My Dear Colleagues,

I convey my heartiest greetings and best wishes to all of you on my assuming the charge of Chairman cum Managing Director of HCL.

Recently, we have weathered a very difficult time due to adverse market conditions and I complement all of you in this endeavor. However, we should not be complacent and continue our efforts to make HCL vibrant in the event of still low LME prices scenario. In this regards, we have to make relentless efforts to improve productivity in all the spheres and remain cost competitive.

Hindustan Copper always welcomes new ideas and I encourage my fellow employees to come forward to actively give suggestions and ideas for enhancing the productivity with cost reduction and quality in mind.

On this, I would like to share a thought that while some of the suggestions may be seemingly obvious, but they often get bypassed in the humdrum of everyday office life. Besides, some of them may also be part of the ongoing strategic initiatives which need emphasis.

I strongly feel that we need to capture the good ideas generated and implement these ideas irrespective of the units and discipline. This will also inject a spirit of common purpose among them all and help them become more engaged and conscientious for the overall benefit of HCL.

I would lay emphasis to convert the Targets set out in our Business plan into the reality in a time bound manner. In coming years, we need to accomplish the ongoing mine expansion projects in a rapid manner. Re-opening of Rakha and Kendadih the closed Mines of ICC will be fast tracked. Ramp up of capacity of GCP Unit has to be achieved in this fiscal year.

Besides improving the techno-economic parameters of our process, we should also tap the potential of recovering the other minerals as by-products during the process of recovering copper. Copper ore tail processing plants similar to one undertaken at MCP will be commissioned at KCC and ICC very soon.

I urge HCL collective to set the goal and extend full cooperation to achieve “NavRatna” Status to our Company within next two years. Looking forward for a meaningful interaction with all of you in comings days.

With Best Wishes,

Santosh Sharma
Chairman cum Managing Director
Dear friends,

It is as if only the other day that I walked into HCL. Yet, ten years later, when it was time for me to lay down office, it felt as though I have known you all my life.

I joined HCL after having served Bharat Refractories Limited (BRL) for 24 years.

I am fortunate that I met you all and will always take pride in our Copper family. I am happy that I had the opportunity to work with copper, which as we all know is timeless and eternal, and whose values have become an integral part of human society since the dawn of civilization.

Together we had started many a mission. Together we had set many a ball rolling. But there is lot more to be done.

Together all of you can make this happen, for, if the destination is known, one just has to take the right path and then it is only a question of spanning the distance in due course of time.

Brief stints of downturns, however, such as the ones we faced in the recent past, should not dampen spirits. Such phases come and go. In fact they are the wake up calls which help us emerge stronger and with greater resolution.

HCL has become a part of me, and will continue to remain so, for all times to come. I shall look forward to HCL scaling new heights, and will always bask in your success and glory.

Copper is here to stay for ever. And Hindustan Copper is there to shine for good.

My best wishes to you all and to your families.

Kailash Dhar Diwan
Ex-Chairman cum Managing Director
CORPORATE NEWS

Shri Arun Kumar, a 1983 batch Assam cadre IAS officer, has been appointed as the new Secretary of the Ministry of Mines from March 1, 2017.

Prior to this, Shri Kumar was a Special Secretary in the Ministry of Social Justice and Empowerment. Shri Arun Kumar is from Uttar Pradesh and did engineering before he was selected as an IAS and allotted the Assam cadre.

In Assam, he served as Deputy Commissioner in Cachar district, Commissioner of Jorhat and as the Secretary to the Assam Governor.

At the Centre, Shri Kumar served as Export Commissioner in the Directorate General of Foreign Trade (DGFT), Joint Secretary in food processing industries, and CVO in Rural Electrification Corporation (REC).

Apart from English and Hindi, Shri Kumar knows Assamese and Bengali as well. He undertook short training at Rural Energy Planning and Technology at The Energy and Resources Institute (TERI), New Delhi, MIS and computer application at National Informatics Centre, New Delhi, and Agriculture and Rural Development at the Institute of Rural Management, Anand (Gujarat).

