

December 4 - 5,
Mumbai, India

igcw
2015

industrial green chemistry
world

**Convention
&
Ecosystem**

*Profitability from Industrial
Green Chemistry and Engineering*

Venue :

Hotel Courtyard Marriott Mumbai, India

Brief Report

industrial green chemistry

2025

2023

2021

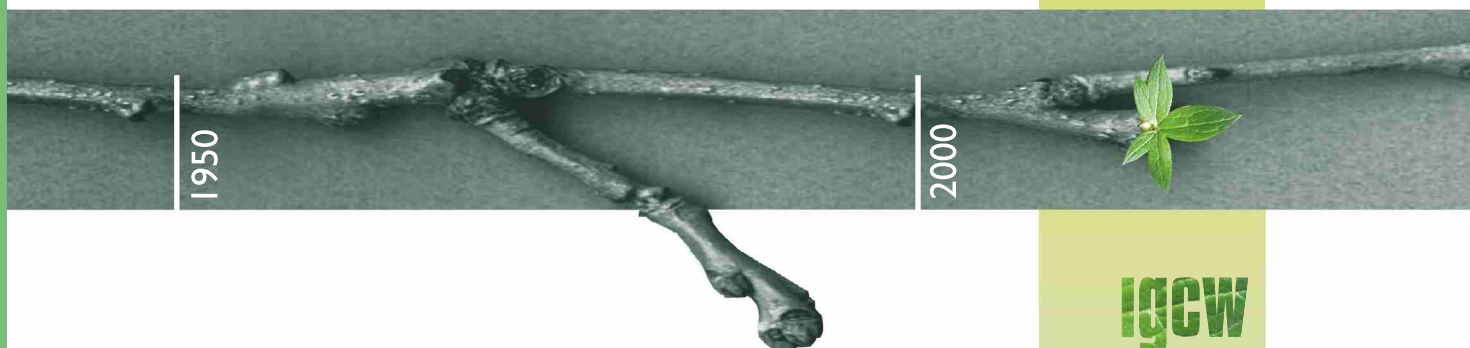
2019

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igcw
2009

Organized by

Green Chemis tree
Foundation

www.IndustrialGreenChem.com

4th Industrial Green Chemistry World (IGCW-2015) Convention & Ecosystem, 4 - 5 Dec. 2015, Mumbai



Inauguration by Smt. M. Shankar, Chairman, MPCB; Shri. S. K. Biswas, JS, DCPC, Govt. of India; Shri. Ashwin Shroff, CMD, Excel Industries Ltd., Dr. J C Warner, Co-Founder 12 Principles of Green Chemistry & Dr. David Constable, Director, ACS-Green Chemistry Institute



Keynote by Dr. John C. Warner, Co-founder, 12 Principles of Green Chemistry.
Topic: Innovation to Commercialization : Case-studies from Warner Babcock Institute of Green Chemistry



IGCW-2015 Symposium Day I, 4th Dec; Themes: IGNITION



Symposium Day 1, 4th Dec., Theme: IGNITION
Session Chair: Mr. Ravi Raghvan, Editor, Chemical Weekly, India



Dr. David Constable, Director, ACS-Green Chemistry Institute,
Topic: Innovating towards Sustainability in the Global Chemistry Enterprise

Introduction

The **4th Industrial Green Chemistry World (IGCW-2015) Convention & Ecosystem** was organised on 4th & 5th December 2015 at Hotel Courtyard Marriot, Mumbai; followed by Students and Teachers Workshops on 6th December 2015 at Institute of Chemical Technology (ICT) and National College respectively.

This two-day International Convention had five key features, viz.: **IGCW Symposium, IGCW EXPO, IGCW Awards Evening, IGCW Conference for State Pollution Control Board Officers, and 180° Seminar Series.**

Objectives

The IGCW Conventions are primarily designed to accelerate the implementation and industrialization of 'Green Chemistry' and 'Green Engineering' relevant practices by the Indian Chemical Industry. With this vision, IGCW-2015 was created with the following objectives:

- 🌱 To facilitate an Industrial ecosystem that enhances Industry's understanding of Green Chemistry and Engineering practices
- 🌱 To bring forth technical know-how of green chemistry applications from the corridors of laboratories to the cauldrons of Industry
- 🌱 To familiarize green chemistry not as a different genre, but as an integral way of doing chemical processes
- 🌱 To recognize emerging global trends in the direction of prioritizing sustainability and environmental safety
- 🌱 To express Industry's commitment towards triple bottom-line benefits of Profit, Society and Sustainable planet
- 🌱 To connect various chemical community stakeholders
- 🌱 To create value for chemical companies by providing and seeking relevant services, solutions, products and technologies in the 'green chemistry' direction.

Partners & Supporters

The 4th IGCW-2015 was supported by Dept. of Chemicals & Petrochemicals, Govt. of India. The Industry Partners included: L'Oreal India as the "Green Chemistry Partner"; Excel Industries Ltd as the "CSR Partner"; PI Industries Ltd as the "IGCW-Awards Evening Partner"; Clariant Chemicals India Ltd., Dr. Reddy's Laboratories Ltd., and Novozymes India Ltd., as the "IGCW Cause Partners", ROCHEM Separation Systems Ltd. as the 4R-Partner.

