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Bi-lingual

## NN GOYAL RETIRES AFTER 56 GLORIOUS YEARS OF SERVICE IN THE GLASS INDUSTRY

Mr. Narendra Nath Goyal, Executive Committee Member and Hon. General Secretary of the Northern India Glass Manufacturers' Association (NIGMA) retired from U P Twiga Fiberglass Ltd., on March 31, 2024 as Director Operations after a career spanning more than five decades of distinguished service.

Mr. Goyal is a Mechanical Engineer from IIT Kanpur and has worked with industries like Fiberglass Pilkington Ltd., Binani Glass Fiber and U P Twiga Fiberglass Ltd.

Mr. Goyal started in 1968 as Management Trainee with Fiberglass Pilkington Ltd., rising to the position of Vice President (Works) before joining U P Twiga Fiberglass Ltd., in 1991 as General Manager (Works), leaving for a short stint with Binani Glass Fiber and rejoining U P Twiga in 1996 as Vice President (Operations).

Since then, Mr. Goyal has played a stellar role in the success of U P Twiga over the years and is seen as a pioneer in building Fiberglass Insulation Industry in India. His greatest contribution has been in building world class future-ready technology plants well ahead of its time in India, which has helped position Twiga as a high-quality brand not only in India but also in international markets in South East Asia. He has also mentored and trained strong leaders and teams at the plants who will carry his legacy forward.

AIGMF wishes Mr. Goyal and his family peace and harmony with good health in future.



## KAPOOR GLASS RECEIVES 'MAHARASHTRA STATE EXPORT AWARD'

On Feb 8, 2024 in an event organized by the Directorate of Industries, Government of Maharashtra, Kapoor Glass India Pvt. Ltd., received the 'Maharashtra State Export Award' in the Gold category from Mr. Uday Samant - Minister of Industries, Govt. of Maharashtra in the august presence of Dr. Harshdeep Kamble IAS, Principal Secretary (Industries); Mr. Deepender Singh Kushwah IAS, Development Commissioner (Industries) and other dignitaries from the District Industries Centre (DIC).

Kapoor Glass initially started its operations via a single machine producing less than 40,000 pieces of ampoules per day. Now, Kapoor Glass produces 1.5 million pieces a day with a product mix of glass ampoules, vials, cartridges, test tubes, perfume samplers and HPLC vials. The company recently expanded its portfolio and also provides glass components to the Indian Defense sector. Kapoor Glass exports almost 90% of its production spread over 38 countries with the majority of

its exports terminating in Western Europe and Americas. In its list of satisfied customers Kapoor Glass also caters to the needs of some of the top 10 Pharmaceutical companies in the World.



Kapoor Glass has been present in Raigad (MAHARASHTRA) District since 1972 and is amongst the first few units to establish a manufacturing footprint in this region. The company has 2 fully automated facilities and a modern unmanned warehouse. Each production line is equipped with multiple cameras for inspection and also AI guided robots to carry out critical pick and place operations with robotic packaging. Highlights of the automation is that the entire modernization has been carried out

in house by integrating components from leading manufacturers across the globe. Company is poised to set up yet another ultra-modern vial manufacturing unit in close vicinity capable of producing one million tubular vials per day. Once again even the high-speed energy efficient vial forming machines have been developed and produced in house. Kapoor Glass takes pride in stating that it is the first company in the world to produce SafeOPC ampoules which are a delight to the medical fraternity. Ampoules produced using the SafeOPC technology have very uniform depth and length of the scratch thereby resulting in uniform breaking pressure along with very precise alignment between the dot and scratch. SafeOPC generates minimal glass particles at the time of opening by the doctor compared to its global peers. In addition to this Kapoor Glass also offers ampoules using the Dimension+ and Innova Surface+ features.

*"Founded in 1962, Kapoor Glass is now managed by the 3<sup>rd</sup> generation of the Kapoor family and we are delighted to receive the recognition on behalf of every Kapoor Glass team member. We would also like to thank the Govt. of Maharashtra by providing us with necessary infrastructure and policy changes to boost efficiencies."*

*"We are in discussions with the Government of Maharashtra to expand our presence in the region with the production of new novel drug delivery systems for the first time in India by an Indian Company, and contribute in our way to the growth of local community", said Mr. Dhruv Kapoor, Commercial Director of Kapoor Glass India Pvt. Ltd.*

**DAVE FORDHAM APPOINTED AS MEMBER EDITORIAL BOARD OF KANCH AND GLOBAL ENGAGEMENT LEAD FOR GLASS FUTURES (UK)**

At the relieving of Prof. V K Singh of BHU IIT, Varanasi and in order to carry forward AIGMF's decade's long relationship, it was decided to appoint

Mr. Dave Fordham as a Member Editorial Board of KANCH, as former publisher of Glass Worldwide magazine and by considering his extensive experience in Glass Publications.

