



**IIM**  
Metallurgy  
Materials Engineering

# NEWSLETTER

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### **INTRODUCTION**

This News Letter is containing a brief on 11th meeting of Executive Committee of IIM DC held on 28th April 2012. The News Letter also contains the following write-ups:

1. Management of Hazardous Wastes in the Metals Industry-An Imperative Need by Shri L Pugazhenthay, Past President IIM & ED, ILZDA
2. Demand Supply Scenario of Coal Industry and the Challenges by Shri S C Suri, Life Fellow IIM & Vice Chairman, IIM DC
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## Chapter News

### Executive Committee Meeting

The 11<sup>th</sup> meeting of the EC of IIM DC was held on 28<sup>th</sup> April 2012. The following are the salient points of the meeting:

- Progress of work relating to MMMM 2012 to be held in September 2012
- Status of Workshop on Ferro Alloys to be held on 1<sup>st</sup> May 2012
- Preparation for Seminar on Nano Technology scheduled for 5<sup>th</sup> May 2012
- Discussion on composition of Slate of EC for 2012-13
- Creation of Website of MMMM 2012
- AGM of IIM DC scheduled to be held in June 2012

## Management of Hazardous Wastes in the Metals Industry– An Imperative Need

L. Pugazhenthly  
Past President, IIM &  
Executive Director, India Lead Zinc Development Association

### Introduction

Environmental pollution is a “**slow murder**”. Decades ago, the society was not at all aware of the serious implications of environmental pollution on mankind and the ecosystems. During the last century, mankind had exploited nature not only for need but also for greed. But after the various catastrophies and tragedies like Chernobyl, Bhopal, Fukushima etc., that took place in different parts of the world, atleast the awareness dawned; rules and legislations were enacted for environment protection as well as occupational health care, in different industrial sectors. Clean air and clean water are the prerequisites for all human beings and all other forms of life to survive. It is high time that these environmental legislations and rules are implemented strictly and monitored regularly. The world today faces the greatest environmental threat of all times, that of climate change, brought out mainly by industrialisation, urbanization, modern consumerist life styles and unsustainable patterns of development. We are currently facing a “**developmental dilemma**”. Environmental pollution impacts earth’s climate and its natural resources. If the environmental degradation cannot be arrested today, with more and more industrialization in the coming years, on account of our economic growth, the problem will become not only huge but also unmanageable.

### Legislations in India

India brought out the “**Environment (Protection) Act** in 1986 with noble intentions. Subsequently the Govt of India enacted the “**Hazardous Wastes (Management and Handling) Rules**” in 1989, with introduction of amendments in 2002. These rule were further expanded into “**Hazardous Materials (Management, Handling & Transboundary Movement) Rules**” in 2007. Subsequently rules have also been brought out for electronic wastes, municipal wastes, medical wastes, nuclear wastes etc., etc.

### Need for Introspection

Though environmental legislations and rules have been brought out and are in place for a long time, it is time to ponder over the efficacy of these. Whether everyone has played their respective roles to make these legislations a success, is a subject to be debated. This applies to the industry, the regulatory bodies as well as the common citizens.

### Voluntary Initiatives

While legislations are enacted in different disciplines and walks of life for bringing about an uniformity and rationality, it is an imperative need for everyone to chip in their contribution to make the earth, more livable and lovable. One may call this as “**Social Responsibility**” or “**Sustainable Development**”. All citizens, whether they are students, farmers, workers, leaders, professionals, scientists, technologists etc., should display voluntary initiatives in all activities to achieve the above, cherished objective. No one needs to

look at others for compliance; one does not need policemen or environmental cops for environmental protection. The voluntary initiative should begin from childhood and that is where parents and teachers have crucial roles, in moulding and shaping up their minds and attitudes.

### Hazardous Wastes

Any manufacturing or industrial operation generates inevitable waste arisings or residues. A waste product is considered hazardous, if it displays one or more of the following characteristics:

(i) Poisonous (ii) Toxic (iii) Ecotoxic (iv) Explosive (v) Flammable/ Combustible (vi) Oxidizing (vii) Organic Peroxides (viii) Corrosive

Metals industry generates several hazardous wastes like scraps, slags, residues, drosses, ashes, skimmings, emissions, discharges etc., Examples in the lead– zinc industry are used lead acid batteries, cable scrap, discarded lead sheets/ pipes, zinc dross, zinc ash/ zinc skimming etc.,

### Eco– friendly Measures

A few years ago, the Govt of India brought out a notice, regulating auctions of all nonferrous wastes, so that traders are kept out and only registered, eco– friendly recycling units are able to pick up such waste materials for reprocessing or recycling. In addition, a registration scheme was also introduced, whereby all eco– friendly units for recycling or reprocessing are registered; such units are featured on the websites of CPCB (Central Pollution Control Board) as well as SPCBs/ SPCCs (State Pollution Control Boards/ State Pollution Control Committees). Around the year **2001**, the MoEF also brought out the “**Battery (Management & Handling) Rules**”, stipulating collection of used lead acid batteries by the manufacturers, dealers, importers (of new batteries), on a “one-to-one” basis i.e., sale of new lead batteries and collection of old lead batteries have to be accounted for. Bulk consumers are mandated to auction such used batteries to registered eco– friendly units only, and not to the traders. Such collected batteries should be sent to the registered eco– friendly lead recyclers only. In the year 2010, some amendments were gazetted whereby lead battery dealers as well as importers of new batteries have to submit collection returns every six months to the local SPCBs/ SPCCs. On the whole, the above policy measures, if implemented, will result in a “close– loop” collection and recycling arrangement, indeed an ideal objective to be achieved.

### Conclusion

Some noble thoughts and ideas have been inbuilt and enshrined in the above initiatives. Industry, not used to the voluntary concept, implements the environmental laws and rules, only when the regulatory bodies strictly monitor the implementation regularly. Regulatory bodies, who usually resort to fire fighting on a day to day basis, have neither the time nor the manpower to strictly monitor the implementation by the industry. The end result is there for everyone to see; backyard units flourishing everywhere and the latest is the entry of backyard recyclers even in the area of electronic wastes. Organized, eco-friendly recyclers who have invested heavily in technology and have trained manpower, do not get hazardous wastes in quantities (as a result of the backyard units) for their reprocessing or recycling, to justify their investments. What a discouraging scenario? Who will bell the cat and set things right? And when?

## Demand Supply Scenario of Coal Industry and the Challenges

S C Suri  
Life Fellow IIM, Vice Chairman IIM-DC

CIL is set to produce 440 Mt during the year 2011-12 against an anticipated coal production of 552 Mt in the country, representing a share of nearly 80%. Total demand of coal for the country, as assessed at the beginning of the year was 696 Mt. Against this, the supply from the mines of Coal India Ltd. was slated to be around 452 Mt. In the near to medium term the coal consumption in the country is slated to go up steeply as more and more new cement plants, power plants, captive power plants and iron & steel units are envisaged to be commissioned in the XII<sup>th</sup> plan period and beyond. To keep up the growth trajectory

of the economic development of the regions, despite the constraints, CIL has worked out production projections for the XII and XIII in plan periods under two scenario, i.e. business as usual and an optimistic scenario. Business as usual scenario envisages all India coal production of 715 Mt by 2016-17 with an estimated growth of about 170 Mt over XI Plan (2011-12) at a CAGR of nearly 5.0%. The scenario considers the current trend of delays in obtaining environmental clearance (EC), forestry clearance (FC), land acquisition, rehabilitation and resettlement (R & R) issues and the development of coal evacuation facilities. The optimistic consideration contemplates the fact that requisite clearance are obtained within the specified time schedule and the basic hindrances to the planned growth in production appropriately addressed.