Other Industry supporters included: Newreka Green Synth Technologies Pvt. Ltd, Reliance Industries Ltd, Covestro India Ltd., Warner Babcock Institute of Green Chemistry, USA.

Specific event partners were: Geist Research Pvt. Ltd. and Maharashtra Pollution Control Board as the PCB –Conference Partners; Dept. of Science & Technology's SERB and the Royal Society of Chemistry (RSC-Western Region) supported the Students & Teachers' Workshops on Green Chemistry; Laurus Laboratories Ltd. supported the Students Workshop; and Godrej Industries Ltd., supported the Teachers' Workshop.

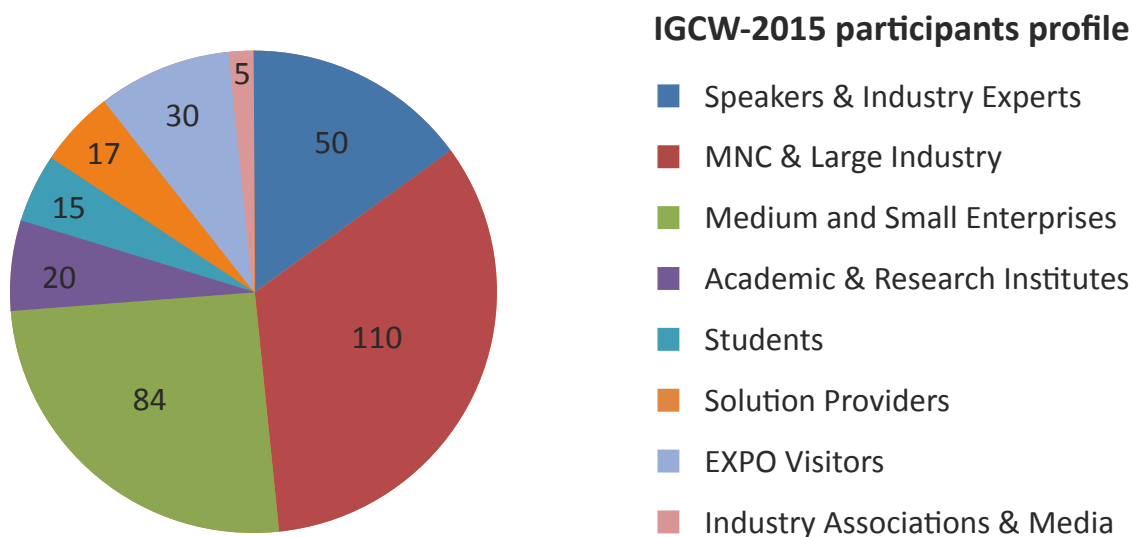
The IGCW Associate Partners that supported in promoting the Convention include: ACS-Green Chemistry Institute, USA; Chemical Weekly, India; Chemical Watch, UK; KnowGenix, India; Specialty Chemicals Magazine, UK and Industry Associations such as : Indian Chemical Council; Indian Specialty Chemicals Manufacturers Association and UDCT Alumni Association.

Participation

The IGCW-2015 Convention was attended by 331 chemical industry stakeholders, of which 50 attendees contributed as Speakers, Industry experts and Special Invitees, 110 were chemical companies (60% MNC & Large Scale & 40% SMEs); 17 Companies participated as Solution and/or Service Providers in the IGCW-EXPO; about 35 participants were from Academic Institutes and Research Institutes and 30 participants from State Pollution Control Boards including Arunachal, Chhattisgarh, Gujarat, Karnataka, Maharashtra, Telangana and Lucknow (CPCB).

Following graphic is to give an at-a-glance summary of the participants' profile and distribution. Overall the IGCW-2015 attendees fairly well represented the International Chemical Community.

It is also observed, that since 2009, the number of Industry representatives from Medium and Small enterprises have gradually increased, indicating the arising felt-need of 'green chemistry' in the Industry.



Overall Outcome

The IGCW Convention & Ecosystem's vision and commitment is to facilitate, catalyse and advance the Indian Chemical Industry in its Green Chemistry and Green Engineering based practices and initiatives. Within this context, the IGCW-2015's deliverables established the following outcomes:

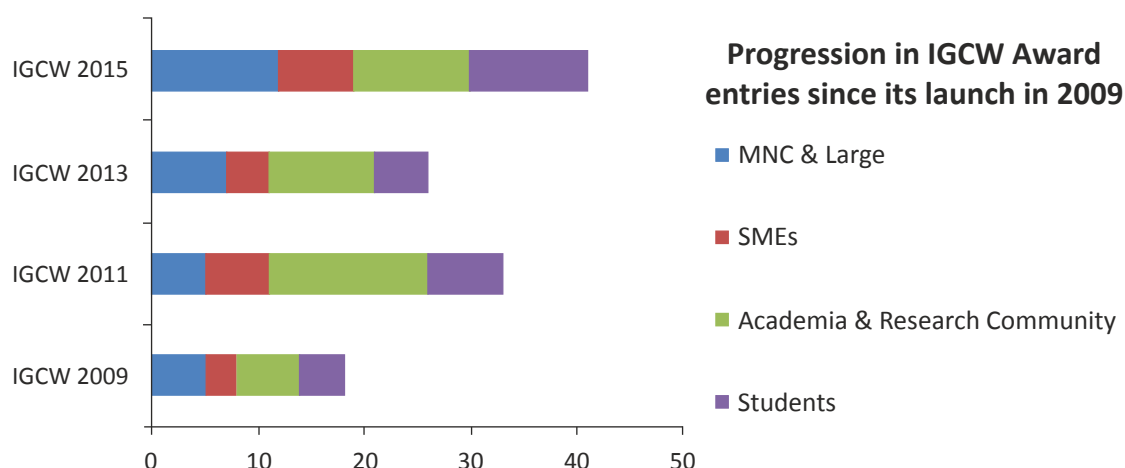
IGCW -2015 Symposium

- IGCW -2015 was Inaugurated by Senior Officials from Govt. of India – including Smt. Malini Shankar, Chairman- Maharashtra Pollution Control Board; Shri. Samir K. Biswas, Joint Secretary, Dept. of Chemicals & Petrochemicals.
- Global Speakers included Dr. John C. Warner, Co-founder-12 Principles of Green Chemistry; Dr. Swaminathan Sivaram, Bhatnagar Fellow & Former Director, NCL- Pune; Dr. David Constable, Director, ACS- Green Chemistry Institute, Dr. Maria C. DALKO, Director, Dept. of Chemistry, L'Oreal France, to name few.
- IGCW-2015 witnessed the declaration of transiting from Green Chemistry Awareness phase to Green Chemistry implementation phase
- Over 25 Senior Industry colleagues shared successful industrial case-studies on their green chemistry and green engineering based initiatives with Industry peers
- The Symposium case-studies were a fair representation of process-intensive chemical industry sectors such as Fine & Specialty Chemicals (32% representation), Pharma-API Industry (28%), Agro-chemicals (12%), Dyes & Pigments (12%) and other topics such as Regulatory, Industry-Academia Partnerships, Govt. policies and incentives, etc (12%)

- A new feature integrated in the IGCW Symposium was the Sustainability Brochure Launch by L'Oreal India. The Launch was done by Senior colleagues both from L'Oreal India and L'Oreal International, including Dr. Francois PRADIER, Director, R&D, L'Oreal India; Dr. Maria C DALKO, Director, Dept. of Chemistry, L'Oreal France; Dr. Alain PINCHART, CEO- CHIMEX, L'Oreal France, Dr. Namita Misra, Head-Scientific Communication, L'Oreal India

IGCW – 2015 Awards

- Identified over 40 Green Chemistry & Green Engineering based case-studies received as IGCW-Awards entries.
- According to our Jury, the IGCW Award submissions are growing both qualitatively and quantitatively, as indicated in graph below:



- It is also observed by the jury that the content of the submitted case-studies indicates industry's understanding of Green Chemistry approach from ZLD to prevention at source
- Three entries were shortlisted in each category, please refer photo report page no. 16 for winner details
- The Awards' evening Plenary Talk by Dr. Joachim Krueger, VP-Clariant International, was well-received by the audience

IGCW-2015 EXPO

- Connected participating Industry to immediate and short-term Solution provider companies showcasing their products and technologies at the IGCW EXPO. 60% of the IGCW -2015 EXPO companies have been regularly exhibiting in IGCW, which indicates the quality of interactions and business opportunity gained over the years.
- Facilitated a focussed and interacting platform for launching technologies and solutions such as for the Ionic Liquid catalysts' showcase by Reliance Technology Group; Green Solvents by Merck Life Sciences Ltd. and value-based additives by Covestro
- IGCW-2015 also created an exclusive opportunity for the ICT-Green Technology course students to not only showcase their respective research projects, but also expand the course's awareness amongst the Industry audience for their future perusal.

180° Seminar Series

- The well-received feature of IGCW has been the 180° Seminars Series on four of the most relevant topics viz.: **“Green Processes”**, **“Green Catalysts”**, **“Green Solvents”**, and **“Green Engineering”**.
- The 180° Seminars were largely attended by R&D and Production Managers/ Officers, and facilitated focussed interaction with the Seminar Speakers.
- The Invited case-studies for presentations in the 180° Seminars were primarily by companies offering immediate, short-term and/or mid-term solutions, technologies or products, with the objective to offer a take-home solution at the door-step of the participating companies

PCB Conference on Green Chemistry

- ✿ IGCW-2015 integrated for the second time, an exclusive Conference on Green Chemistry for the State Pollution Control Boards.
- ✿ This is a unique feature and India's first expression that brings together Regulatory bodies on a common platform with the Industry and other stakeholders for seeking their pro-active partnership in catalysing the implementation of "Green Chemistry" in Indian Chemical Industry
- ✿ The Conference had a blend of expert presentations by global speakers such as Dr. John Warner, Dr. David Constable and also a live talk by Prof. Paul Anastas, Founder 12 Principles of Green Chemistry and Former Asst. Director- US-EPA.
- ✿ The Conference content integrated a special talk by a Senior Industry representative – Dr. S. Hariharan, CEO & MD, Solaris ChemTech Industries Ltd., for getting unbiased industry perspectives on pollution prevention & control
- ✿ The PCB Conference also facilitated presentations by solution provider companies offering path-breaking and economical solutions for pollution prevention, this apart, the PCB officers also got the opportunity to interact with the various Solution provider companies showcasing their technologies and /or products at the IGCW-EXPO
- ✿ One of the most successful dimensions of the PCB Conference was learning from exchange of best-practices and there-by expanding knowledge-base on pollution prevention approaches and practices. The participating State PCBs shared a 10-15 minutes presentation on their initiatives and best practices with their counter-parts.