Earlier, Glass Futures (UK) announced the newest addition to its team: Mr. Dave Fordham, as its Global Engagement Lead. With a rich history spanning over three decades in the glass industry, Mr. Fordham brings with him unparalleled expertise and an unwavering passion for innovation and sustainability.

Mr. Fordham's journey in the glass sector commenced in 1993 when he became a part of Glass International magazine. Since then, he has played a pivotal role in shaping the industry landscape. One of his significant contributions includes co-founding Glass Worldwide in 2005, a platform that has facilitated insightful discussions and collaborations within the global glass community. Moreover, Mr. Fordham has chaired numerous glass conferences worldwide, cementing his reputation as a thought leader in the field. Notably, he is also recognized as a Liveryman of the Worshipful Company of Glass Sellers of London, a testament to his dedication and impact within the industry.

Reflecting on his journey, Mr. Fordham shares, *"Since first being party over ten years ago to the discussions that evolved into the creation of Glass Futures, I have remained a firm*

*supporter of its goal to establish glass as the low carbon material of choice and am therefore delighted now to officially join the organization at such an exciting time in its development. I am very much looking forward to collaborating with Glass Futures' expert team and its ever-growing membership, as well as partnering with stakeholders from across the world for mutual benefit".*

*"At Glass Futures, our commitment to driving innovation and sustainability in the glass industry is unwavering. Mr. Fordham's wealth of experience and insights will undoubtedly bolster our efforts in furthering this mission. His vision aligns seamlessly with our goal of establishing glass as the low carbon material of choice, and we are eager to leverage his expertise to push boundaries and shape the future of glass manufacturing."*

Mr. Richard Katz, CEO Glass Futures adds, *"Dave Fordham's position at the heart of the international glass community will be a tremendous asset to Glass Futures and his appointment places us in an even better position to deliver industrial decarbonization across the world."*

*"We extend our warmest welcome to Dave Fordham as he embarks on this new chapter with us. Together, we are poised to lead the charge in revolutionizing the glass industry and ushering in a new era of sustainability and innovation. Join us as we embark on this exciting journey towards a brighter, greener future for glass."*

Secretary AIGMF Mr. Vinit Kapur commented, *"AIGMF has been friends*



Mr. Dave Fordham at the 14<sup>th</sup> AIGMF International Conference on "Decarbonization for the Sustainable Glass Industry" organised jointly with Glass Worldwide at glasspex exhibition on September 15, 2023 at Mumbai.



with Mr. Dave Fordham for many decades and is a preferred partner since 2011 for its publications; participates jointly at glasstec and glasspex exhibitions in Germany and India respectively. In 2021, Glass Worldwide was accorded Honorary Member of AIGMF status for the excellent relationship via Mr. Fordham's extraordinary support."

"AIGMF activities were reported globally via Glass Worldwide articles by spreading knowledge in the form of Factory Spotlights, Spotlight features on India, Personality Profiles, Online Library, Collaborative events and initiatives."

Mr. Kapur further added, "we are optimistic that AIGMF would bring more direct benefit to its members with the help of Mr. Fordham in his new roles with AIGMF and Glass Futures (UK) which is a global not-for-profit research and technology, membership organisation that connects the glass industry with academia to demonstrate disruptive technologies that will make glass and other materials zero carbon and sustainable".

"Having had the honour of partnering in countless ways with the AIGMF since the inaugural AIGMF International Conference in 1995, I am very much looking forward to continuing the successful collaboration and am grateful to the President, Ex-Com, Secretary and Members for their ongoing trust and support", said Mr. Dave Fordham.

### TEACHING YOUNG INDIA- AN INDUSTRY INITIATIVE

On Feb 21, 2024 under the initiative of teaching Young India undertaken by The Confederation of Construction Products and Services (CCPS), Ms. Sheetal Khanna, General Manager Specifications, Branding and Project Sales at Gold Plus Glass Industry Limited gave an insight on Glass Manufacturing process and Glass Processing & Applications at the Vastu Kala Academy, College of Architecture, NEW DELHI.

The session was coordinated by their faculty Member Ar. Sheily Srivastav which saw a participation of over 45 students. Ar. Shhilpi Sinha, Director at Vastu Kala Academy gave the opening address.

The sessions covered the importance of Glass as green building material being 100% recyclable. Coating process and the benefits of the solar control range of glasses were also explained.

As the students were from Architectural Stream – Glass Selection Parameters were explained and topics on energy efficiency and environmental impact were also discussed by citing suitable case studies.

### SORG STRENGTHENS EUROPEAN MARKET POSITION BY ACQUIRING TECHGLASS

SORG and the shareholders of Techglass Sp. z.o.o. have signed a share purchase agreement contract for the acquisition of all Techglass shares.

Techglass is a leading glass plant manufacturer, particularly active in the construction of glass furnaces, forehearths, batch plants and related services. Founded in 1990, the traditional family business employs more than 120 people across two sites in KRAKOW and WARSAW.

"As well as increasing our workforce, our acquisition is part of a sustainable

excellent reputation in Europe."