The projected demand vis-à-vis domestic availability of coal for the next two five year plan periods is shown in Table 1

**Table 1**

(Fig in million tonnes)

Particulars	Estimated Production 2011-12	XII Plan 2016-17		XII Plan 2021-22	
		Bus. as usual	Optimistic	Bus. as usual	Optimistic
Demand		980.5		1373.0	
Indigenous Availability	696.0				
CIL	440.0	556.4	615.0	650.0	700.0
SCCL	51.0	57.0	57.0	63.0	63.0
Captive blocks & others	53.9	101.6	123.0	237.0	337.0
All India	544.9	715.0	795.0	950.0	1100.0
Gap	151.0	265.5	185.5	423.0	273.0

The gap between demand and availability is projected at 265.5 Mt and 423.0 Mt in the XII and XIII plans respectively. However, the gap could be reduced by about 150.0 Mt, provided the reforms necessary to expedite clearances take shape in the projected plan periods with desired three fold growth in production from captive blocks. Considering past experiences in developing captive blocks, the demand supply gap in India is only likely to widen in the near future rather than narrowing down.

### **Indian coal sector - future outlook and challenges**

Having witnessed a steady growth in coal production over the last two decades, the Indian coal sector now stands to shoulder an unprecedented opportunity to realize not just an incremental but a transformational growth in coal production to meet the 21<sup>st</sup> century energy requirements of the nation. The second half of the XI<sup>th</sup> Plan period has witnessed major hurdles and delays related to environmental and forestry clearances. The demand-supply scenario depicted above establishes the fact that coal will continue to play an important role in driving the economic growth of India. The greatest challenge before the industry is to make this growth a sustainable one, with its benefits available to all sections of the society. Sustainable mining will, therefore, involve operations which are economically viable, technically feasible and environmentally and socially acceptable. To achieve the energy security for sustainable development of coal industry, the core issues faced by the coal sector are listed below:

1. Obviate hurdles in development of captive coal blocks.
2. Enhanced rate of coal exploration with modern technologies
3. Creation of infrastructure development cell and a cell for land acquisition
4. Large scale introduction of IT in mines and technological advances
5. Introduction of Operator Independent Truck Despatch System (OITDS)
6. Utilization of Advanced survey instrument (3D laser scanner)

Use of HEMM of higher configuration

## Engineering Council of India : 10<sup>th</sup> Foundation Day Ceremony-April 4, 2012

### Dr E. Sreedharan Receives Eminent Engineers Award

Eminent Engineers Award was conferred on Dr E.Sreedharan at a ceremony held at the India Habitat Centre on April 4, 2012. The award is instituted by the Engineering Council of India incorporated on April 4, 2002 an apex body of engineers at the national level by coming together of a large number of professional organizations / institutions of engineers for the advancement of engineering profession in various disciplines and for enhancing the image of engineers in society, by focusing on quality and accountability of engineers and to enable the recognition of expertise of Indian engineers and their mobility at international level in the emerging WTO/GATS environment and also to facilitate bringing in on the statute the Engineers Act for regulating engineering profession in India.

His name was selected from out of 25 nominations received for the award by a jury constituted by the Council under the Chairmanship of Shri K.C. Pant, former Dy Chairman, Planning Commission with Dr Kirit S. Parikh, Chairman, Integrated Research and Action for Development (IRAD and former Member Planning Commission, Dr. V. Krishnamurthy, Chairman, National Manufacturing Competitiveness Council (NMCC), Dr. R.A. Mashelkar, National Research Professor, National Chemical Laboratory, Pune and former Secretary, Department of Scientific and Industrial Research and DG,CISR, Shri. B. Muthuraman, President CII & Vice Chairman, Tata Steel Ltd., Dr. P.V. Indiresan, former Director, IIT Madras and Shri A C Wadhawan former Chairman & Managing Director, Hindustan Zinc Ltd, Chairman, Public Sector Enterprise Selection Board as its Members.

Shri K.C. Pant presided over the function and Justice J.S. Verma, former Chief Justice of India was the Chief Guest. The function was very well attended mostly by engineers both from the industry and academia.

Dr Uddesh Kohli, Chairman, Engineering Council of India sounded a word of urgency regarding regulation of engineering profession like the other professions such as Medical, Legal, etc, were regulated for ensuring the accountability of engineers to the society.

Shri Pant advised engineers to keep themselves up dated with the latest developments in their field of specializations for meeting the challenges of the open economy. He further stated that the Engineering Council of India was created as an umbrella body of engineers by professional engineering associations for dealing with the issues concerning engineering profession at the national level and promoting a world-class engineering profession and advised those engineering associations, who had withdrawn from the Council, to return and strengthen the council for the benefit of all engineers.

Justice Verma praised Dr. Sreedharan's achievements and also stated that the current engineering education was not producing employable engineers. The engineering education needed to be reformed to make engineers employable by the Industry.



### [Indian coal production to increase to 795 million tonnes by 2016-17](#)

PTI reported that India's coal production is projected to increase by over 43% to 795 million tonnes by 2016-17 financial year, from an estimated 554 million tonnes in 2011-12. Indian Minister of State for Coal Mr Pratik Prakashbapu Patil in a written reply to parliament informed that the projection is based on obtaining necessary clearances and availability of requisite land for coal mining. He said "As per the draft report of the working group on coal and lignite set up for formulation of 12th Five Year Plan, the indigenous availability of coal is projected to increase from 554 million tonne in 2011-12 to 795 million tonne in 2016-17, provided requisite land is available for coal mining and all other clearances are obtained in time." He added that "Of this, Coal India Limited's contribution is expected to increase by over 39% to 615 million tonnes by 2016-17 against the estimates of 440 million tonne for 2011-12. Replying to a separate question, he said that about 477 million tonne of coal would be required by 2016-17 by the power companies that have signed fuel supply agreements with the Coal India for their projects to be commissioned on or before March 2015.

Source: Steel Guru

### [Indian ministries squabble over iron-ore reserve status](#)

In a fresh exchange of salvos within the Indian government over whether or not to export iron-ore, the Mines Ministry has opposed a proposal from the Steel Ministry for classifying iron-ore as a 'strategic mineral'. In a communication to the Parliamentary Standing Committee on Steel and Coal, the Mines Ministry has claimed that there are sufficient reserves of iron-ore in the country and that the steel industry should be more proactive in efficient usage and conservation of the mineral, rather than continue clamoring for curbs or a ban on exports. "India has 28.5-billion tons of available iron ore reserves and this would go up further with ongoing exploration," the Mines Ministry said in the communication. The Ministry also came down on the steel industry for demanding captive iron-ore mines and expressed concerns that experience with granting captive mines to steel producers showed that this prevented optimal exploitation of reserves, since steel producers tended to raise only high-grade iron, and the absence of investments in beneficiation and agglomeration caused inferior grade ores to either remain untapped or raised and dumped.