Green Chemistry Teachers Workshop

- ✿ The IGCW Teachers' Workshops, organised on 6th December 2015, at Bandra, primarily facilitated chemistry teachers with a focussed platform for engaging in various modules and methodologies for incorporating 'green chemistry' education
- ✿ The Workshop enabled in-depth interactions on the 12 principles of 'green chemistry' for its integration into the chemistry curriculum
- ✿ The workshop served as a common platform for facilitating Teachers-industry interaction to distinguish the "real-world" green chemistry capacity building requirements
- ✿ The Workshop concluded with a launch of "Green Chemistry Teachers' Association" under the leadership of Dr. Kiron Jathar, Vice-principal, National College, Bandra.

Green Chemistry Students' Workshop

- ✿ The IGCW Students workshop attended by 117 Chemistry, Chem. Engg and PhD students from ICT and Colleges in and around Mumbai.
- ✿ The Workshop primarily facilitated student-industry interaction on 'green chemistry' challenges and opportunities
- ✿ The interactions impacted the participating students' understanding of implementing green chemistry and engineering practices in the Industry.
- ✿ The expert talk by Dr. David Constable, Director- ACS-Green Chemistry Institute, USA; catalyzed in creating a collective mind-set amongst students that is attuned to the impact of integrating environmentally benign ways of chemistry and chemical manufacturing right at the design stage
- ✿ The Workshop participants got aware of the emerging trends and opportunities for exploring future prospects in pursuing 'green chemistry' and allied subjects

Miscellaneous

- ✎ Global organisations such as American Chemical Society, Environment Resource Management, Novozymes BV, Chemtrix-Netherlands, Chemical Watch-UK, CHEMIX-France, found IGCW platform as an unmatched platform for interacting with senior chemical community stakeholders from Industry, Academia, Research and Government bodies.
- ✎ IGCW-2015 created an opportunity for focussed Academia and Researchers to connect with the Industry, particularly those pursuing significant work in the Green Chemistry and/ or Green Engineering space
- ✎ Provided a platform to bridge Govt. agencies, Regulatory bodies and Industry to collectively explore policies and approaches towards “Green Chemistry” implementation

Conclusion

One of the most common suggestions share by the IGCW-2015 participants is to organise IGCW every year, this indicates the increased awareness of the subject and the arising felt-need in the Industry towards 'Green Chemistry & Green Engineering' based practices.

The success of IGCW-2015 Convention will be determined by the scale of “green chemistry” initiatives both by Industry and Academia over the next two years.

However, one of the indicators that we closely follow as our means to measure the impact of IGCW, is the response of the exhibiting companies. As they the “solutions providers” in the space engage in “implementation interactions” with the participants; and it is heartening to share that all the exhibiting companies at IGCW-2015 have walked out with immense business opportunities and potential collaborative leads. This outcome does not only indicate the Industry's willingness to engage in 'green chemistry' and relevant technologies, but also allows us to measure the impact of IGCW ecosystem at-large.

As a follow-up action, the IGCW-2015 will make available its content deliverables in form of Speaker presentations and videos (subject to approval) on IGCW website for its larger dissemination.

The 5th IGCW-2017 is a promise to bring-forth new advances in “Green Chemistry & Green Engineering”, global experts, and next-generation solution providers on a common platform with the objective to accelerate the implementation and industrialisation of Green Chemistry into our existing chemical manufacturing practices.

Green ChemisTree Foundation, through its regional and sector specific initiatives will facilitate focussed platforms for the Industry to engage in Green Chemistry and Engineering based best practices and to get connected with immediate solution providers, both from Industry and Academia/ Research.

IGCW-2015 Symposium Day I, 4th Dec., Theme: IGNITION



Dr. Ajit Sapre, Group President, R&T, Reliance Industries Ltd.
Topic: Green Chemistry & Engineering: An Industrial Perspective



Dr. Deepak Parikh, VC-MD, Clariant Chemicals Ltd., India.
Topic: Vision 2025: Chemical Industry in India: Megatrends, Sustainability & Innovation

IGCW-2015 Symposium Day I, 4th Dec., Theme: INSPIRATION



Young India's Message to Chemical Industry,
 Ms. Ranjini Srikantan, 12th Grade student & Green Chemistry Enthusiast, The International School Bangalore.



Theme: INSPIRATION
 Session Chair: Dr. R. Rajagopal, CEO, KnowGenix, India



Dr. Rajan Venkatesh, VP- Chemical & Performance Products-South Asia, BASF.
Topic: Creating Chemistry for a Sustainable Future

IGCW-2015 Symposium Day I, 4th Dec; Theme: INSPIRATION



Dr. Maria Dalko, Director, Dept. of Chemistry, L'Oreal, France.
Topic: Green Chemistry: As a source of Innovation



Mr. Ravi Kapoor, MD, Heubach Colour Pvt. Ltd., India.
Topic: Think Green, Act Green

IGCW-2015 Symposium Day I, 4th Dec; Theme: INITIATION



Theme: INITIATION
Session Chair: Dr. Rakeshwar Bandichorr, Director, API- R&D, IPDO, Dr. Reddy's Laboratories Ltd., India