"By combining the complementary competencies and sales channels of SORG and Techglass, we are strengthening our position as the leading European manufacturer of glass furnaces," said Mr. Alexander and Mr. Michael Sorg, Managing Partners. "This means we are ideally placed to overcome existing and future challenges as we successfully meet the demands of our customers."

Mr. Andrzej Skowiniak, Managing Director of Techglass, will remain in his current role to help ensure a seamless transition process: "This acquisition by the market leading SORG Group not only validates the hard work and dedication of our team, but also secures a promising future for our company. We look forward to achieving new milestones together."

The transaction is expected to close by the end of the first quarter of 2024, subject to the fulfillment of contractual closing conditions.

### GLASTON AND HEGLA FORMING PARTNERSHIP IN THE ASIA-PACIFIC REGION

Glaston and HEGLA, both leaders in their respective areas of business in the glass machinery industry for architectural and automotive glass applications, have entered into an exclusive partnership covering the majority of the Asia-Pacific region.

The goal of the partnership is to



growth strategy to further develop the Polish market and build on SORG's

strengthen the offering of both parties for the benefit of customers.

With the complementary product offering, both companies can meet glass processors' growing demand for automation and integration providing comprehensive solutions, faster response and services to the customers, thanks to the broader network in the region.

Effective March 2024, HEGLA's sales and distribution activities in the area will draw upon the resources and network of Glaston Group. The partnership covers the whole region except for JAPAN, SOUTH KOREA and CHINA.

*"In HEGLA, we have the ideal partner as their complimentary offering will provide a perfect addition to our product range. Glaston is now able to offer the full product range to those customers who want to combine our heat treatment and insulated glass production with highly automated shop floor logistic solutions thereby substantially increasing efficiency and productivity. We are excited to start this new co-operation,"* comments CSO Mr. Sasu Koivumäki at Glaston Corporation.

*"With Glaston, we are able to provide highly customized solutions for clients including the integration of Glaston's heat treatment and insulating glass production into our highly automated and integrated shop floor logistic solutions in one of the largest and fastest growing regions of the world",* says Mr. Bernhard Hötger, CEO of HEGLA Group.

**About HEGLA Group:** Founded in 1976, HEGLA is renowned for high-quality, high-performance machines and systems for flat glass

processing. The company is one of the market and technology leaders for highly automated and integrated shop floor solutions and services covering glass storage, loading, cutting, remnant sheet handling and sorting as well as laser marking and processing machines providing for bird protection and mobile friendly glass. In addition, HEGLA is a growing supplier of advanced IT and ERP-systems to operate and monitor production facilities and activities.

**About Glaston Group:** Glaston is the glass processing industry's innovative technology leader supplying equipment, services and solutions to the architectural, mobility, display and solar industries. The company also supports the development of new technologies integrating intelligence to glass.

Glaston is committed to providing its clients with both the best know-how and the latest technologies in glass processing, with the purpose of building a better tomorrow through safer, smarter, and more energy efficient glass solutions. Glaston operates globally with manufacturing, services and sales offices in nine countries and its shares (GLAIV) are listed on Nasdaq Helsinki Ltd.

**BIS, CSIR-CGCRI AND GSI ORGANISED THE NATIONAL CONFERENCE ON INDIAN STANDARDS FOR GLASS AND GLAZING**

The 1<sup>st</sup> National Conference on Indian Standards for Glass and Glazing was organised by the Bureau of Indian

Standards (BIS), CSIR – Centre for Glass and Ceramic Research Institute (CGCRI) and Glazing Society of India (GSI) on March 18, 2024 at CSIR – CGCRI in KOLKATA. The objective of the conference was to make aware and train the entire construction value chain on the new and revised Indian Architectural Glass standards and to support them for the implementation of these standards in the buildings.

Dr. (Ms.) Suman K. Mishra, Chairperson, Sectional Committee of Glass and Glassware (CHD 10), BIS and Director, CSIR – CGCRI, during her Chief Guest address noted that standards played a crucial role nurturing our economic and sustainability goals; and that new standards on glass and glazing would support industry (particularly construction), academia and other technical organisations to enhance performance. She also highlighted the collaborative efforts of various players in implementing the goals.

Mr. Ajay K Lal, Head, Chemical Department, BIS delivered the theme address and highlighted the lead being taken by BIS in bringing out new standards and revising the existing standards for glass and glazing, in line with the changing trends. He mentioned that the glass standards are at par or better compared with the international standards and was being continuously revised and improved.

The conference was addressed by other eminent speakers from Industry and Bureau of Indian Standards including Ms. Sheetal Khanna, General





Manager, Gold Plus Glass Industry; Mr. Hatinder Vohra, National Head – India and South Asia, Vetrotech Saint Gobain; Mr. Tushar Zope, Vertical Head, Asahi India Glass Limited; Mr. Amit Choudhary, Scientist D, CMD 2, BIS and Mr. Mohit Garg, Member Secretary, CHD 10, BIS.