According to the Mines Ministry, continuation of the practice of granting captive mines instead of auction of the resource to investors, irrespective of public or private sector status, would be counter-productive in evolving large mining corporations and attract foreign direct investments into the fragmented Indian mining industry. "The Government must ensure a level playing field for both public and private sector investors in the mining industry. The Government should adopt an arm's length approach and separate its role as promotional developer of natural resource and a miner," the Mines Ministry said. For its part, the Steel Ministry has been advocating that end-user industries like steel or power producers required their interests to be protected from the proposed adoption of auction route of granting mining licenses. It cited the example of Rashtriya Ispat Nigam Limited, a Government-owned steel producer that was expanding installed capacity to six-million tons a year but did not have any access to captive iron-ore supplies. However, even as the Mines Ministry opposed classification of iron-ore as a 'strategic mineral', mineral sector regulator, the Indian Bureau of Mines (IBM), which operates under the Mines Ministry, has expressed concern over long-term availability of the resource against planned steel-making capacity. "The present level of iron-ore reserves in India were not encouraging for the projected demand of iron-ore by 2020," IBM said in a report titled Indian Iron and Steel: Vision 2020. It stated that India's steel production was forecast at 180-million tons and to meet such production target, run-of-mine iron-ore requirement would be 500 million tons a year against current production levels around 200 million tons a year.

Source: Creamer Media's Mining Weekly

### [Indian steel consumption to grow by 4pct to 5pct in 2012-13](#)

ET reported that India's steel consumption growth is likely to be a moderate 4% to 5% in the current fiscal as economic slowdown is impacting industrial projects, a government official said. Dr AS Firoz Chief Economist Ministry of Steel said that "I don't expect a very high rate of growth in consumption of steel in the current fiscal. It may be 4% to 5% for various reasons. However, there are ifs and buts. At the best case, up to 6.5% growth could be expected." Mr Firoz said that "That (5.5% demand growth) is not a very good scenario. Slowdown is taking place largely because of lack in investment. Industrial projects are not taking off." Mr Firoz however said production might be higher this year than the last fiscal because of new

capacities, being added at present, would be commissioned. Country's steel consumption, according to the preliminary estimates, grew by only 5.5% in 2011-12 to around 70 million tonnes due to subdued demand from across the consuming sectors like automobile, Fast Moving Consumer Goods and construction. The domestic crude steel production grew by 3.3% in 2011-12 to 72 million tonnes. India remained a net importer of steel to the tune of 2.7 million tonnes in last fiscal. Almost all leading producers of steel, both in the public as well as in the private sector, are adding fresh capacities anticipating huge demand emanating in the future, particularly considering that India's per capita consumption low.

Source: Steel Guru

### Mr D R S Chaudhary is new Steel Secretary

Mr D.R.S. Chaudhary has been appointed as the new Secretary, Ministry of Steel. Mr Chaudhary has replaced Mr P.K. Misra. Mr Chaudhary's previous position was as the Secretary, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises.

Source: Business Line

### Karnataka steel industry fears closure as auction ore runs out

Seven months after the Supreme Court issued a detailed corrective plan for rampant illegal mining in Karnataka, until recently the iron ore hub of India, the viability of the Rs 45,000 – crore steel industry in the southern state remains in question. Contrary to the popular perception that enough iron ore would be available for steel mills within the state to sustain business until July, when operations are to resume, the industry says supply may run out as early as this month-end bringing 23 per cent of the country's steel capacity to a closure. The apex court had imposed a blanket ban on all mining activities in the state in August last year. In a temporary arrangement, aimed at helping the steel industry survive in the interim, the court had allowed daily auctions of iron ore from existing stocks, apart from directing state-owned NMDC Ltd to operate two of its mines to supply a total of a million tonnes every month. With the auctions remaining largely deficient in meeting demand, owing to cost and quality issues and NMDC failing to supply even half of the committed 1 mt, the future of investments worth Rs 56,000 crore, in addition to a Rs 25,000 crore debt exposure, is at stake. So is Rs 7,000 crore of annual tax revenue and the livelihood of thousands of workers.

Karnataka alone accounts for around a fifth, or 45 mt, of the total 220 mt of iron ore produced in India annually. The bulk of the state's production comes from Bellary district, while Tumkur and Chitradurga account for the rest. The steel industry in the state – comprising a little over a dozen companies, including JSW steel, Mukand, Sun flag Steel, Tata Metaliks, Kalyani Steels and Kirloskar Ferrous – churns out 15 mt steel annually, using this ore. None of these companies have captive mines linked to their projects and are, therefore, forced to procure their entire raw material requirement from merchant miners. According to the final report of the Supreme Court appointed Central Empowered Committee (CEC), a little over 14 mt of ore from the available overall stock of 25 mt had been sold through auction by February 26. The report also notes 6.5 mt of the stock is subgrade ore, to be excluded from auction. This leaves a meagre 4.4 mt stock available for sale against the demand of 2.5 mt every month. The CEC report, given on February 3, has recommended resumption of operations in 45 mines – classified as Category - A – where no illegality was found. It filled supplementary report on March 13, which recommended completion of new and detailed Reclamation and Rehabilitation (R&R) plans for these before operation resumed. Even if the R&R plans are prepared within two months, as recommended by the CEC report, it will take another three to four months for the mines to be fully operational and start commercial operations. Thus, it will be at least five months before any iron ore from Category –A mines is available, miners say.

“As existing stocks will be fully exhausted within a few weeks, the steel industry would face a catastrophic situation, with the marginal availability of 0.5 mt per month from NMDC mines. Therefore, it is essential that an immediate workable solution is devised to avoid drastic curtailment of steel production from May,” RK Goyal, managing director of Kalyani Steel Ltd, a large producer in the state, told Business Standard.

The crisis is more for the likes of Kalyani Steels. Unlike JSW, it does not possess beneficiation and sintering facilities, thus being dependent on calibrated ore, as against fines, for production. “Calibrated ore is not available in auction. Also, our mines are closed for the past eight months. Restarting operations would require more time, as equipment and manpower would have to be mobilised,” said Goyal. Kalyani Steels uses 1.2 mt iron ore to produce 0.7 mt steel annually. Capacity utilisation of JSW Steel, the largest manufacturer in the state with a 10 mtpa plant in Bellary, has fallen to between 65 per cent and 70 per

cent, owing to low quality and availability of ore. It had fallen to 30 per cent immediately after last year's ban. The auctions had later helped push up utilisation to a little over 80 per cent during the third quarter ended December 2011. A JSW spokesperson refused to comment on the matter. Even as miners have raised a furore over availability, the CEC is optimistic on early resumption of supply. "Considering the quantity of iron ore sold and transported till date, the CEC is of the view that the existing stocks may be adequate to meet the requirement of the steel and associated industries up to May/June 2013," it had said in its final report of February 3. The report states how the extent of "rampant, unauthorised, unregulated, environmentally unsustainable and illegal mining" and consequent massive encroachment in the forest area had perhaps no other parallel in the country.

