INTERNATIONAL SEMINAR
Organized by

STEEL TECH

on

Green Ferroalloys Making - towards Sustainable Future

12th APRIL(FRIDAY), 2024 | TAJ BENGAL, KOLKATA, INDIA

KEY ISSUES TO BE DISCUSSED

FERRO-ALLOYS SCENARIO

- INTERNATIONAL & DOMESTIC MARKET - SUPPLY, DEMAND BALANCE & OPPORTUNITIES FOR INDIA – ENHANCING FOCUS ON EXPORTS
- INNOVATIVE IDEAS FOR REDUCING PRODUCTION COST OF FERRO ALLOYS
- LOW AND MEDIUM CARBON FERROALLOYS – PRESENT AND FUTURE SCENARIO
- FEASIBILITY OF FERROTITANIUM PRODUCTION IN SUBMERGED ARC FURNACE AS ALTERNATIVE WAY TO INCREASE PROFITABILITY.
- WAYS AND MEANS TO INCREASE EXPORT OF FERRO-ALLOYS
- STAINLESS STEEL –NEW AREAS OF APPLICATION & EXPORT POTENTIAL
- INCENTIVES REQUIRED FROM THE GOVERNMENT OFINDIA FOR THE INDUSTRY

RAW MATERIAL

- AVAILABILITY OF RAW MATERIAL FOR PRODUCTION OF FERRO ALLOYS
- SUPPLY OF CHROME & MANGANESE ORE FOR FERRO ALLOY PRODUCERS
- INNOVATIONS & EMERGING TECHNOLOGIES IN UTILISATION OF LOW GRADE RAW MATERIALS
- BRIQUETTING, SINTERING & PELLETISATION
- WAYS AND MEANS TO MEET FERRO ALLOY RAW MATERIALS FOR 300/500MTPACRUDE STEEL PRODUCTIONIN INDIA

LOGISTICS

- INFRASTRUCTURE & WAYS TO REDUCE COSTS ON LOGISTICS
- MODERN LOGISTICS

MINING

- MINING LAWS, REGULATIONS& RESTRICTIONS
- FEASIBILITY OF UNDERGROUND MINING
- MODERN TECHNOLOGIES USING AI AND DIGITIZATION

POWER & ENERGY (INCLUDING GREEN ENERGY)

- LOCATING FERRO-ALLOY PLANT TO AVAIL POWER AT THE LOWEST COST
- UTILISATION OF WASTE HEAT TO REDUCE COST
- SOURCING OF REDUCTANT AT LOWER COSTS
- MAKING OF FERROALLOYS USING GREEN ENERGY & HYDROGEN

TECHNOLOGY

- ADOPTION OF BAT (BEST AVAILABLE TECHNOLOGIES) AND GREEN ENERGY FOR MANUFACTURING FERRO ALLOYS
- DIGITIZATION / INDUSTRY 4.0 / IOT / MACHINE LEARNING/AI
- FERRO ALLOY WASTE UTILIZATION AND RECYCLING
- HIGH CARBON AND REFINED MANGANESE ALLOY PRODUCTION TECHNOLOGIES
- PROCESS IMPROVEMENTS AND INNOVATIONS IN SUBMERGED ARC FURNACE PROCESSES
- CHROME ALLOYS AND STAINLESS-STEEL PRODUCTION
- NOBLE ALLOYS AND THEIR PRODUCTION TECHNOLOGIES
- R&D ACTIVITIES IN FERROALLOYS INDUSTRY

SAFETY, HEALTH & ENVIRONMENT

PARTICIPATION AND SPEAKERS FROM:

OUTOTEC, SMS, TENOVA, PYROMET, TRAFIGURA; TATA STEEL, SAIL, JSW, JSPL, RINL,MOIL, IMR RESOURCES,SUPER SMELTER LTD., JINDAL STAINLESS STEEL,TM INTERNATIONAL, IMFA,JAMIPOL, SHYAM FERROALLOYS, SHYAM METALLICS & ENERGY, TIRUMALABALAJI, JAI BALAJI, OUTOKUMPU, VEDANTA GROUP, ADHUNIK,ELEGENT, SHAKAMBHARI, IMMT, NML, MECON,M N DASTUR,RGCON, IIT, JU& MANY MORE...

VENUE

The venue is the Taj Bengal, Kolkata conveniently located 5 star hotel having excellent facilities. Keeping in view of current situation, we shall follow all norms related to COVID-19 protocols.However, if there is any restriction towards physical meeting during 26th April '24 due to upsurge in COVID conditions, we may go for webinar in place of seminar or change the date.