More than 100 participants from Government including officials from PWD, Kolkata Municipal Corporation, etc., Industry representatives including glass manufacturers, processors, fabricators, window manufacturers, etc., scientists and scholars from technical institutions including CSIR – CGCRI, Jadavpur University, etc, architects, structural engineers, experts and professionals from glass construction sector participated at the conference.

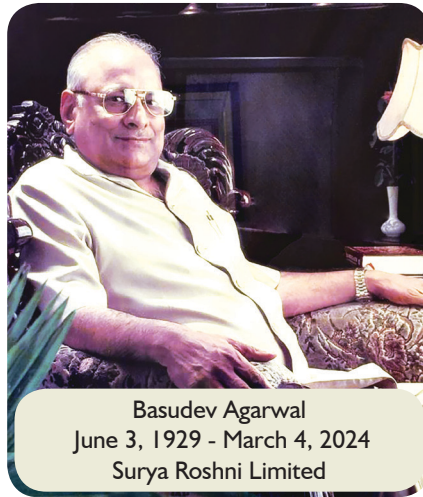
There was an engaging interactive session with the participants from industry, government and academia to take their inputs and feedback on the new and revised standards and to understand the latest trends and needs for making new standards for glass and glazing in India.

Dr. K Annapurna, Chief Scientist, CSIR – CGCRI made the welcome address and Mr. G N Gohul Deepak, Executive Director, GSI delivered the vote of thanks.

### **BASUDEV AGARWAL- A TRUE VISIONARY**

*In the grand tapestry of time, Mr. Basudev Agarwal emerges as a visionary luminary, crafting the narrative of Surya's ascent to prominence within the Steel & Lighting industry. His seminal contributions began with the establishment of the Steel Pipe plant at Bahadurgarh (HARYANA) in 1973 and thereafter Lighting plants in Kashipur (UTTRAKHAND) in 1984 and Malanpur, Gwalior (M.P.) in 1991. Under his stewardship, Surya transformed into a national icon of Steel Pipes & lighting excellence, illuminating homes and streets across the country.*

At the helm of the Kashipur plant, Mr. Basudev Agarwal laid the groundwork



for Surya's expansion with two G.L.S and two F.T.L. assembly chains. These humble beginnings belied the magnitude of his vision, which encompassed not only manufacturing prowess but also comprehensive integration of **Glass Furnace's**, Tungsten filaments, Aluminum caps plants, and other critical components. Through his strategic acumen and unwavering commitment to quality, Mr. Basudev Agarwal propelled Surya to unparalleled heights, setting benchmarks that reverberated throughout the industry. Central to Mr. Basudev Agarwal ethos was the unwavering pursuit of excellence without borders.

His relentless quest for cutting-edge technology took him across continents, where he forged partnerships and acquired state-of-the-art equipment to ensure that Surya's products stood at the pinnacle of global standards. Yet, amidst his global engagements, he remained firmly rooted in the day-to-day operations of the plants, personally overseeing every aspect with meticulous care and attention. However, Mr. Basudev Agarwal impact transcended the confines of corporate corridors.

His leadership was imbued with a deep sense of compassion and empathy, as evidenced by his unwavering commitment to the welfare of Surya's employees. Initiatives spearheaded by him not only enhanced workplace conditions

but also fostered a culture of camaraderie and mutual respect. Furthermore, Mr. Basudev Agarwal philanthropic endeavors extended far beyond the confines of the corporate world. As the Founder Trustee of the Basudev Gangadevi Agarwal Seva Trust, he extended a helping hand to the underprivileged, providing vital support for medical and educational needs.

His altruistic spirit also manifested in his role as the former Chairman of Hissar Improvement Trust, where he spearheaded transformative initiatives for local development. Additionally, Mr. Basudev Agarwal's commitment to healthcare and education was unwavering. His patronage of Maharaja Agrasen Hospital, DELHI, and involvement as a Trustee in the N. C. Jindal Charitable Trust, Hissar HARYANA, underscored his dedication to societal well-being. Similarly, his roles as Trustee in Maharaja Agrasen Technical Education Society, DELHI, and Trustee in Haryana Charitable Society Trust, KOLKATA, reflected his belief in the transformative power of education as a catalyst for progress.

Notably, Mr. Basudev Agarwal heart resonated with causes dear to his soul, as exemplified by his role as Chief Patron in Shri Krishna Gaushala, Bawana DELHI, where he championed the welfare of animals. His unwavering devotion, embodied in his status as a Life Member of ISKCON and Haryana Sewa Sadan, KOLKATA, transcended boundaries, embodying a spirit of service and compassion that touched lives far and wide.

In the fabric of our collective memory, Mr. Basudev Agarwal's legacy remains etched - a testament to the transformative power of leadership fueled by empathy, integrity, and an unwavering commitment to excellence. His life's work serves as a guiding light, inspiring generations to emulate his noble example and strive for greatness in all endeavors.