Minister of Mines Shri Narendra Singh Tomar Takes Over Charge of Mining Sector

Shri Narendra Singh Tomar, the Minister of Rural Development, Panchayati Raj and Mines, assumed charge of Ministry of Mines on September 04, 2017.

Shri Tomar had held the Mines portfolio in his earlier stint as Mines Minister from May 2014 to July 2016.

Born on 12 June 1957, Shri Tomar started his career in politics as a student in 1980. He was elected to Madhya Pradesh Assembly twice between 1998 and 2008 and served as a Cabinet Minister in the state government between 2003 and 2007. In 2006, he was made the president of Madhya Pradesh Bharatiya Janata Party (BJP). In 2014, he was elected member of Sixteenth Lok Sabha from Gwalior (Lok Sabha constituency).

New Minister of State in Ministry of Mines

Shri Haribhai Parthibhai Chaudhary assumed the charge as Minister of State in the Ministry of Mines in New Delhi on September 04, 2017.

Shri Chaudhary was Minister of State in Ministry of Micro, Small and Medium Enterprises (MSME) earlier and he has served as Minister of State in Ministry of Home Affairs.

Shri Chaudhary represents the Banaskantha constituency of Gujarat and is a four-time member of the Lok Sabha from Bharatiya Janata Party.

New Mines Secretary takes over

Shri Arun Kumar, a 1983 batch Assam cadre IAS officer, has been appointed as the new Secretary of the Ministry of Mines from March 1, 2017.

Prior to this, Shri Kumar was a Special Secretary in the Ministry of Social Justice and Empowerment. Shri Arun Kumar is from Uttar Pradesh and did engineering before he was selected as an IAS and allotted the Assam cadre.

In Assam, he served as Deputy Commissioner in Cachar district, Commissioner of Jorhat and as the Secretary to the Assam Governor.

At the Centre, Shri Kumar served as Export Commissioner in the Directorate General of Foreign Trade (DGFT), Joint Secretary in food processing industries, and CVO in Rural Electrification Corporation (REC).

Shri Kumar was attached to the Ministry of Mines as Joint Secretary from 09.01.2012 to 04.08.2015 before moving on to the Ministry of Social Justice and Empowerment.

Apart from English and Hindi, Shri Kumar knows Assamese and Bengali as well. He undertook short training at Rural Energy Planning and Technology at The Energy and Resources Institute (TERI), New Delhi, MIS and computer application at National Informatics Centre, New Delhi, and Agriculture and Rural Development at the Institute of Rural Management, Anand (Gujarat).
**CORPORATE NEWS**

**Shri Santosh Sharma assumes charge of CMD, Hindustan Copper Limited**

Shri Santosh Sharma has taken over as the Chairman cum Managing Director (CMD), Hindustan Copper Ltd (HCL), with effect from 01.09.2017. Prior to his appointment as CMD, Shri Sharma was the Director (Operations) of HCL since 01.03.2016. Shri Sharma joined HCL as General Manager (Operations) on 26.04.2013 and, thereafter, he became the Executive Director (Operations).

Shri Sharma has been instrumental in operationalization of Jhagadia Copper Ltd., a closed Unit since 2009 at Gujarat, in a record time of nine months, and was also the in-charge of the Unit.

Shri Sharma is a 1982 batch Electrical Engineer from the National Institute of Technology, Raipur, and also possesses a Bachelor’s Degree in Law and MBA in Marketing. He is a member of Indian Institute of Metals and Indian Institute of Welding.

Before joining HCL, Shri Sharma had served SAIL in various capacities and disciplines. There he was conferred with Jawahar Award for outstanding performance. He had also spearheaded the execution and monitoring of a mega-project of construction of Blast Furnace-8 in Bhilai Steel Plant.

