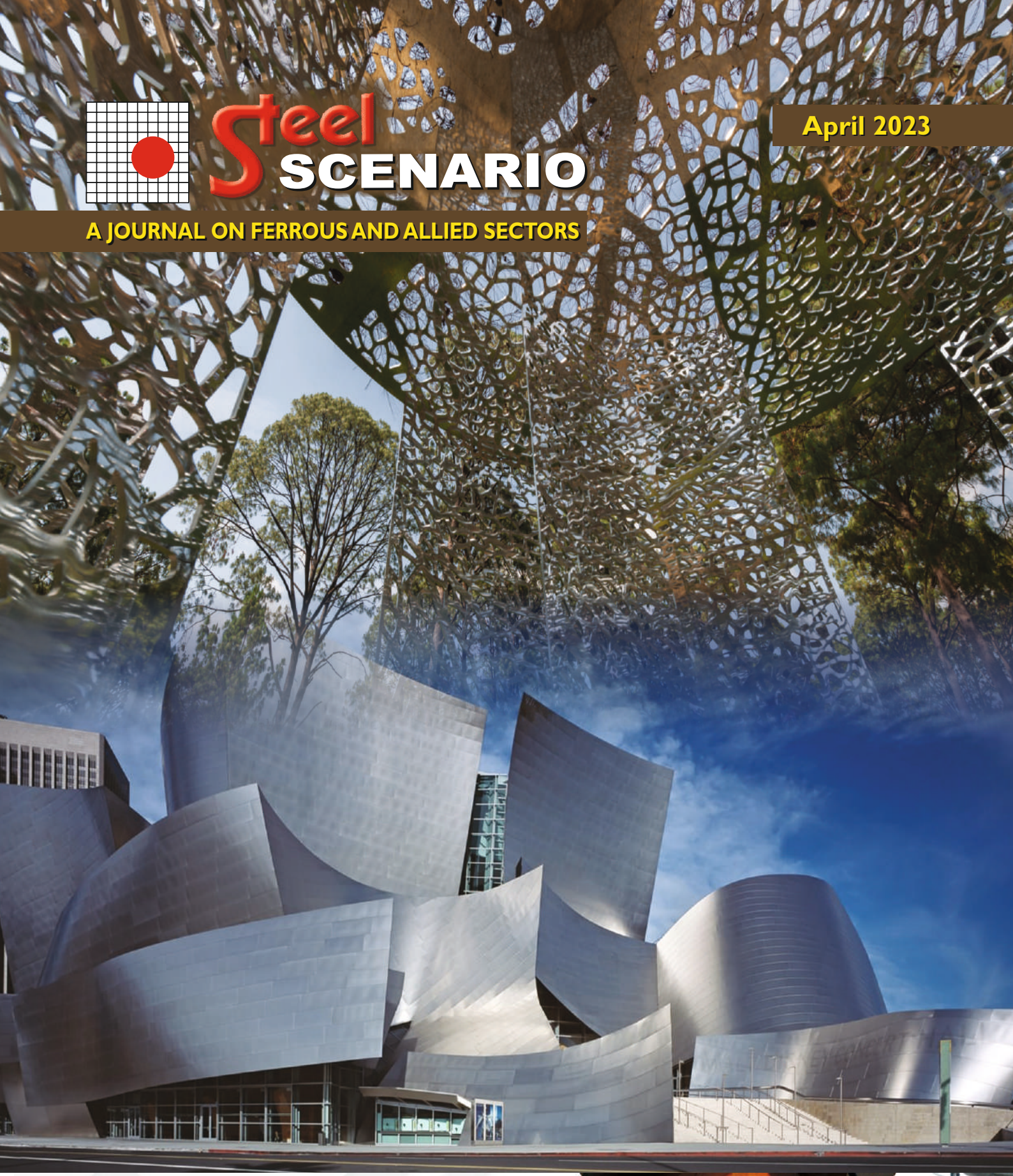
Steel SCENARIO

April 2023

A JOURNAL ON FERROUS AND ALLIED SECTORS



ZHUZOOR
A NEW-AGE CONSTRUCTION MARKETPLACE

From The House Of

SHYAM STEEL
SHYAM TMT REBAR

ABOUT US

ZHuzoor Infratech Private Limited is a new-age marketplace for construction materials, which takes orders from all business customers (infrastructure contractors, builders etc.) for all construction materials etc. of any brand and fulfils it by sourcing from suitable manufacturers. ZHuzoor aims to revolutionize the construction market by providing materials at best quality and at best possible rate under one roof along with frictionless logistics, flexible financing terms.