## HIGHLIGHTS OF THE UNION BUDGET OF INDIA 2024-25

The Union Minister for Finance and Corporate Affairs Mrs. Nirmala Sitharaman presented the Interim Union Budget 2024-25 in Parliament on Feb 1, 2024. The key highlights of the Budget are as follows:

- One crore households to obtain 300 units free electricity every month through rooftop solarization.
- Encourage Cervical Cancer Vaccination for girls (9-14 years).
- Modified Programme for Development of Semiconductors and display manufacturing ecosystem.
- Housing for Middle Class scheme to be launched to promote middle class to buy/built their own houses.
- Certain tax benefits to Start-ups and investments made by sovereign wealth funds/pension funds, tax exemption of some IFSC units earlier expiring on 31.03.2024 extended up to 31.03.2025.
- For Corporate Taxes-22% for existing domestic companies, 15% for certain new manufacturing Companies.
- No tax liability for taxpayers with income up to Rs. 7 lakh under the new tax regime.
- Government to build 2 crore houses under PM Aavas Yojana (Grameen).
- Extension of health coverage under the Ayushman Bharat scheme to include all ASHA, Anganwadi workers, and helpers.
- Withdrawal of outstanding direct tax demand, with limits set at up to Rs 25,000 for issues up to FY10 and up to Rs.10,000 for FY11-15, benefiting around 1 crore taxpayers.
- Fast-tracking Saksham Anganwadi and Poshan 2.0 for improved nutrition delivery and early childhood care and development.
- Expanding existing airports and undertaking comprehensive development of new airports under the UDAN scheme.
- Implementation of three major railway corridor programs under PM Gati Shakti to enhance logistics efficiency and reduce costs.
- Establishment of a financial corpus of Rs 1 lakh crore that will provide low-cost or zero-interest loans for research and innovation.
- Nominal GDP growth seen at 10.5%.
- Provision of Rs.75,000 crore, as a 50-year interest-free loan, to support milestone-linked reforms by state governments.
- Commitment to meet 'Net Zero' by 2070 by viability gap funding for wind energy; Setting up of coal gasification and liquefaction capacity; Phased mandatory blending of CNG, PNG and compressed biogas; Financial assistance for procurement of biomass aggregation machinery.

## भारत सरकार का केंद्रीय बजट: 2024-25

केन्द्रीय वित्त और कॉर्पोरेट मामलों की मंत्री श्रीमती निर्मला सीतारमण ने 1 फरवरी, 2024 को संसद में अंतरिम केंद्रीय बजट 2024-25 पेश किया। बजट की मुख्य बातें इस प्रकार से हैं:

- रूफटॉप सोलरइजेशन के माध्यम से 1 करोड़ परिवारों को हर महीने 300 यूनिट मुफ्त बिजली मिलेगी।
- लड़कियों (9-14 वर्ष) के लिए सर्वाइकल कैंसर टीकाकरण को प्रोत्साहन।
- अर्धचालक और प्रदर्शन विनिर्माण परिस्थितिकी तंत्र के विकास के लिए संशोधित कार्यक्रम।
- मध्यम वर्ग को अपना घर खरीदने / बनाने के लिए प्रोत्साहित करने के लिए मध्यम वर्ग के लिए आवास योजना शुरू की जाएगी।
- स्टार्ट-अप और सॉवरेन वेलथ फंड / पेंशन फंड द्वारा किए गए निवेश के लिए कुछ कर लाभ, 31.03.2024 का समाप्त होने वाली कुछ आईएफएससी इकाइयों की कर छूट 31.03.2025 तक बढ़ा दी गई है।
- कॉर्पोरेट टैक्स के लिए - मौजूदा घरेलू कंपनियों के लिए 22 प्रतिशत, कुछ नई विनिर्माण कंपनियों के लिए 15 प्रतिशत।
- नई कर व्यवस्था के तहत 7 लाख रुपये तक की आय वाले करदाताओं के लिए कोई कर देनदारी नहीं।
- सरकार पीएम आवास योजना (ग्रामीण) के तहत 2 करोड़ घर बनाएगी।