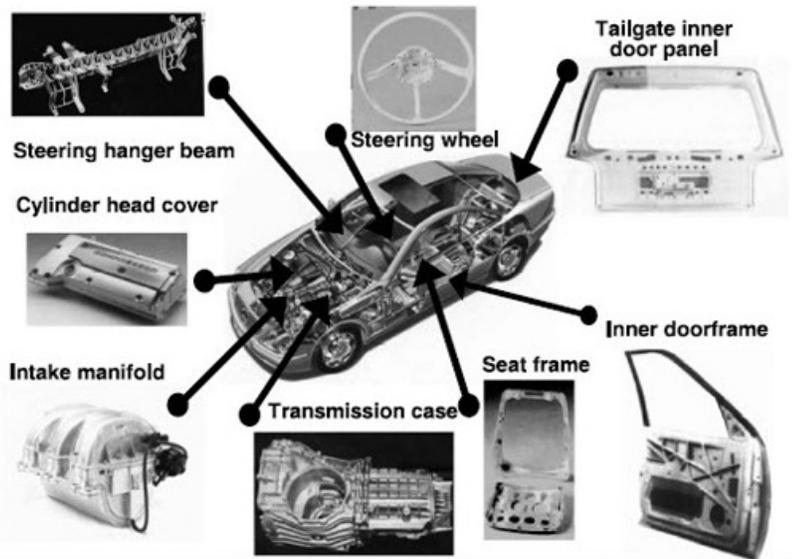
Source: Business Standard

### Automotive Uses of Magnesium Alloys

Vehicle weight reduction is one of the major means available to improve automotive fuel efficiency. High-strength steels, aluminum (Al), and polymers are already being used to reduce weight significantly, but substantial additional reductions could be achieved by greater use of low-density magnesium (Mg) and its alloys. Magnesium alloys are currently used in relatively small quantities for auto parts, generally limited to die castings, e.g., housings. For passenger cars, the general rule is that about 86% of their total life time energy use from the time of production to the time of disuse or scraping is consumed by carrying their own weight and persons around. Magnesium is an attractive material for automotive use, primarily because of its light weight - 36% lighter per unit volume than aluminum and 78% lighter than iron. When alloyed, Mg has the highest strength-to-weight ratio of all the structural metals.

Since the first oil crisis in the 1970s, there has been an economic and legislated move to make cars lighter in weight to improve fuel efficiency and reduce emissions. Cars have been made lighter by a combination of down-sizing, new designs (such as cab forward and front-wheel drive), and shifts to lighter materials. The most striking material shifts have been from iron to high-strength steel (HSS), and from iron and steel to aluminum and plastics. But magnesium offers even greater potential to reduce weight by displacing steel, and additional incremental savings by displacing aluminum and plastics from uses already taken over from iron and steel. Magnesium is abundant. It is the eighth most common element; seawater, the main source of supply, contains 0.13% Mg, which represents a virtually unlimited supply. Magnesium is also recyclable, and instituting a recycling system would extend supplies and save energy. Major increases in automobile usage would eventually require U.S. production capacity expansion. In traditional alloy development, experimental investigations are performed with many different alloy compositions. The selection criteria for multicomponent alloying elements and their compositions become diffuse in a traditional approach. Computational thermo chemistry based on the Calphad approach can provide a clear guideline for such selections and may help to avoid large-scale experiments with less promising alloys. Thus, it is a powerful tool to cut down on cost and time during development of magnesium alloys.

A comprehensive overview of the Calphad method is given by H.L. Lukas et al. More details on the ongoing development of a major thermodynamic database for magnesium alloys, currently comprising 20 components (Ag-Al-C-Ca-Ce-Cu-Fe-Gd-Li-MgMn-Nd-Ni-Sc-Si-Sn-Sr-Y-Zn-Zr) and 412 phases are given elsewhere. The combination of light weight, high specific strength, and good castability makes magnesium alloys a promising engineering material for the automotive and aerospace industries. Mg-Al-based alloys, especially the AZ and AM series, combine good room-temperature strength and ductility with satisfying salt-spray corrosion resistance and excellent castability. Sufficient creep resistance at elevated temperatures is also required by special automotive applications, such as engine blocks or power train



components. For these elevated-temperature applications new magnesium alloys were developed on the basis of calcium and strontium additions or rare earth (RE).

A.A. Luo discussed the potential of these alloys and demonstrated promising results on the high-temperature strength for magnesium-based alloys with strontium and calcium, but called attention to possible castability problems like sticking and cracking. Additions of RE elements show similar advantages, but should be minimized considering their high costs. These new alloys have already high temperature properties comparable to common aluminum alloys. A comparison of the performance of an oil pan made from the new magnesium MRI153M alloy and from aluminum A380 alloy revealed that the magnesium alloy performed similar and had the better damping properties. Automotive applications require also good ductility for many components, especially energy absorbed in the case of an accident is a very crucial issue. One direction in the alloy and process development for wrought alloys is to optimize the energy absorption of the material. Nevertheless other components require preferentially higher strength than ductility. Thus alloy development follows various requirements and certain alloy groups can be identified to provide certain properties. The majority of auto parts and components are made from a short list of common materials. The simplest approach is to look at material use by major system, and then correlate the material with function and/or manufacturing process. The three major systems or component groups are the body, the *power train*, and the *chassis* (Figure 1).

Source: Key-to-Metals site

### [Coal imports may cause annual forex outflow of Rs 72,000 crore by 2016-17](#)

What could be the financial cost of years of neglect of India's coal production strategy by the government? The cost is Rs 72,000 crore of avoidable annual foreign exchange outgo by 2016-17, according to the government's own and latest estimate. This is enough money to fund a mega social sector scheme of the size of the National Rural Employment Guarantee for two years. The government's Working Group Report on Power Sector for the 12<sup>th</sup> Plan period has warned about substantial outflow of the country's forex reserves over the next five years as a result of huge coal imports. "Based on the present price of coal, import of 120 million tonnes will result in annual outflow of foreign exchange of Rs 72,000 crore," the report has said. The finding and recommendations of the report, prepared by an expert committee headed by Union Power Secretary P Uma Shankar, would go into formulation of the 12<sup>th</sup> five-year Plan that began last month. The country imported 70 mt coal, including coking coal, at a cost of Rs 31,000 crore in 2010-11. India would have an installed coal-based power generation capacity of 121,000 Mw by the end of the current financial year. This is expected to grow by around 40 per cent to 166,000 Mw over the next five years, requiring 842 mt coal annually. However, only 550 mt is likely to be available domestically, including 415 mt from Coal India Ltd (CIL), 35 mt from Singareni Collieries Company (SCCL) and around 100 mt production from captive miners. This will leave a 292 mt shortfall in supply.