Shri Sharma is a thorough professional with a pragmatic view and intellectual capacity coupled with proven managerial experience.

**New part-time official Director joins**

Shri Niranjan Singh has been appointed part-time official Director on the Board of Hindustan Copper Limited from 15.03.2017.

Shri Niranjan K. Singh belongs to 1987 batch of Indian Forest Service (IFS) from Gujarat Cadre. He is currently working as Joint Secretary in the Ministry of Mines, Government of India, New Delhi.

Shri Singh served in various capacities in the Centre and State Governments. He has worked at the district level for conservation and management of forests, Watershed Management and social sector development. He had the opportunity to serve at the level of Director dealing with Environment and Forestry Sector in the Planning Commission, Government of India. He has also served at the Director level dealing with Integrated Watershed Development Programme (IWDP) in the Department of Land Resources, Ministry of Rural Development, Government of India. He served as Managing Director, Gujarat Agro Industries Corporation Limited, for the development of agri-infrastructure and food processing sector in the State.

Shri Singh is a B.Tech in Mining Engineering from Indian School of Mines, Dhanbad. He accomplished his Ph.D on the topic “Estimation of Gross Domestic Product of Forestry sector in the State of Gujarat”. He has participated in various short term courses at the National and International level.

Shri Singh has abundant experience of working in Government and Public Sector.
Chhattisgarh Copper Limited, a JV of HCL & CMD, inaugurated

Registered office of Chhattisgarh Copper Limited, a Joint Venture Company of Hindustan Copper Limited and Chhattisgarh Mineral Development Corporation, has been inaugurated by Dr. V. K. Saraswat, Hon’ble Member of NITI Aayog and Chancellor JNU, New Delhi, in the presence of Shri K.D.Diwan, the then CMD, HCL, and senior officers of Chhattisgarh Govt. on 28 July, 2017, at Bhilai, Sector-5.

The occasion was witnessed by senior officers of Hindustan Copper Ltd and CMD Ltd which includes S/Shri Santosh Sharma, CMD, HCL, S. K. Bhattacharya, Director (Mining), O. N. Tiwari, Executive Director, Malanjkhand Copper Project, etc.

Dr. V. K. Saraswat, Member of NITI Aayog and Chancellor JNU, New Delhi, inaugurating the registered office of Chhattisgarh Copper Limited in the presence of Shri K.D.Diwan, the then CMD, HCL, on 28 July, 2017 at Bhilai.

Hindusthan Copper CMD receives Life Time Achievement Award

The then CMD, HCL, Shri K.D. Diwan, has been conferred the Life Time Achievement Award on 07.07.2017 in International Conference on Non Ferrous Minerals & Metals Event, New Delhi. Shri Diwan expressed his gratitude and addressed the audience at the conference after felicitation.

Dr V. K. Saraswat, Member, NITI Aayog, visiting Malanjkhand Copper Project (MCP) of Hindustan Copper Limited on 28.07.2017 and reviewed the progress of the ongoing projects of the Unit.

In a lecture delivered in the presence of the then CMD, Shri K.D. Diwan, Shri Santosh Sharma, CMD, HCL, Shri S. K. Bhattacharya, Director (Mines), and other senior officers of HCL, he stressed on the role of innovation in driving sustainability and cost competitiveness.

Dr. Saraswat also spoke on the significance of the ‘Make in India’ initiative to the employees of the project.

Dr. V. K. Saraswat, Member, NITI Aayog, along with the then CMD, Shri K.D. Diwan, Shri Santosh Sharma, CMD, HCL, Shri S. K. Bhattacharya, Director (M), HCL, and other senior officers reviewing the progress of the ongoing projects at MCP on 28.07.2017
HCL signs MoU with MIDHANI

Hindustan Copper Limited (HCL) has signed a Memorandum of Understanding (MoU) with Mishra Dhatu Nigam Limited (MIDHANI), a CPSE under the Ministry of Defence, at HCL Corporate Office, Kolkata, on 22nd July 2017, for a joint collaboration in area of production of Copper-Nickel tubes and related items.