- सभी आशा, आंगनवाड़ी कार्यकर्ताओं और सहायिकाओं को शामिल करने के लिए आयुष्मान भारत योजना के तहत स्वास्थ्य कवरेज का विस्तार।
- बकाया प्रत्यक्ष कर मांग की निकासी, वित्त वर्ष 2010 तक के मुद्दों के लिए 25,000 रुपये तक और वित्त वर्ष 2011-15 के लिए 10,000 रुपये तक की सीमा निर्धारित की गई, जिससे लगभग 1 करोड़ करदाताओं को लाभ होगा।
- बेहतर पोषण वितरण और प्रारंभिक बचपन की देखभाल और विकास के लिए सक्षम आंगनवाड़ी और पोषण 2.0 को तेजी से ट्रैक करना।
- उड़ान योजना के तहत मौजूदा हवाई अड्डों को विस्तार करना और नए हवाई अड्डों का व्यापक विकास करना।
- लॉजिस्टिक्स दक्षता बढ़ाने और लागत कम करने के लिए पीएम गति शक्ति के तहत तीन प्रमुख रेलवे कॉरिडोर कार्यक्रमों को कार्यान्वयन।
- 1 लाख करोड़ रुपये के वित्तीय कोष की स्थापना जो अनुसंधान और नवाचार के लिए कम लागत या शून्य-ब्याज ऋण प्रदान करेगी।
- नाम मात्र जीडीपी वृद्धि 10.5 प्रतिशत देखी गई।
- पवन ऊर्जा के लिए व्यवहार्यता अंतर वित्तपोषण द्वारा 2070 तक 'नेट शून्य' को पूरा करने की प्रतिबद्धता; कोयला गैसीकरण और द्रवीकरण क्षमता की स्थापना; सीएनजी, पीएनजी और संपीड़ित बायोगैस का चरणबद्ध अनिवार्य समिश्रण; बायोमास एकत्रीकरण मशीनरी की खरीद के लिए वित्तीय सहायता।

(News Source:

AIGMF Research Team / World Wide Web)



## Welcomes its New Members

| Company  | Products / Services   |
|--|---|
| <p><b>CORNING TECHNOLOGIES INDIA PVT. LTD.</b><br/>2<sup>nd</sup> Floor, Pioneer Square<br/>CRPF Road, Sector 62<br/>Gurugram-122005 (Haryana INDIA)</p> <p>Contact Person:<br/>Mr. Aman Gupta &amp; Mr. Rohan Phanse<br/>+91 99711 86206, 85271 61777, 98168 39949<br/><a href="mailto:guptaa@corning.com">guptaa@corning.com</a>, <a href="mailto:PhanseRP@corning.com">PhanseRP@corning.com</a></p> | <p>Manufacturing of Type I borosilicate glass tubing</p>  |
| <p><b>GLASS TECHNICS INTERNATIONAL</b><br/>A-110 San Tropez, Madrid County<br/>Bhaily Station Road, Bhaily<br/>Vadodara-391410 (Gujarat INDIA)</p> <p>Contact Person:<br/>Mr. Ankit Luhar<br/>+ 91 98980 24846<br/><a href="mailto:sales@glasstechintl.com">sales@glasstechintl.com</a></p>  | <p>Consultancy, Agency/Machines/Refractories/Consumables/<br/>Spare Parts/High-Tech Solutions for Container/Glassware<br/>Industry.</p> |
| <p><b>KARNEET ENTERPRISES (INDIA) PVT. LTD.</b><br/>No. 23/3, 3<sup>rd</sup> Floor, Hare Krishna Road<br/>Crescent Road, High Grounds<br/>Bangalore-560001 (Karnataka INDIA)</p> <p>Contact Person:<br/>Mr. Dharmendra Baid<br/>+91 99807 33114<br/><a href="mailto:dharmendra@mallinathgroup.com">dharmendra@mallinathgroup.com</a></p>   | <p>Suppliers of raw materials- Soda Ash and other chemicals,<br/>etc.</p>   |



# glasstec

INTERNATIONAL TRADE FAIR FOR GLASS  
PRODUCTION • PROCESSING • PRODUCTS

# WE ARE GLASS

22 – 25 OCT 2024  
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# World Consumer Rights Day celebrated by Glass Industry

**Robots and best quality of Raw materials for glass manufacturing were discussed  
(March 16, 2024 HYDERABAD)**

Parallel to the Executive Committee Meeting on March 16 at Novotel HYDERABAD, technical sessions on Robots and Raw Materials in Glass Manufacturing were organized by The All India Glass Manufacturers Federation.

The meeting was hosted by AGI Greenpac Ltd., under its business unit AGI glaspac (Innovative and Eco-friendly Glass Packaging Solution company). The meeting was supported by President Mr. O P Pandey of the South India Glass Manufacturers' Association (SIGMA)- HYDERABAD garnering elite participation of members from the southern region.

Over the last few decades, AGI glaspac linked with its growth and expansion has invested heavily in the field of environmental protection and other green areas; thereby benefitting consumers by providing the top quality of glass packaging.







The meeting was attended by over 50 participants mostly from southern India region as well as PAN-India glass manufacturers,

**WORLD CONSUMER RIGHTS PLEDGE**

Glass fraternity solemnly commits to maintaining unparalleled standards of safety and purity in every facet of our glass products manufacturing process, thereby fortifying our dedication to excellence. Our unwavering pledge is to ensure that each stage of glass production adheres to the highest benchmarks, fortified by a steadfast commitment to quality control and innovation. This steadfast dedication serves as a bastion, safeguarding the fundamental rights of consumers to procure products devoid of any imperfections or compromises.



suppliers, consultants for the glass industry.