The government expects that between 55 mt and 80 mt imported coal – equivalent to between 83 mt and 115 mt of domestic coal – would be required by 2017, assuming 15 per cent blending. "Considering another 54 mt of domestic coal required for imported coal-based plants, there shall still be a shortfall of over 115 mt from domestic sources," the report noted. The scenario requires CIL and SCCL to together ramp up production to 605 mt from their mines in case imports are to be eliminated. During the past five years beginning 2006-07, while coal-based generation capacity in India had grown at 8.7 per cent annually, domestic coal production grew by 5.1 per cent yearly, owing to delayed environment clearances and CIL's capacity constraints. For the 12<sup>th</sup> Plan period, the annual growth rate of coal-based capacity is likely to be 8.9 per cent, while domestic production is expected to grow at six per cent yearly. "This clearly indicated a continuing shortfall in availability and calls for opening up coal sector to private sector and setting up an independent coal regulator, besides increasing production by Coal India," the report said. CIL's production remained flat at 431 mt in 2010-11. Production grew marginally at 436 mt last financial year (2011-12), as the company was refused fresh green clearances. Workers' strike and heavy rains also took a toll on production. The state-owned miner has set a production target of 454 mt in the current financial year.

Source – Business Standard

### [Indian coal mining scam - No irregularities in allotment – Minister of States](#)

The Ministry for Coal said recently that no irregularities were reported in allotment of coal blocks to commercial entities during 2004-09. Minister of State for Coal Mr Pratik Prakashbapu Patil said of 218 coal blocks allotted so far, 174 were allocated to 267 companies during 2004-09. he said that "Of the 174 coal blocks, 21 coal blocks are de-allocated. Hence 153 coal blocks stand allocated to 245 companies out of the above." Thirteen members of the house wanted to know whether irregularities had been reported in allocation of coal blocks to commercial entities during 2004-09 causing INR 10.7 lakh crore loss to government and gains to many private companies, as alleged by a draft report of the Comptroller and Auditor General. The minister replied in the negative when asked whether tenders were invited and auction was done for allocation of coal blocks. He said the Amendment of the Mines and Minerals (Development and Regulation) Act, 1957, enabling the introduction of allocation of coal blocks through auction by competitive bidding took time for its enactment and notification of Rules made there under.

Source: Steel Guru

### [Difficult to impose a ban iron ore exports – Commerce & Industry Minister](#)

Commerce and Industries Minister Mr Anand Sharma has said it would be difficult to impose a ban on iron ore exports as it would affect the mining sector and livelihood of many. Mr Sharma, responding to a query on the demand for imposing a ban from different quarters including Odisha government said that "It would be tough to put a halt to export as storing huge volumes of iron ores for long would be environmentally hazardous." He said that mining activities generate jobs for thousands of poor people and stopping surplus mining would affect their livelihood. Stating that the country is at present producing 230 million tonnes to 235 million tonnes of iron ore per annum, the Minister said, only 92 million tonnes to 95 million tonnes of the produced ores are consumed in the domestic sector, making the rest as exportable surplus. Mr Sharma said that "Let us see how it can be regulated in a firm manner to check bad practices and illegal exports that have crept in. It will take time for India to consume the entire iron ores produced by it." Underlining the need for adopting a balanced and judicious view, he said that "We will not take extreme steps. What is right will be done."

Source: Steel Guru

### [Indian iron ore mining mess - Fresh leases only after all matters are resolved](#)

FE reported that uncertain times await investors planning to start iron ore mining in Karnataka, as the state government has made it clear that fresh leases will be given only after the Supreme Court clears all legal cases concerning the sector. The state's controversy-ridden industry has come under the purview of the central empowered committee of the Supreme Court which has recommended a ban on issuing fresh mining permits.

A senior state government official with the commerce and industries department told FE that they have not notified any new areas for iron ore mining and would look into it only after the SC clears all the cases. The state government already has a huge pending list of applicants seeking fresh iron-ore mining leases. Those waiting for the same include ArcelorMittal, Jindal Vijaynagar Steel, Posco, etc. In fact, several of these companies have plans of to set mega steel plants in Karnataka. During the Global Investors Meet held in June 2010, Karnataka had attracted investment proposals in excess of INR 200,000 crore from the iron and steel industry. Some of the global giants like ArcelorMittal and Posco signed MoUs with the state government to set up steel plants with a capacity of six million tonne per annum, with proposed investments in excess of INR 30,000 crore. It may be noted that these steel majors sought captive iron-ore mining leases from the state government as a precondition for starting their operations. The state government in its policy of granting fresh iron-ore mining leases has made it clear that only those companies which engage in value addition, ie setting up of steel plants, would be given permits. At one time, there was a proposal from the state government for companies setting up steel plants: Get 50% of ore requirement through captive mines, and procure the rest from the open market. A company official said they were watching the developments unfolding as per the SC direction and are looking at the possibility of taking over any existing mines if such a situation arises. As per the CEC recommendations, the iron mines have been classified under three categories A, B and C. As of now, the SC has allowed resumption of mining in 43 leases subject to rehabilitation and reclamation work being undertaken.

Source: Steelguru

## [Indian iron ore mining mess - Saranda bleeds in illegal ore hunt](#)

Telegraph India reported that at least four mining firms have been extracting iron ore and manganese against their sanctioned capacities in this West Singhbhum region since 2008 right under the nose of the mines department and Jharkhand State Pollution Control Board. The startling fact came to light this January after the two laggard state offices replied to separate RTI petitions filed by a government official who chooses to remain anonymous on March 28 last year. While the JSPCB provided details of annual mining cap fixed for the individual firms, the mines department furnished its reply based on ore production. The glaring discrepancy in the two sets of figures copies of which were acquired by The Telegraph recently suggests that the four firms have been pilfering ores two to seven times of their approved quantities for the past three fiscal. Interestingly, all these mining firms are operational within a 10km radius. From 2008-11, Bijaya-II iron ore mines leased to Usha Martin Limited extracted three to four times more ore than its sanctioned limit. In 2008-09, it produced 1.833 million tonne against an approved 0.65 million tonne; in 2009-10, it extracted 2.324 million tonne against 0.65 million tonne and in 2010-11, it bagged 2.572 million tonne against 2.4 million tonne.

Similarly, the Karampada iron ore and manganese mines leased to Shah Brothers produced 0.715 million tonne despite permission for 0.612 million tonne in 2008-09. The next fiscal, it extracted 0.679 million tonne against an approved limit of 0.09 million tonne and in 2010-11, it gained 0.972 million tonne against a permissible capacity of 0.09 million tonne. Roughly, the excess production amounts to six to seven times the sanctioned limit. In the same time span, Thakurani iron ore mines leased to one Padam Kumar Jain exceeded production up to twice the original consent. In 2008-09, it extracted 2 million tonne against 1 million tonne; in 2009-10, the production was 1.91 million tonne against 1.3 million tonne and in 2010-11, the figure was 1.68 million tonne against 1.3 million tonne. The fourth culprit Ghatkuri iron ore and manganese mines whose leaseholder is Orissa Manganese Minerals Limited exceeded overall production up to 1.6 times its sanctioned capacity. In 2008-09, the production was 0.18 million tonne (there was no cap), in 2009-10, it extracted 1.2 million tonne against 0.72 million tonne; and in 2010-11, it bagged 0.943MT against 0.72 million tonne. If any mining firm exceeds the capacity sanctioned by the bureau, it amounts to gross violation of the Environment (Protection) Act, 1986, and can invite punitive measures, including cancellation of license. The responsibility of monitoring violations lies with the pollution control board, but the JSPCB has not acted against the devious firms till date. The mines department too gets monthly figures of production from these companies, but never bothered to delve into details. The monthly reports just added to reams of paper in dusty files.