This will promote “Make in India” initiative and create significant business synergy for HCL and MIDHANI. The MoU was signed by the then CMD, Shri K.D. Diwan, and Dr D. K. Likhi, CMD, MIDHANI, in presence of senior officers of HCL and MIDHANI.

Hind Copper signs MoU for 2017-18

Hindustan Copper Limited (HCL) signed a Memorandum of Understanding (MoU) with the Ministry of Mines, Government of India, in New Delhi on 18.07.2017, outlining the business plan for the Financial Year 2017-18.

The MoU was signed between Shri Arun Kumar, Secretary, Ministry of Mines, and Shri K.D. Diwan, the then CMD, HCL, in the presence of other senior officials of the Ministry.

HCL inaugurates eco-friendly Kaldo Furnace at Gujarat Copper Project

The then CMD, HCL, Shri K.D. Diwan, inaugurated Kaldo Furnace of Gujarat Copper Project, Jhagadia, Bharuch, on 6th Aug ’17. This furnace has the capability to process variety of Copper bearing raw materials and also ‘e-waste’ in an environment-friendly manner.
Offer for Sale of equity shares of Hindustan Copper Limited

The Government offered to sell 3.70 crore equity shares in Hindustan Copper Limited at a floor price of Rs 64.75 apiece through a two-day offer-for-sale (OFS) beginning on 02.08.2017, with an option to issue a similar number of shares in case of over subscription.

The sale of 4 percent stake or over 3.70 crore shares at Rs 64.75 apiece amounts to about Rs 240 crore to the exchequer.

The Government then held 82.88 percent stake in Hindustan Copper Ltd (HCL).

The floor price of Rs 64.75 a unit was at an 8.35 percent discount over that day’s closing price of Rs 70.65 on the BSE.

The two-day OFS was open for institutional investors till the next day and retail investors got to bid on 03.08.2017 (Retail investor is defined as the one who place bids for shares not more than Rs 2 lakh.)

The Government already raised over Rs 8,428 crore through disinvestment in five companies, and one share buy back.

The Government budgeted to raise Rs 72,500 crore through stake sale in PSUs. This included Rs 46,500 crore from minority stake sale, Rs 15,000 crore from strategic disinvestment and Rs 11,000 crore from listing of insurance companies.

Shri Santosh Sharma, CMD, along with Shri S K Bhattacharya, Director (Mining), in conversation with Ms. Nina Vaskunlahti, Ambassador of Finland, at HCL Corporate Office on 12.09.2017.

Shri Santosh Sharma, CMD, HCL, and other senior officials of the Company in discussion with M/s Metal Scrap Trade Corporation team pertaining to e-Sale, e-Auction, e-Procurement and other relevant issues on 11.09.2017.
Ex-CMD's Sendoff

Shri K. D. Diwan, the then CMD, HCL superannuated from the services of the Company on 31st August, 2017 after 10 long years of association with the Hindustan Copper family, bringing about a new era of opportunities for the successors to the chair.

Shri K. D. Diwan, the then CMD, addressing the gathering on August 31, 2017

Shri Anupam Anand, Director (Personnel) handing over the Copper Plate to Shri Diwan on his superannuation at CO

At the Tamra Bhavan Conference Room on August 31, 2017

At the evening get-together in Kolkata on August 31, 2017

Shri Diwan being handed over a gorgeous card at the evening ceremony

After the evening get-together

Shri K. D. Diwan, the then CMD, addressing the gathering on August 31, 2017

At the Tamra Bhavan Conference Room on August 31, 2017

At the evening get-together in Kolkata on August 31, 2017

Shri Diwan being handed over a gorgeous card at the evening ceremony

After the evening get-together

Shri K. D. Diwan, the then CMD, being received at ICC and his address for the employees during the farewell function