BRIEF SEMINAR PROGRAMME

09.15-10.00	**: Registration & Tea Session**
10.00 -11.00	**: Address by the Chief Guest/ Guests of Honor & Keynote Speakers**
11.00 -11.45	**: Panel Discussion & Q&A**
11.45 – 12.00	**: Tea Break**
12.00-13.45	**: Technical/Commercial Session 1**
13.45 - 14.45	**: Lunch**
14.45-17.00	**: Technical/Commercial Session 2**
17.00 - 17.30	**: Valedictory Session and Vote of Thanks**
17.30-18.00	**: Tea, Networking**

BACKGROUND

The World Steel Association forecasts that thesteel demand will grow by 1.8% in 2023 to reach ~ 1815 Mt in 2023.Steel demand will further increase in 2024 by 1.9% to reach at 1849 Mt. India ranks second amongst the top steel producing countries in the world with crude steel production ~140 Mt in 2023, a record increase of 12% compared to the last year whereas others had mostly negative growth rate.The per capita consumption of finished steel in India is just about 76 kg compared to 233 kg world average in 2021 indicating huge potentiality to grow. The National Steel Policy aims to reach 300 and 500Mtpa by FY31 and FY47 respectively. Requirement of Ferro alloys for production of steel will jump more than double compared to the present level. The seminar aims to discuss preparedness of ferroalloy industry with an aim to develop India as a global leader with a strong focus on enhancing self-reliance.

India is fortunate to have good resource of good quality chrome ore. However deposit of Mn ore is limited and we have to import Mn ore to meet the production of Mn-based ferro alloys. Energy cost is quite high in India for which China has become competitor in Ferro-Chrome though they are importing ore. Selection of right sustainable technology to utilise low grade ores, underground mining for chrome ore and availability of power at reasonable cost will help the indigenous Ferro alloy producers to meet the demand of Indian steel producers as well as export to enable earning of foreign exchange. Digitisation and application of Industry 4.0 need to be adopted for better control, cost reduction and customer's satisfaction. Reduction of CO_2 emission and Carbon Capture & Utilisation of CO_2 and its conversion into Liquid/Ethanol or Methanol, etc. to be looked into since Green Steel maker may also ask for green ferroalloys in future as well.

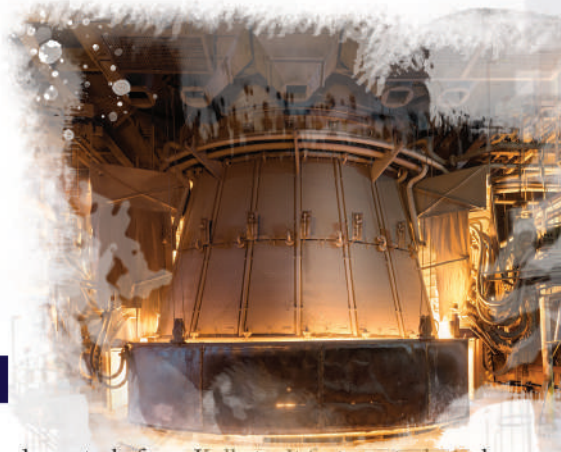
Ferro-alloys constitute one of the most expensive inputs to steelmaking in a typical Integrated Steel Plant, it amounts to 7-10% of the cost of saleable steel. It is thus important to deliberate on raw materials for steelmaking, emerging technologies in detail for its right selection to remain globally competitive.

Indian industries including steel plants are taking steps to reduce carbon footprint. Though India is targeting to be net zero emission by 2070 but many steel companies such as Tata Group is aiming at net-zero emission by 2045. **Ferroalloys industry also to deliberate on green ferroalloys making and take necessary steps for its sustainable future.**

DO NOT MISS THIS UNIQUE OPPORTUNITY

WHY ATTEND THIS SEMINAR?

The Seminar will provide a unique opportunity for Steel/Ferroalloy producers, miners to interact with Technology Suppliers, Designers, Operating Personnel, Researchers, Academicians and Others from the Industry. The latest technological developments in production / usage as well as advanced process control techniques will be deliberated upon in this Seminar. Unique networking opportunity with peers and industry leaders through interactive panel discussions and during lunch/tea breaks.STEEL TECH has been conducting seminars of international standard since 2009 and this seminar is the 17th one once again designed with rich content.



ABOUT THE ORGANIZER

STEEL TECH is a reputed technical journal published quarterly from Kolkata. It features technical articles involving steel technology for today and tomorrow. The aim is for faster development of steel industry, including downstream facilities with special focus in the eastern region, which is lagging compared to the other regions although it is rich in mineral reserves.

The journal has received widespread acclaim from within the industry, research organizations as well as academic institutions. The Editorial Board of the journal consists of luminaries in the Indian steel industry, including top executives of major steel plants, well-known scientists in research organisations and academicians of repute.

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PARTICIPATION DETAILS

Delegate Fee *	: Rs. 5,000 per person for Indian participants
	: Rs. 2,500 per Student participants
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** PLUS GST of 18%*

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Poster Display (3 Ft X 2 Ft) Max: Rs. 10,000 / USD 250 /Euro 200 per Poster
** PLUS 18% GST to be borne by the sponsor*

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