Welcome speech was given by Mr. Sanjay Agarwal, President AIGMF followed







by a presentation on Role of Container Glass in the World Consumer Rights Day by Mr. Rajesh Khosla, Sr. Vice President AIGMF and CEO / President AGI Greenpac.

Later a technical presentation



on ROBOTS IN GLASS MANUFACTURING (offering technical solutions for the glass industry) was delivered by Er. Pulkit Gaur (Chief Technology Officer of Gridbots Technologies Pvt. Ltd.) and recipient of CK Somany Glass Award 2023 for Innovation and Technology. Er. Pulkit Gaur drives the companies







Remembering Mr. Basudev Agarwal who left for heavenly abode on March 4, 2024; founder of Surya Roshni Ltd., who built 3 Glass Furnaces for the lighting industry. Mr. Agarwal had set up an incandescent lamp shell manufacturing facility named Ribbon Technology at Malanpur (MADHYA PRADESH) Lighting Plant for captive use, PAN India and foreign markets.



Innovation and Technological advancements. An Engineer by education and the founder of Gridbots Technologies - Robotics is his passion. He has been building robots since his childhood.

The concluding session saw presentations and display of various



RAW MATERIALS FOR GLASS MANUFACTURING (Samples of Quartzite, Silica sand, Glassomite Slag, Iron Chromite, Alumina Hydrate, Soda Ash, etc.) by Mr. Aurindam Dey, Director of IMR Resources India Pvt. Ltd.; Mr. Dharmendra Baid, General





Manager of Karneet Enterprises India Pvt. Ltd., and Mr. Pratik Joshi, Director of Eco Clay Solutions Pvt. Ltd.

All segments of the glass industry participated with great enthusiasm in the Executive Committee via Hybrid



mode. The sessions were interactive and were appreciated by everyone.

With love and affection, AGI Greenpac gifted a glass memento to each participant. Vote of thanks was given by Mr. Karinder Varma, General Manager of AGI Greenpac.

President AIGMF, Mr. Sanjay Agarwal







thanked Mr. Rajesh Khosla and the entire AGI team for their untiring efforts for making excellent meeting arrangements, sumptuous lunch; as well as pick and drop facilities for all participants at HYDERABAD ■



Select photos of the event and presentations are available at <https://aigmf.com/past-events.php>



AIGMF team at the City of Nizams; in front of the Charminar (four minarets) constructed in 1591.



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# Glass and Glazing Skill Centers for Students and Industry Professionals



Report by Prof. A S Rao, HoD, Department of Applied Physics  
Delhi Technological University and Member Editorial Board KANCH

The signing-up ceremony of MoU between DTU (Delhi Technological University) and GGKF (Glass and Glazing Knowledge Forum) to set up a skill center at DTU Campus Rohini, DELHI was held on Feb 6, 2024.

In the UN declared International Year of Glass in 2022 where Secretary AIGMF duly represented as Coordinator with ICG/IYoG under the region RO17 (INDIA\_IRAN\_PAKISTAN); and with the kind support of International Commission on Glass, IYoG Council Members, Education Dept. of GNCTD, Glass Worldwide magazine, Society of Glass Technology, Delhi Technological University, Central Glass and Ceramic Research Institute, glass manufacturers/suppliers, Govt. departments, thousands of school and college students for their active participation and other stakeholders; AIGMF was able to deliver more than 30 IYoG events from mid-2021 till Dec 2022. Brief reports along with select photos/presentations are available at [www.aigmf.com](http://www.aigmf.com)

Under one of the main IYoG events in India, Dr. Arun Varshneya, President of Society of Glass Technology,



Prof. Arun Varshneya delivering his lecture on International Year of Glass (IYoG) at DTU on Nov 30, 2022.

UNITED KINGDOM and Member of the International Year of Glass 2022 held interactive sessions with the students of St. Thomas School and Delhi Technological University on Nov 30, 2022 at DELHI. Prof. Varshneya interacted with the students

showcasing the growing importance of glass and its popularity in packaging and building material. He covered the topics from fundamentals to advances in glass science and technology. Discussions were carried on the further technical cooperation and research







Post signing up of the MoU ceremony, 2 locations were visited where the skill center could be set up within DTU's campus.

Initially, two courses would be offered i.e. for students and industry professionals. DTU has appointed Dr. Sumandeep Kaur who is teaching the course related to "Glass Science & Technology" for B.Tech first year Engineering Physics Students in the capacity of "Contractual" position.

collaborations in Glass Science and Technology with the support of AIGMF. To carry forward the momentum, a one-day national workshop on ascertaining a skill center for glass and glazing was organized by the Department of Applied Physics, Delhi Technological University at their campus on Aug 11, 2023 with an idea to bring Industry and Academia together which was initially discussed at the Glass & Glazing Knowledge Forum (GGKF) in early July 2023, where members were of the view to ascertain and establish a training center for Glass and Glazing at DELHI NCR.

UWDMA (uPVC Window & Door Manufacturers Association), Glass Academy and AIGMF (The All India Glass Manufacturers' Federation).