Mr. Anil Jain, CEO – API Division, Sun Pharmaceuticals Industries Ltd., India.
Topic: Initiation : Need to “Co-opete” for Industrial Sustainability

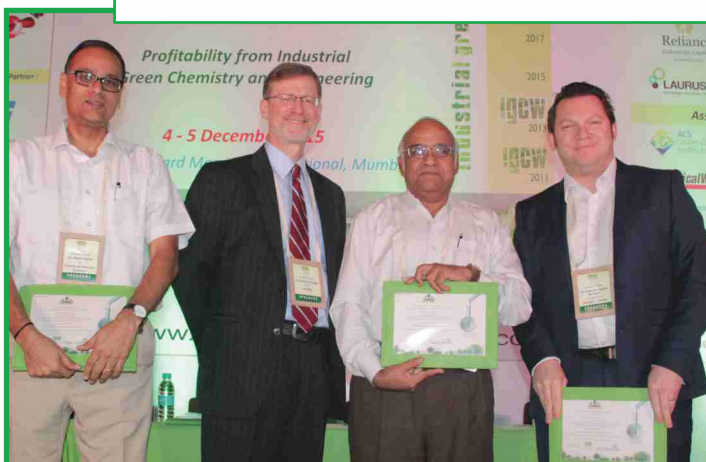


Mr. Samir Somaiya, CMD, Godavari Biorefineries Ltd., India.
Topic: Renewable Feedstock & Sustainability



Dr. Vilas Dahanukar, Chief Scientist – Process R&D, IPDO, Dr. Reddy's Laboratories Ltd., India.
Topic: Organizational Initiatives towards Developing Greener Processes for Generic API

**IGCW-2015 Symposium Day II, 5th Dec;
Themes: IDENTIFICATION, INVENTION & INNOVATION**



Session Chair: Dr. David Constable, ACS- Green Chemistry Institute, USA



Dr. Swaminathan Sivaram, CSIR Bhatnagar, Fellow, Former Director, NCL, India.
Topic: Green, Safe & Sustainable Chemistry: Repositioning Chemistry as a Central Science



Dr. S. Duprat De Pale, R&D Director, Operations, CHIMEX- L'Oreal, France
Topic: EcoFootprint & Sustainable Innovation; Made in CHIMEX™ Approach



Dr. Murali Sastry, CEO, IITB-Monash Research Academy, India.
Topic: Overview of Green Chemistry/Sustainability research projects in the IITB-Monash Research Academy



Session Chair: Dr. Vilas Dahanukar, Chief Scientist- Process R&D, IPDA, Dr. Reddy's Laboratories Ltd. India



Dr. V. Rajappa, Director & Head- Process R&D, Bristol-Myers Squibb, India.
Topic: Development of Safe, Robust, Environmentally Responsible Processes for New Chemical Entities



Dr. Anil Kumar, Principal Scientist & Head, TATA Innovation Centre, TATA Chemicals Ltd., India.

Topic: Use Efficiency – A design paradigm for Green Innovations



Dr. Denis Prat, Head of Process Safety & Environment, Chemistry & Biochemistry, SANOFI, France.

Topic: Selection of Green Solvents

IGCW-2015 Symposium Day II, 5th Dec; Themes: IMPLEMENTATION & INDUSTRIALIZATION



Session Chair: Dr. Swaminathan Sivaram, CSIR Bhatnagar Fellow & Former Director, National Chemical Laboratories (NCL), India



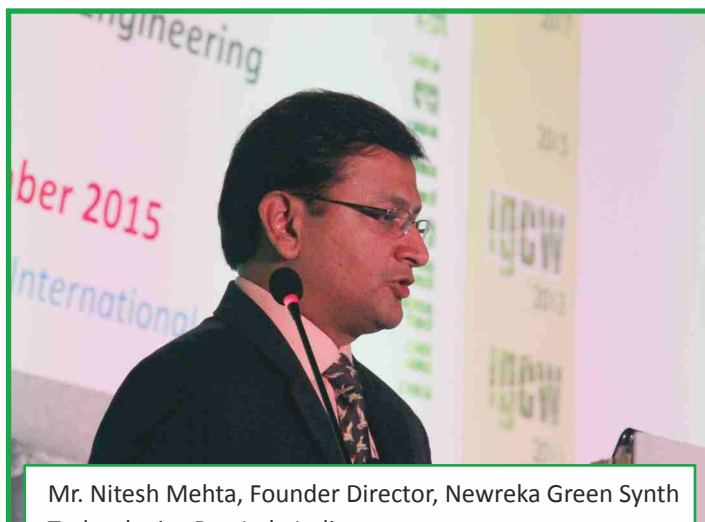
Mr. R. Rajagopal, CEO, KnowGenix, India.

Topic: Leveraging GCE tools for sustainable chemical manufacturing: Learning outcomes



Dr. C. Wiles, CEO, Chemtrix BV, Netherlands.