Source: Steel Guru

## [SAIL likely to get share in Rajasthan iron ore mine - Report](#)

ET reported that Steel Authority of India may get a slice of a magnetite mine in Rajasthan's Bhilwara district soon. According to sources, SAIL had written to the Rajasthan government way back in 2009. Considering the need, the state had sought union mines ministry's approval to allocate a part of the mine. The entire process is nearing to an end. The state run steel maker had in December 2009 applied to the Rajasthan government for giving it the mining lease in the Parbanera belt, considering the increased requirement of iron ore to feed its expanded capacity. SAIL is in the process of expanding its capacity to 23.46 million tonnes per annum by 2012-13 from 14.35 million tonnes per annum at present with a whopping investment of around INR 70,000 crore. It takes around 1.6 million tonnes of iron ore to produce one million tonne steel. Following SAIL's application, the Rajasthan government had put forward the proposal to union mines ministry for granting mining lease on 871 hectares of area in its favour. The total area of the mine is 3,716.27 hectares. Meanwhile, the state had allocated 1,557 hectares out of the total mining area to Jindal Saw in January 2011. The area given to Jindal Saw has the potential to produce 180 million tonnes of iron ore.

Source: Steel Guru

## [Indian iron ore mining mess - Adani denies involvement](#)

Reacting to reports about CEC's recommendation for a probe into the alleged illegal export of seized iron ore from the Belekeri port by shipping operators, including Adani Enterprises, the company said that it does not own or operate any iron ore mine in any part of the country, including Karnataka. Adani Group spokesperson in a statement said that "Adani Enterprises did not and does not own or operate any iron ore mine in Karnataka or any other part of the country. It has never undertaken any such mining activity."

Hence, company's involvement in illegal mining does not arise at all." The company further said it was one of the four parties or stevedores providing services at Belekeri Port, however, its responsibility or role was limited only to provide port services for the export of iron ore. The spokesperson said that "To obtain clearances, permissions or permits and transportation of iron ore from mines till the port were the responsibility of miners, traders and exporters. Adani as a service provider did not have a mandate or authority to check such clearances, permissions or permits adding that iron ore exports were carried out under the supervision of relevant port and custom authorities." The three other firms, which have been alleged of being involved in illegally exporting 850,000 metric tonnes of iron ore from the port during June 2010 are Shree Mallikarjun Shipping, Salgaoncar Mining Industries and Rajmahal Silks. The Supreme Court had appointed the Central Empowered Committee to probe into the illegal mining in Karnataka after a Dharwad based non-government organization filed an interlocutory application in January 2012, seeking a CBI investigation into the illegal export of iron ore by four firms, including Adani Enterprises.

Source: Steel Guru

### **Government update on availability of iron ore in India**

The Minister of Steel, Mr Beni Prasad Verma has said that the production of iron ore during 2010-11 was 208 million tonnes whereas the total estimated domestic consumption by iron and steel industry was 111.40 million tonnes. Therefore, overall there has been no scarcity of iron ore for the domestic iron and steel industry. In a written reply in the Lok Sabha he said, to improve availability of iron ore for the domestic iron and steel industry at affordable price, the Government has increased the export duty on iron ore from 20% ad valorem to 30% ad valorem on all grades of iron ore (except pellets) with effect from December 30th 2011. The export of iron ore during 2011-12 has been substantially reduced and was approximately 55.76 million tonnes during April, 11-February, 12 (provisional) as compared to about 87.25 million tonnes in the corresponding period of previous year 2010-11, thus showing a reduction of about 36% in the export of iron ore from the country.

Source: Steel Guru

### **Setback for SAIL as clearance refused for 3 iron ore mines in Jharkhand**

Economic Times reported that a high level committee of the Environment Ministry has refused clearances for Steel Authority of India Limited's three key iron ore mines in Jharkhand's West Singhbhum district, as the area is severely polluted and appropriate control measures are not in place. The mines, Jhillingburu-I, Jhillingburu-II and Topailore, are located in Gua iron ore reserves and are estimated to hold 82,812.6 million tonne of deposits.

EAC observed that these mines are located in West Singhbhum district, an area identified as severely polluted in terms of the respirable suspended particulate matter exceeding the prescribed limits. Steel Minister Beni Prasad Verma said in a written reply to the Rajya Sabha that the Expert Appraisal Committee (EAC) of the Environment Ministry had examined the proposals on January 24, 2012 for issuance of terms of reference for preparation of Environment Impact Assessment/Environment Management plan. He said "The EAC, therefore, deferred and kept the proposals in abeyance till appropriate control measures are implemented in the said area. The proposal is still pending with the Ministry of Environment and Forests for approval" SAIL had sought forest clearance for the Topailore mine in September 2006, while approvals for Jhillingburu-I and Jhillingburu-II mines were sought in July 2008.

Source: Steel Guru

### **Construction should continue to support China's Steel Industry in 2012**

Despite recent gloomy figures for manufacturing in China, the steel industry should continue to grow in 2012, according to MEPS latest report China Steel Insight. According to MEPS analysis, the smaller mills which predominately supply the construction segment have increased their contribution to the overall steel production figure. In contrast, the major mills which supply virtually all the needs of the manufacturing sector, have found orders more difficult to obtain. Weak economic indicators for most western nations are likely to lead to reduced import volumes for the Chinese steel mills compared to the recent past. Consequently, increased activity in the construction sector will be required to maintain a strong steel industry in 2012. The best prospect in the short term is the construction of economic homes. The government has a plan to build 36 million economic houses between 2011 and 2015. At the same time, it is attempting to rein in speculatively driven high end real estate construction in the cities, by

restricting the sale of land for this purpose. In future, new developments are likely to be limited to those which have a proportion of affordable homes in the overall plan. This should encourage the private sector to engage in construction of homes for lower income families and speed up the building of affordable homes. Incorporating private sector funding with that of the government investment would be good news for the Chinese steel industry. It may be possible for current restrictions on bank lending could be relaxed for projects which incorporated a proportion of affordable homes in the project. This in turn would be useful for the real estate segment and the economy in general – including the manufacturing sector, through sales of home appliances.