Shri K. D. Diwan, the then CMD, and his wife Smt. Arti Diwan, being felicitated during the farewell function at ICC, Moubhandar

Shri K. D. Diwan, the then CMD, being received at ICC and his address for the employees during the farewell function

Shri K. D. Diwan, the then CMD, and his wife Smt. Arti Diwan, being felicitated during the farewell function at ICC, Moubhandar

Shri K. D. Diwan, the then CMD, being received at KCC for the farewell function, with senior executives and staff union sharing moments in retrospect of the years in service of Shri K. D. Diwan.

Shri K. D. Diwan, the then CMD, planting a sapling in course of the farewell function at KCC.

Shri K. D. Diwan, the then CMD, addressing employees during the farewell function at MCP
Hindustan Copper Centralized Induction Program for MT - 2017 batch

Hindustan Copper Limited organized the Central Induction Programme for the newly recruited 38 Management Trainees (MTs) in both Technical and Administration streams from 4th to 14th October, 2017 at Lake Land Country Club, Kolkata.

The programme was inaugurated by Shri Santosh Sharma, CMD, HCL, in the presence of Shri Anupam Anand, Director (Personnel), Shri S K Bhattacharya, Director (Mining) along with other senior officials on 04.10.2017.

The Functional addressed the 38 budding MTs and congratulated them for selecting Hindustan Copper Limited as their employer and welcomed them to the Copper Family.

While Shri Sharma urged the trainees not to be confined to their domain alone but to get exposed to other functions as well, Shri Anand encouraged the trainees to think, ask even silly questions to clarify doubts and to inculcate the habit if reading books. Shri Bhattacharya recalled his own training days and urged the trainees to be inquisitive and have the thirst for knowledge.

Eminent corporate trainer, Shri Asit Basu, also briefed about the programme and explained how the training module has been framed for one year.
This was further followed by an interactive session with all Functional Directors and Senior Officials wherein a general orientation was given to the MTs and a brief summary given to them on the road ahead at HCL, emanating from the extensive eleven days Induction Program.

The program schedule of Induction Programme is extensive and designed to provide the newcomers with a fair amount of learning about the organization, its systems and ethos along with theoretical and experiential learning in all the facets of functional management streams that would prepare them to effectively discharge their duties as managers.

A galaxy of facilitators have been identified for the programme both from HCL and from other organisations of repute considering their experience and knowledge in the respective professional field.
NJCC Meet

NJCC Meeting was held at Corporate Office on 20.09.2017 to discuss Production and Productivity.

S/Shri Santosh Sharma, CMD, HCL, Anupam Anand, Director (Personnel), S K Bhattacharya, Director (Mining), Unit Heads, Senior Officers and NJCC representatives from the recognized Union attended the meeting.

Performance Reward was one of the prominent issue discussed. In order to address the expectation of the non executives and to keep them motivated, the advance amount for Performance Reward for FY 2017-18 was decided in the meeting after protracted discussion with the Non Executives.

The CMD explained the financial position of the Company and emphasized the need for overall improvement and consistent performance in the remaining part of current financial year 2017-18 as the MoU targets are extremely challenging.

Suggestions from the Union representatives relating to improvement in production, productivity, equipment maintenance were also taken note of. Management assured the Trade Union members that issues like Underground Allowance, Post Retirement Medical Scheme and other welfare aspects are under consideration and shall be duly addressed.

Copper Ore Tailing (COT) Beneficiation Plant at MCP

Shri K.D. Diwan, the then CMD, HCL, laid the foundation stone for construction of COT Beneficiation Plant at MCP on 18.04.2017 to process 3.29 million tons of Copper ore tailings of Malanjkhand Copper Project per annum for its beneficiation to recover the heavy metals.