Topic: Scalable Flow Chemistry: Tool for Research, Development & Production of Pharmaceuticals, Fine & Specialty Chemicals



Mr. Nitesh Mehta, Founder Director, Newreka Green Synth Technologies Pvt. Ltd., India

Topic: Identifying "green chemistry" industrialization barriers through case-studies

IGCW-2015 Symposium Day II, 5th Dec., Theme: IMPACT



Dr. W. Hofherr, Executive Director, Ecological & Toxicological Association of Dyes & Organic Pigments Manufacturers (ETAD), Switzerland.
Topic: Working together for safer colorants



Dr. Rashmi Naidu, Technical Director, NS Support Services Pvt. Ltd., (SSS-Europe)
Topic: Green Chemistry & Related Regulatory Developments



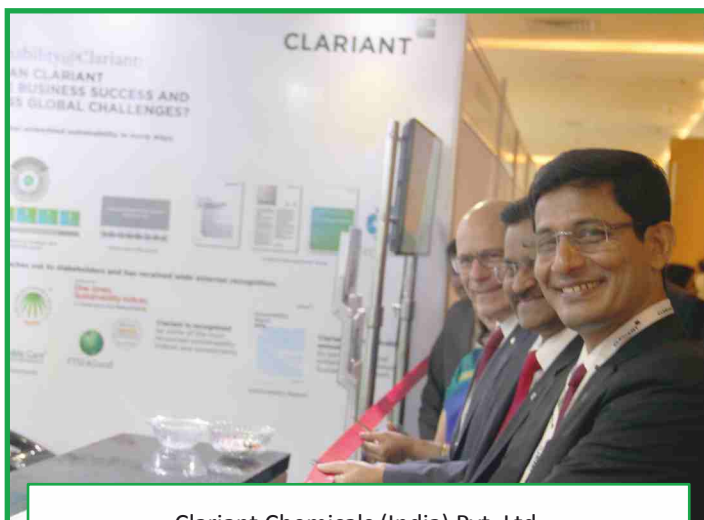
Acknowledging Speakers & Chairpersons



Green ChemisTree Foundation in partnership with Grow-Trees.com, planted 1001 saplings in the periphery of Sundarban National Park, West Bengal, India; towards the 4th IGCW-2015 Convention & Ecosystem, 4th, 5th & 6th December 2015.

The Tree Certificates have been felicitated in the honour of all our Speakers and Special Invitees

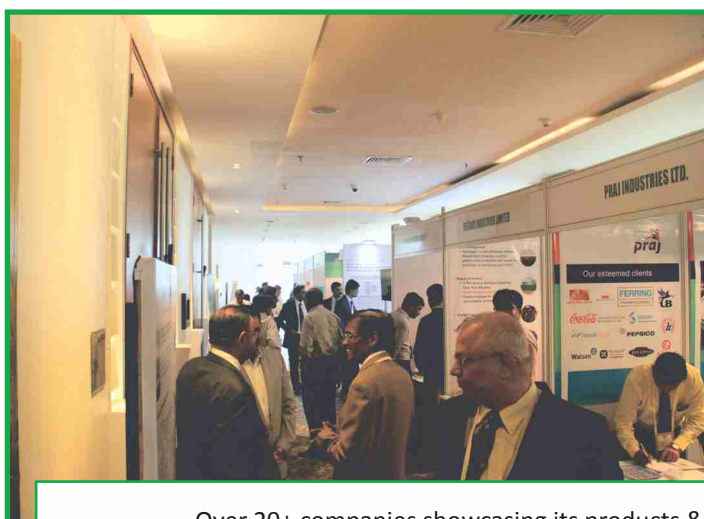
IGCW-2015 Exhibition, 4 - 5 Dec 2015, Mumbai



Clariant Chemicals (India) Pvt. Ltd.



Advanced Enzyme Technologies Ltd.



Over 20+ companies showcasing its products & technologies on green chemistry and engineering



L'Oreal India's Sustainability Brochure Launch & Presentation during IGCW Awards' Evening, 4th Dec. 2015





Award Evening plenary talk by
Dr. Joachim Krueger, Senior Vice President, Clariant International Ltd., Switzerland



IGCW-2015 Awards Felicitation, 4th Dec. Mumbai



Large & MNC Category : Mr. R N Mohanty, VP Technology, Pidilite Industries Ltd., India



SME Category : Dr. Prakash R. Somani, Founder & Research Director, Applied Science Innovations Pvt. Ltd.



Knowledge Community : Dr. Bhubaneswar Mandal, Assistant Professor, IIT-Guwahati, India



Student Category : Mr. Saurabh Patankar, Graduate Student - PhD Student, Institute of Chemical Technology (ICT), Mumbai

IGCW-2015 Industrial networking, visiting EXPO & Technical interactions with green chemistry experts



Seminar on Green Processes



Mr. Ulhas Parlikar, Director,
Geocycle India at ACC Limited



Mr. R. N. Mohanty, VP - Technology,
Pidilite Industries Ltd.



Ms. Shweta Gupta, Manager Application &
Technology Develop., Covestro (India) Pvt. Ltd.



Mr. Amit Udgirkar, Sr. Manager,
PRAJ Industries Ltd.

Seminar on Green Catalysts



Dr. Parasu Veera Uppara, Vice-President & Group Lead
(Ionic Liquids Research), Reliance Industries Ltd.



Dr. Dinesh Nair, Regional Business Manager,
Novozymes South Asia Pvt. Ltd.



Prof. Vivek Polshettiwar, FRSC Nano-Catalysis Laboratory
(NanoCat), Tata Institute of Fundamental Research (TIFR)



Mr. Wolfgang Eger, Director,
Kijani Asia

Seminar on Green Solvents



Dr. Sangeeta Srivastava, GM - Corporate & R&D,
Godavari Biorefineries Ltd.