Source: MEPS Steel News

### **SAIL to rope in partners for all 3 SPVs in Sindri project**

PTI reported that Steel Authority of India will rope in separate strategic partners for all three special purpose vehicles, planned for the INR 38,400 crore Sindri project, and give them 49% stake in the SPVs. SAIL plans to set up a 5.6 million tonne per annum steel plant with an outlay of INR 29,000 crore, a 1.15 million tonne per annum gas based fertiliser plant for INR 4,400 crore and the rest INR 5,000 crore for the 1,000 MW power plant. A source in the Steel Ministry told PTI that "Separate partners will be inducted in each of the three ventures, but shareholding in these projects will be arrived at in such a manner that the shareholding between the public sector units do not go down below 51%." The source added that these partners are likely to come from the private sector only. While SAIL has already taken National Fertiliser on board for the fertiliser venture, however, no such tie-ups have been reached so far in case of steel and power projects. Cabinet Committee of Economic Affairs has already cleared SAIL's proposal to revive the Sindri unit of erstwhile Fertiliser Corporation of India. The unit stopped production in 2002. CCEA has also given nod for supply of 2.1 million metric standard cubic meter per day gas for the fertiliser unit, but stated that SAIL has to arrange its own raw material and fuel linkages for steel and power plants.

The source said all the projects would be funded in a debt-equity ratio of 70:30.

Source: Steelguru

### **Steel Prices in Emerging Markets weighed down by Low Demand and Economic Woe**

Brazilian steelmakers are expected to persevere with moderate pricing policies in the second quarter, despite improved shipments to key consuming industries and minimal price competition from foreign suppliers. Aggressive pricing positions are unlikely due to the real's exchange rate against the US dollar. Finished steel prices in Russia softened in April. Underlying consumption has fallen short of industry projections, amid a slow start to the construction season. Distributors plan to maintain manageable inventory levels as a result. Indian end-user groups intend to persevere with their conservative procurement strategies next month. The Supreme Court has authorised a partial easing of the ban on iron ore mining activities in Bellary (Karnataka).

Market sentiment in China has been unsettled by weak underlying demand growth and high inventory levels. Distributors have postponed replenishing depleted inventory levels. Several domestic steelmakers intend to leave their selling figures unchanged in May. Ukrainian steelmakers have had limited success in pursuing price growth. Low seasonal consumption rates have compelled suppliers to divert material to overseas markets. The outlook for the Turkish steel market is now less transparent amid uncertainties. Flat product mills have faced stiff price competition from distributors, selling materials purchased earlier at a lower price. Automobile steel suppliers report that domestic requirements have been weighed down by the on-going EU sovereign debt crisis.

Source: MEPS Steel News

### **BRIC countries to drive Global Steelmaking to record high in 2012**

MEPS predicts global steel output at 1625 million tonnes this year. This equates to a rise of over 80 million tonnes (5.4 percent) compared with 2011. The BRIC nations, along with Turkey and the USA, are projected to contribute 85 percent of the growth. Mills in the EU continue to restrict production volumes and this could result in the annual outturn rising by just 1.6 percent. In the rest of Europe, including the CIS, the 2012 outturn is expected to increase by 3.6 percent, year-on-years. MEPS predict that Turkish steel production will be at an all-time high figure. However, the rate of growth will be slower than last year due to a moderation in domestic consumption and lower exports. Producers in the CIS are cautious of a downturn in export sales to Iran because of international sanctions. North American raw steel production in 2012 is

expected to rise by 4.7 percent to a figure in excess of 124 million tonnes. US mills have sustained strong activity buoyed by a more positive economic outlook. Total South American steel manufacturing is likely to surpass the 50 million tonne mark in 2012 - an expansion of over 2.5 million tonnes compared with the output in the previous twelve months. In 2012, MEPS believes steelmakers in Africa should be able to recover approximately half the lost tonnage from last year. Another record steel output figure is forecast for 2012 in the Middle East. At 25 million tonnes, this will be the fourteenth consecutive rise in production. MEPS envisages Asian steelmaking expanding by well over 60 million tonnes this year to reach 1064 million tonnes. The majority of this gain will be provided by Chinese producers. Output in this country is forecast to grow by 7.9 percent, year-on-year. In India, market sentiment is picking up and raw materials are becoming easier to source. Consequently, the annual increase in steel production is likely to be higher this year than last. MEPS anticipates a marginal rise in steel output this year in Japan and South Korea.

Source: MEPS Steel News

### [New Indian steel policy to target 10pct growth](#)

BL reported that the new policy, likely to be finalized in about a couple of months, envisages 10% growth in output to meet the India's projected demand of 200 million tonnes by 2020. The Steel Secretary, Mr DRS Chaudhary, told Steel Summit 2012, organised by the Confederation of Indian Industry that it would replace the National Steel Policy 2005. He said "The new policy will focus on removing infrastructure bottlenecks, improving technology and will focus on achieving a 10% growth. That's the only way to grow. The more we expedite the new policy, the more beneficial it will be." Currently, the Indian steel sector is growing at a compounded growth of 5%.

Source: Steelguru

### [Global steel production fell gradually from May 2011 – Minister of Steel](#)

The Minister of Steel, Mr Beni Prasad Verma has said that the world crude steel production fell gradually from the month of May 2011 to touch the lowest level in November 2011. However, since then, production has been on a rising trend. Monthly output of crude steel (Global) of the last six months is indicated below:

(In million tonnes)					
Oct11	Nov11	Dec11	Jan12	Feb12	Mar12
123.533	115.368	117.058	123.649	120.892	132.198

In a written reply in the Lok Sabha he said, the government and various research agencies under it regularly monitor the developments in the world steel industry. The government does not intervene in the market as there are no restrictions on external trade in steel. However, as and when there is a need the government takes appropriate fiscal measures to mitigate any risk to the domestic industry. Mr Verma said that since steel is a deregulated sector, Ministry of Steel has no regulatory powers. Investments in the steel sector are decided on the commercial prudence of the investor and the prevailing market condition ie demand and supply condition. Therefore, any decision regarding capacity expansion is that of the steel investors. Ministry of Steel plays the role of facilitator and coordinator between the steel investors and the Central /State machinery. It intervenes in the process when issues are brought before it. The Minister said that an Inter-Ministerial Group has been constituted with the job of monitoring and coordinating on the issues concerning major steel investments. IMG has no statutory powers to issue administrative directives. The IMG has been set up under the Chairmanship of Secretary (Steel) with Members from Ministries of Mines, Coal, Environment & Forests, Railways, Road Transport & Highways and Shipping and Chief Secretaries of concerned State Governments.

Source: Steel Guru

### [Steel Summit 2012 held in New Delhi](#)

The Indian steel sector is well-placed to reach its production target of 200 million tonnes by the year 2020. This was made clear at the CII Steel Summit 2012 held in New Delhi on April 30, as private and public sector steel makers discussed their expansion plans. While the per capita consumption has grown from 31 kg in 2003 to 56 kg in 2011. It is still less than 30 per cent of global average, presenting significant potential for growth. Further the 12<sup>th</sup> Plan envisages an investment of \$1 trillion in infrastructure, which will boost the demand for steel. Panelists from the government and industry highlighted the unique and special role played by steel in any economy. For India to grow between eight and nine per cent, it was imperative

that the steel sector grew at 10 per cent. The growth rate for the last few years has been five to six per cent only, they said. Raw material security was a key concern across the board as the sector targets 200 million tonnes by the year 2020.

