integral part of the company and provide extensive support in all business functioning so that you can take right strategic decision and implement all ideas.

AUDIT & TAXATION

- Stock Audit.
- Internal Audit.
- Taxation.
- Management Audit.
- System Audit.
- Revenue and Inspection Audit.
- Corporate taxation.
- Individual taxation.

Audit & Taxation is a must, be it at an individual or company level. Our speciality lies in maintaining the thorough and through process, compliance with all statutory laws, transparent accounting to provide clear view of the business understanding the minor nuances of business working and timely reporting of the same to achieve the desired growth.



Glimpses of Chemspec India 2019



From L to R: Mr. E.R. Raj Narayanan, Group Executive President, SBU Head - Chlor Alkali and Viscose Filament Yarn Mr. Vinay D Patil, President ISCMA, Mr. Amit Mehta, Managing Director, S. Amit & Co. Mr. Lalit Chadha, Founder, Goodwill Group of Companies





L & AUXI CHEM PVT. LTD

An ISO 9001:2015, 14001:2015 & OHSAS 18001:2007 Certified Company

**DEVELOPMENT NEVER ENDS!
REQUIREMENT OF QUALITY IS FOREVER!**

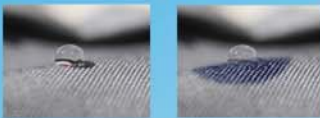
DENIM

ASI-KOC + ASI-65Q

OTHER
CHEMICALS **ASI-KOC**



FOAMING NON-FOAMING



NO-ABSORBENCY ABSORBENCY



Poor Alkaline
Stability High Alkaline
Stability



UnStable at
High Temperature Stable at High
Temperature

ADVANTAGE OF ASI PRODUCT

- Saves Time
- Saves Energy
- Reduces Pollution
- Consistent Quality
- Increase Production
- 24 x 7 Technical Range
- Eco-Friendly Products
- Value for Money

Happy
INDEPENDENCE
Day



Corporate Office : 202, E-Square, Subhash Road,
Vile Parle (East), Mumbai - 400 057. Maharashtra (INDIA).
Tel : +91-22-26111333/26123333 Mob : 9819466603.
E-mail : lsauxichempvt@gmail.com Web : www.lsauxichempvt.com

Being Eco-Friendly



GOTS
Certified Products

PAX - Protecting Your World



Be A Proud Indian  **Buy Indian**

PaxChem, with its ISO 9000, ISO 14000, OHSAS 18000, cGMP – ICH Q7 & FDA, GLP Certifications, and its over 1000 Customers located in more than 20 Countries; is the most competent & reliable Biocide / Preservative Suppliers in the Region. PaxChem presently offers more than 150 specialized products, including number of Cost-Effective & Bio-Effective Solutions.



PAXCHEM LTD.

Shreyas, Plot No. 72, Mogul Lane, Mahim, Mumbai 400 016, INDIA.

Web : www.PaxGroup.com; Email : sales@PaxChem.com

Mobile No: +91 88796 66860 / +91 88796 66861

Tel: +91 22 24385488 / 65802400

Mumbai - Dubai - Bangkok