Mr. Arun Bachnalkar, Product Manager - Solvents,
MERCK Life Sciences Ltd.



Dr. Denis Prat, Head of Process Safety & Environment,
Chemistry & Biochemistry, SANOFI, France



Networking with Industry experts

Seminar on Green Engineering



Dr. MG (Deepak) Palekar, Head-Strategy & Technology,
STEP Pvt. Ltd.



Mr. Girish Thorat, General Manager - India,
Rochem Separations Systems (I) Pvt. Ltd.



Dr. C. Nandi, Vice President - R&D,
NOCIL Ltd.



Mr. C. K. Sethia, Sales Manager,
Corning India

**One-day Green Chemistry Conference for State Pollution Control Board Officers,
at IGCW-2015 on 4th Dec., Mumbai**



Inaugural address by Shri. P. K. Mirashe,
Asst. Secretary- Technical, Maharashtra Pollution
Control Board (MPCB).



Dr. John Warner, Co-Founder 12 Principles of Green
Chemistry, USA
Topic: Moving from Regulations to Promotion



Welcome address by Mr. Nitesh Mehta, Founder Director, Green ChemisTree Foundation & Convener IGCW &
Ms. Sandra D'Sa, GM- Marketing, Geist Research & PCB Conference Co-organiser



Active participation of Senior Officials from State PCBs, including Arunachal, Andhra, Chhattisgarh, Gujarat,
Karnataka, Maharashtra, Telangana & Central PCB.





Dr. S. Hariharan, CEO & Joint MD,
Solaris ChemTech Industries Ltd. Avanta Group, India
Topic: Pollution Control & Prevention- Chemical Industry Perspective



Dr. Bharat Jain, Member Secretary, Gujarat Cleaner
Production Centre, India
Topic: Pollution Prevention at Source through "Cleaner Production"



Mr. Ulhas Parilkar, Director- Geocycle India at ACC Ltd.
Topic: Co-processing – An environmentally sound solution for a zero waste future



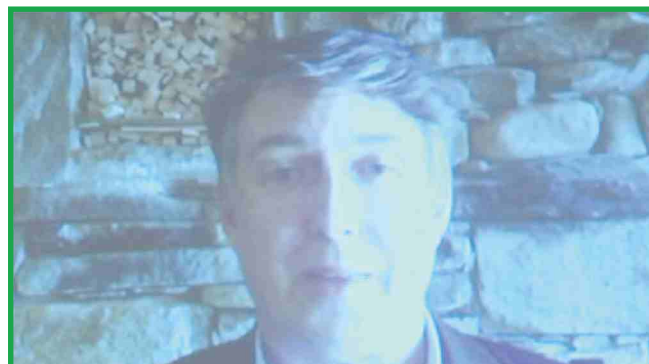
Mr. Deepak Dawda, CEO, The Green Environment
Services Co-op Soc. Ltd., Vatva, Gujarat
Topic: Innovative ways to achieve CETP Intel Norms- The Vatva experience



Sharing of best practices by State PCBs



Ms. Sandra D'Sa, GM- Marketing, Geist Research
Pvt. Ltd.
Topic: Wealth Out Of Waste: Profit-centric solutions for industrial wastewaters



Prof. Paul Anastas, Former Director, US-EPA & Founder
12 Principles of Green Chemistry & Green Engineering
Topic: The Next Generation of Environmental Protection

One-day Workshop on Green Chemistry & Engineering for Students at Institute of Chemical Technology (ICT), Matunga, Mumbai



Keynote by Dr. David Constable, Director, ACS-Green Chemistry Institute



Over 117 Chemistry & Chemical Engineering Student Participated in Workshop



Students - Industry Interactions



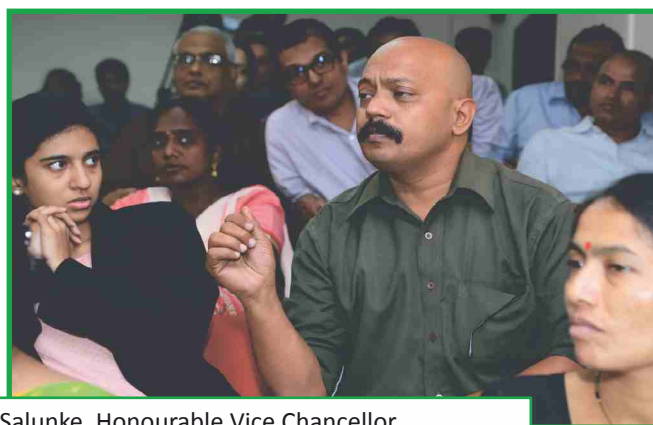
Acknowledging Dr. Radha Jayram, Convener, Students Workshop



One-day Workshop on Green Chemistry & Engineering for Teachers at National College, Bandra, Mumbai



Keynote by Dr. David Constable, Director, ACS-Green Chemistry Institute



Inaugural address by Dr. Manikrao Salunke, Honourable Vice Chancellor, Yashwantrao Chavan Maharashtra Open University (YCMOU)



Integrating 12 Principles of Green Chemistry in chemistry education by Prof. Bhalchandra M. Bhanage, Prof. of Industrial and Engineering Chemistry, Head Dept. of Chemistry, Institute of Chemical Technology, Mumbai



Acknowledging Dr. Kiron Jathar, Convener, Teachers Workshop

Participant Feedback & Comments

While I was only there for one day, I could tell that it was extremely successful. Congratulations on putting together a wonderful event.