Dr. Sumandeep Kaur currently serves as an Assistant Professor (Guest) in the Department of Applied Physics

GGKF represents following industry associations: FOSG (Federation of Safety Glass), GSI (Glazing Society of India), CCPS (Confederation of Construction Products and Services),



Dr. Sumandeep Kaur, Assistant Professor (Guest) in the Department of Applied Physics at Delhi Technological University (DTU).





at Delhi Technological University (DTU). Under the mentorship of Prof. A.S. Rao, she focused on the synthesis and characterization of Up-Conversion Nano-Phosphors for Bio-Photonic Applications, demonstrating a dedication to cutting-edge research while holding the position of CSIR-Research Associate from November 2020 to November 2023.

In the course meant for students, since Jan 2024, DTU has already started taking classes for 2 hours per week for their B.Tech students under National skill policy.

These courses are designed to expose students to the fundamentals of glasses, composition of glasses and their properties.

Course Topics would cover the following:

- Glassy state, types of oxide glasses, general properties of glasses, V-T diagram. Glass formation-Zachariasen rule's,



Mr. Amit Malhotra, President of the Confederation of Construction Products and Services (CCPS) and Managing Director of McCoy Silicon Ltd., presenting a Calendar Glass bottle 2024 to Prof. Prateek Sharma, Vice Chancellor of the Delhi Technological University (DTU), specially made by AGI Greenpac Ltd., for AIGMF.



Sun's single bond strength criterion, Dietzel's field strength criterion. Kinetic theory of glass formation, nucleation rate and crystal growth.

- Physical properties-Density, elastic moduli, hardness of glass, viscosity, refractive index, thermal expansion of glasses.
- Absorption and colors in glasses, role of transition metal ions and rare earth ions in glass.
- Chemical durability of glass, factors affecting chemical durability of glass, measurement of chemical durability of glass.

Reference of Books taken for the course development:

- Fundamental of Inorganic Glasses: A K Varshneya
- Chemistry of Glasses: A. Paul
- Introduction to Glass Science: L D Pye





- Handbook of Glass Manufacture (Vol. I & Vol. II): Tooley Knowledge Forum (GGKF).
- Properties of Glass: Moorey First Upskilling and Technical Enhancement Training Programme

And the other Skill Centre would be for the Industry Professionals to be run by GGKF to train them further and hone their skills in Glass and Glazing installations.

The center for the Industry Professionals got operational by the Confederation of Construction Products and Services (CCPS) at the Gold Plus Glass Industry Ltd.'s Head office in Sector 9, Rohini, DELHI who kindly offered to use their surplus office space for setting up of the center for technical sessions under the aegis of Glass & Glazing



for unskilled and semi-skilled industry workers was organized on March 7, 2024 where 29 participants

were trained about different types of glasses, glass handling, loading, unloading, measurements, window handling / installation, frameless glass doors/glazing, shop front installations, etc.

Mr. Sharanjit Singh, senior Member of the Federation of Safety Glass (FOSG) and Managing Director GSC Glass Ltd., Mr. Ali Kamil of Kaenat Glass, Mr. Bhanu Joshi of Ozone Overseas, Mr. Mario Schmidt & Ms. Shobhita of uPVC Window and Door Manufacturers' Association (UWDMA) along with Gold Plus technical team were among the trainers. All the trainees were given a

tool kit by Gold Plus Glass and were also awarded with a certification of participation.

**As a way forward, Glass Industry invites technical talks/interactive sessions/workshops from worldwide industry experts/professionals and request their participation when visiting Delhi/INDIA for the benefit of students and industry workers.**

**Ideas are also invited on the important topics that could be covered in the curriculum; including equipment or other techniques at [drsallam@dce.ac.in](mailto:drsallam@dce.ac.in) or [info@aigmf.com](mailto:info@aigmf.com) ■**





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will carry detailed coverage of China Glass, AIGMF events, Technical Articles, Glass News, other supported Events and more.

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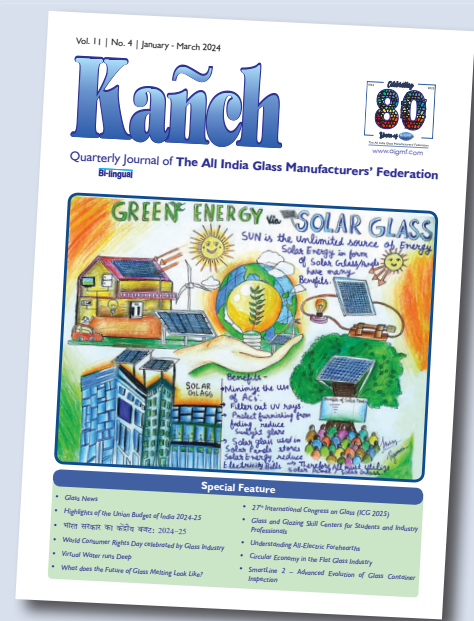
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