Source: Mail Today

### [SAIL RSP sets new standards in ERP implementation](#)

BL reported that Steel Authority of India Limited's Rourkela Steel Plant has set new standards in implementation and stabilization of Enterprise Resource Planning system. RSP sources said that "Implementing this in a complex industry like RSP is quite a daunting task, as it is about building a software program that integrates the entire operation of the steel plant right from production and finance to dispatch." In an organization with operations as RSP, it normally takes five to six months for stabilization. However, at RSP, the stabilization process that started from April 1, 2012 has been faster and smoother compared to others. Another significant achievement was that this was effected without any 'Black Out' period which is the norm. Sources said that while in many other organizations, production had to be throttled during the implementation and stabilization process because of teething troubles, the production at RSP had in no way suffered during this period. They said that this is proved by the fact that in April the steel plant has achieved its APP targets in three major areas production of hot metal, crude steel and saleable steel. After complete stabilization, the ERP system will integrate the financial information, standardize and speed up the manufacturing processes, integrate customer order information and reduce inventory.

Source: Steel Guru

### [Ratan Tata's Vision 2020: A \\$500-bn global empire](#)

Eight months before handing over the reins of the Tata Group empire to his successor, Ratan Tata has detailed a vision under which the group's turnover will hit \$500 billion (Rs 25 lakh crore) by 2020-21. That's a fivefold increase over the expected turnover of \$100 billion (Rs 5 lakh crore) in the financial year 2011-12. Tata unveiled his vision in an annual group management meet held a few weeks ago in Mumbai's Taj Mahal hotel and attended by about 500 top executives of various group companies. The meeting was also webcast to other senior employees across the country and abroad. Tata's speech was followed by a question and answer session. The group chairman, who would step down in December this year, was accompanied in the meeting by Cyrus Mistry, who would take over the baton of the diversified group. Tata told his top executives that despite scepticism, his push to internationalise the group through acquisitions had been a key factor in its growth. Without those acquisitions, the group would have reached a turnover of only \$65 billion, he said.

Tata's vision for the future assumes an annual compounded annual growth rate (CAGR) of over 20 per cent for the next nine years. This is in line with the growth he has achieved in his 20-year tenure as chairman. The group registered a 22 per cent CAGR between FY 1992 and FY 2011, the tenure in which he was chairman. That is much faster than the nominal growth rate in agricultural GDP during the period. In 2010-11, the Tata group had a turnover of over \$83 billion (Rs 4.15 lakh crore). The scale of Tata's ambition is evident from the fact that in the 2011 Fortune 500 global list, the largest company was Walmart, with a turnover of \$421 billion (Rs 21.05 lakh crore). During his tenure, Tata registered a 21.84 per cent CAGR in profit after tax (PAT) and 23.52 per cent in market capitalisation. That, of course, comes down to 18 per cent if Tata Consultancy Services (listed in 2004) is excluded. Many analysts argue the group is still heavily dependent on the top three companies — TCS, Tata Steel and Tata Motors — which account for almost 72.43 per cent of sales and 83.57 per cent of PAT of the 31 listed companies in the group. While Tata's single biggest achievement has been his ambitious global acquisition strategy, many have also argued that it has led to burgeoning debt in the group. Between 1991 and 2003, the group made five purchases; in 2004, it rose to seven; in 2005, to 17; and between 2006 and 2010, there were 36 acquisitions. His big-bang takeovers started with Tata Tea's takeover of iconic UK brand Tetley, for \$450 million in 2000. In 2007, Tata Steel bought Corus, Europe's second largest steelmaker, for \$12.1 billion. Just a year later, Tata Motors paid \$2.3 billion for Jaguar Land Rover.

Source: Business Standard

### [A Report by IIT Kanpur on Materials Around Us](#)

It was the initiative of Mr. Pramanshu Trivedi and Mr. Alok Kumar which sensitized the organization of event "Materials Around Us" by various talks from members of *Indian Institute of Metals, Kanpur Chapter*. Event on Apr. 15, 2012, witnessed the welcoming of the guest speakers and *Prof. Shashank Shekhar, Advisor,*

Student Affiliate Chapter, IIM Kanpur, by the host institute, Saraswati Gyan Mandir. The first talk was presented by *Prof. Anish Upadyaya* providing the current scenario of materials around us. Display of design on cutting tools, defense and offense, and polymeric material by Prof. A. Upadyaya excited young students to appreciate the world of materials. This followed with presentations by *Mr. Pramanshu Trivedi* and *Mr. Alok Kumar* to provide a perspective of materials world. Then *Prof. Kantesh Balani* introduced the “*World of Nano Materials*” depicting the wonders occurring at length scales of nanometer. This talk followed with address by *Prof. Kallol Mondal*, where he mesmerized the audience with his talk on “*Transformations in Materials*” by providing simple examples of nature and relating it to the effort a student makes and the mark one gets. All in all, students had gathered around the speakers like bees on a beehive, and it was just a memorable experience for one and all.

Courtesy: Shri Pugazhenthay  
Executive Director, ILZDA

### **TATA Steel takes USD 160 million cover for liability risks of top brass**

In a landmark development in the Indian general insurance industry, TATA Steel has gone for a USD160 million (over INR 800 crore) consolidated global cover for its directors and officers liability risks, including its European operations. The D&O cover, being extended by Raheja QBE General Insurance and others, is designed for directors and officers in key decision making positions or who are handling large funds for the company. A top insurance industry source said that “The policy provides cover against any loss that the organization may incur on account of mistaken actions by a director or officer, or against loss arising from claims due to wrongful acts. The primary cover also includes liability insurance policies for Tata Steel’s European operations and Corus.” After it was acquired by TATA Steel Corus used to receive its primary cover from the London market. The D&O cover premium depends on the degree of exposure of a company to the US and Europe (since they are most prone to engage in lawsuits), the monetary cover limit requested, type of organization, balance sheet details and capital. The director’s past and present details, his experience are also taken into account. The Satyam scam has led to an increase in demand for the director’s and officer’s liability insurance or D&O cover. From only a handful of companies earlier, more companies in India have started opting for this cover.

In a keen contest where all the leading general insurers including TATA Group’s own general insurance company TATA AIG General Insurance participated in the bidding process to provide D&O cover to TATA Steel, Raheja QBE General Insurance was selected as the primary insurer with HDFC Chubb and Iffco Tokyo getting smaller shares in the deal. The cover is valid from April 1st 2012, to March 30th 2013. The D&O liability insurance forms a core component of corporate insurance portfolio of major companies in the US and Europe. In fact, 95 per cent of Fortune 500 companies maintain such covers. Indian firms are beginning to take interest in D&O cover. Going forward, experts feel that there is an immense opportunity in the D&O segment. With underlying risk exposure in India and abroad on the rise, companies and even independent directors are becoming aware of insuring themselves against such eventualities. Given the less litigious environment in India, the proportion of D&O policies has not been very significant. However, the situation is changing. Even employees who were once silent about workplace harassment and discrimination are now taking action against their employers. Plant closings, layoffs and M&As have become routine events, providing a fertile ground for big claims.

Source: Steel Guru

#### ***REQUEST***

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***MR. BHIM SAIN***

***Executive Officer***

***The Indian Institute of Metals-Delhi Chapter***

***E-mail: [iim.delhi@gmail.com](mailto:iim.delhi@gmail.com)***

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