- Dr. John C Warner, Co-Founder 12 Principles of Green Chemistry, CTO- Warner Babcock Institute of Green Chemistry

You all have made a huge commitment to implementing green chemistry and engineering in India and all your hard work and sacrifice is beginning to be rewarded, I think. Thank you for all you have done, and continue to do. It's truly inspiring!

- Dr. David Constable, Director, ACS-Green Chemistry Institute

The IGCW Conferences have established a unique niche in bringing together key stakeholders of Green Chemistry in India and providing them a platform to share experiences and best practices. I am sure in the years to come they will vastly strength the awareness of Green Chemistry and become a catalyst for change for the Chemical industry of India. My very good wishes for continued success.

- Dr. Swaminathan Sivaram, Bhatnagar Fellow & Former Director, NCL, Pune

We thank you for giving us an opportunity to participate/ speak and further to get us associated with the IGCW Convention.

It was a beautifully organized workshop, which gave us a chance to blend with various Industries & Academia!

- Mr. Chandrakant K Sethia, Sales Manager, Corning India Ltd.

It was indeed fruitful exhibiting at the IGCW Symposium which gave an insight of the Industry working for the Green Environment.

We had quite good interactions with few fellow industrialist to see how we can contribute to the same. Thanks for your support and Congratulation to you and your team for the successful event.

- Mr. Rahul Kirkinde, Business Head- API Healthcare, Advanced Enzymes Technologies Ltd.

I appreciate all your efforts in India in the areas of Green Chemistry/Technologies. It was a very nice experience for me to attain IGCW-2015 and to receive the Award in SME category. The conference was very well organized.

I assure you that we will also keep our efforts going in the areas of Green Technologies. Please inform me anytime if you need any help/assistance from my side.

- Dr. Prakash Somani, Founder, Applied Sciences Innovation Pvt. Ltd.

It was a good show put up by you and your team. The event was satisfying in terms of industry presence and our content of discussions/presentations. Look forward to the next programme. Do share the details when ready.

- Mr. Girish Thorat, General Manager – India, ROCHEM Separation Systems

Huge congrats for organizing such a great green chemistry conference. I enjoyed every bit of it. Those two days provided me real feedback about Indian industries approach towards green chemistry.

My 180 degree seminar was highly appreciated by the audience and several industries are now in touch with me for some serious collaboration.

It was great event and you should have it every year. You should also invite more active academicians in the field.

Once again I like to congratulate both of you for the success of this event.

- Prof. Vivek Polshettiwar, FRSC, Nano-Catalysis Laboratory (NanoCat), Department of Chemical Sciences, Tata Institute of Fundamental Research (TIFR)

Congratulations on organizing another successful and impactful IGCW 2015. It was my pleasure to participate and learn from this convention.

- Dr. Vilas Dahanukar, Chief Scientist, IPDO, Dr. Reddy's Laboratories Ltd.

I want to say you and the rest of your fantastic team a very big thank you for organizing the conference which was a great learning and networking platform – we were happy to be able to contribute! And we look forward to continuing the collaboration in the future.

All the best – and look forward to touching base again in 2016.

- Mr. Michael Foldager, Senior Manager, Global Marketing & European Sales, Novozymes AS

I would like to thank you for giving me the opportunity to join and present at IGCW 2015 in Mumbai. It was a brilliant event, with fascinating content and high-profile participants. I made some good contacts there for my new company and I am optimistic for the next steps.

- Dr. Wolfgang Eger, Director, Kijani Asia

IGCW is a confluence of knowledge, research and solutions; a meeting of some of the great minds in Green Chemistry.

It is a class apart and the passion, commitment and dedication to the cause that culminated in the two day IGCW-2015 shone forth from the IGCW team.

I consider myself fortunate to have been a part of this great event. Team IGCW, may your passion be contagious ! Keep up the great work !

- Ms. Sandra D'Sa, GM- Marketing, Geist Research Pvt. Ltd.

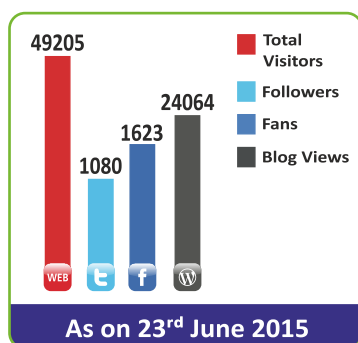


December 4 - 5,
Mumbai, India

IGCW
2015
industrial green chemistry
world

Convention
&
Ecosystem

industrial green chemistry
a new vision for
one earth, one future



Join us at e-IGCW Social Media

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- youtube.com/user/IGCW
- facebook.com/IndustrialGreenChemistry
- plus.google.com/+Industrialgreenchem/posts

Green Chemistry Partner :	Awards Partner :	CSR Partner :	IGCW Cause Partner :
4R Partner :	Partners & Supporters :		
Associate Partners :			
Students & Teachers' Workshop Partners :			

Organizers :



Green ChemisTree Foundation

C/o. Newreka **Green & Synth**™ Technologies Pvt. Ltd.

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