PRODUCTS & SERVICES

TMT Bars	Structural Steel	Pipes & Tubes	Metal Beam Crash Barrier
Scaffolding & Shuttering Material	Poles & Towers	Fabrications	Construction Chemicals
Bitumen & Fly Ash	Construction Equipment	Construction Related Hardware & Software	Inspection & Testing services

Plot No 03-319 (DH-6/11), Street No - 319,
New Town, Rajarhat, Kolkata 700156

+91-8100203758

enquiry@zhuzoor.com

www.zhuzoor.com

April 2023

CONTENTS

Steel SCENARIO

STEEL SCENARIO VOL 32/M09 Registration No. 53085 / 92

SECTION: EDITORIAL

SECTION : ARTICLE

SECTION : REPORT

SECTION : DATA BANK

Spark Economy Research Centre
46CD, Binodini Bhavan, Sammillani Park, East Rajapur, Santoshpur, Kolkata - 700075
Email: info@steelscenario.com / editor@steelscenario.com | Web: www.serc.org.in

ATTENTION SUBSCRIBERS
Any complain of non-receipt of journal should reach 'Steel Scenario' office at Kolkata latest within a month of publication.
- Publisher

Printed and Published by Ms. Sakuntala C. Chanda on behalf of Spark Economy Research Centre at SERC.

Sakuntala, Editor & Publisher

Role of Steel in Creating 'Smarter Future'

Steel is critical æþGîû economic development and the backbone of global sustainable initiatives, including the energy transition. But the steel industry is also one of the world's most energy-intensive, accounting for around 8% of global carbon dioxide emissions.

Despite the pandemic and supply chain disruptions, the steel industry is as strong as ever. In a fast-changing world, steel is adapting and evolving just as fast. For steelmakers, reducing these emissions is critical as the global decarbonisation agenda accelerates. Steelmakers that move now to improve the sustainability of operations can get ahead of evolving carbon regulations and capitalise on environmental, social, and governance (ESG) metrics to gain a competitive edge. Steel lies at the heart of a smarter, sustainable future. It is a critically important material for future low-carbon buildings, infrastructure, energy, and mobility solutions. Its durability, versatility, and recyclability make it the perfect material for a future low-carbon circular economy. Yet its prolific use means that if steel is to contribute to a net zero world it also needs to decarbonise. 'Smarter Future' looks at the role of steel in tomorrow's world and society's transition to net zero.

The steel industry is committed to keeping pace with environmentally-safe practices. One way they can do this is by reducing or eliminating slag from steel production. Slag is a waste product produced from dephosphorisation, the removal of phosphorous from steel. While some steel slag can be recycled, most of it is disposed of in a landfill. Some countries, including Japan, have been working towards a zero-slag production process in recent years. This involves limiting the amount of silicon and allowing lime to react with the phosphorus oxides. In this way, dephosphorisation can be initiated without producing slag.

The demand for stronger and thinner materials continues to increase as the demand for construction and pipe-grade materials increases. Stainless steel, the backbone of many of our cities, supplies materials for bridges, skyscrapers, railroads, and the automotive industry will continue to be an essential part of our lives. With smart cities, sustainability, and energy efficiency becoming popular throughout much of the world, the steel industry continues to make improvements in its ability to provide high-quality products to meet the ever-evolving landscape, both nationally and globally.

Technology promises to help the steel industry reach even higher and build ever taller, more impressive structures. Those in the construction industry have what almost seems like a magical power in creating some of the coolest steel buildings. One technology that is enabling this is BIM. Simply put, BIM packages will collect data from various construction management packages and professions and collect a construction project's data, including designs, into one file. This allows for the prevention of costly clashes that would result in cost overruns. For the creative, this helps free their time to create cool buildings that are also practical and come in under budget.

"Rethinking architecture to make it more innovative and, mostly, more sustainable"

New construction materials are also riding on the technological tsunami. Translucent wood, luminescent cement, bricks made of cigarette butts, and concrete to an endless stream of materials of the future which, although extravagant initially, are part of research projects in many Universities and companies already working with two clear goals in mind: rethinking architecture to make it more innovative and, mostly, more sustainable. One of the main benefits of these innovative construction materials is their ability to reduce energy requirements since its implementation in households could entail a 28% decrease in electricity consumption.

The dawn of civilisations as we know it began with a succession of material advancements; after all, the Bronze and Iron Ages placed us on the route to where we are now. As a result, it's not surprising that history is intertwined with innovation.

S.Chanda

Sakuntala Chanda