Shri Diwan was accompanied by Shri Santosh Sharma, the present CMD, Shri Anupam Anand, D(P), Shri S.K.Bhattacharya, D(M), Shri O.N.Tiwari, ED, MCP, other senior officers, departmental heads and office bearers of Trade Unions.

MCP processes every year around 2 million tons of Copper ore to obtain Copper concentrate. Out of 2 million tons of ore only around 80,000 tons mass is extracted as copper concentrate and the rest is transferred to the tailing dam as sand.

This tailing sand has been found to carry trace amount of various heavy metals, consisting of Silver, Gold, Copper, Magnetite, etc. Various avenues have been explored so far in order to tap revenue from this tailing. Finally a Chennai-based Company, M/s Star Trace Company, has been awarded the job on being successful in tendering process.

MCP COT 1 Shri K.D. Diwan, the then CMD, HCL, unveiling the foundation stone for construction of COT Beneficiation Plant at MCP along with Shri Santosh Sharma, the present CMD, Shri Anupam Anand, D(P), Shri S.K.Bhattacharya, D(M), Shri O.N.Tiwari, ED, MCP, other senior officers.

Discussion over layout of Plant
HCL dedicates Gujarat Copper Project to the Nation

The then CMD, Shri K.D. Diwan, interacting with Shri Vijaybhai R. Rupani, Hon'ble Chief Minister of Gujarat, and Shri Piyush Goyal, the then Hon'ble Union Minister of State with Independent Charge for Power, Coal, New & Renewable Energy and Mines, Government of India, during the inauguration programme.

Shri Vijaybhai. R. Rupani, Hon'ble Chief Minister of Gujarat, and Shri Piyush Goyal, the then Hon'ble Union Minister of State with Independent Charge for Power, Coal, New & Renewable Energy and Mines, Government of India, dedicated to the Nation the fifth Unit of Hindustan Copper Limited, in a grand ceremony on 6th October 2016.

Addressing the large gathering, Shri Rupani complimented the CMD HCL and his team for taking initiatives to reopen the closed plant. This will generate local employment and thus strengthen the economy.

Jhagadia Copper Limited was taken over by Hindustan Copper Ltd. in January 2015 and was rechristened as Gujarat Copper Project (GCP), the fifth Unit of HCL.

Shri Goyal, while complimenting the Company for the revival of the sick unit, stated that there is very few precedence of such acquisition by a Public Sector Enterprise. This will be an essential milestone of growth for the Company.

In his welcome speech, the then CMD, Shri K.D. Diwan, expressed his gratitude to Shri Vijaybhai R. Rupani and Shri Piyush Goyal for gracing the occasion.

Shri Diwan informed that restarting of Jhagadia Copper Plant, besides enhancing production capacity of HCL, will also give boost to recycling of Copper including processing of e-scrap in an environment-friendly manner in the Country.

S/Shri Anupam Anand, Director (Personnel), V.V. Venugopal Rao, the then Director (Finance), S K
Shri Balvinder Kumar, the then Secretary, Ministry of Mines, inaugurated the Nickel, Copper and Acid Recovery Plant of Hindustan Copper Limited in Indian Copper Complex, Ghatsila, Jharkhand, on 10.08.2016. This is the first facility in India to produce Nickel metal of LME grade from primary resource.

Shri Kumar was welcomed by the then CMD, Shri K.D. Diwan, Shri Anupam Anand, Director (Personnel), Shri V V Venugopal Rao, the then Director (Finance), Shri S K. Bhattacharya, Director (Mining), Shri Santosh Sharma CMD, HCL, Shri D.K.Choudhury, the then GM, ICC, and Shri Sanjay Kr. Singh, DGM, ICC.

Jhagadia Copper Limited (JCL) was taken over through an auction in January 2015 which was jointly carried out by the Official Liquidator (OL) of Gujarat and Asset Reconstruction Company (India) Ltd., Mumbai, under SARFAESI Act 2002. The above sale was confirmed by the High Court of Gujarat vide order dated 27.01.2015. The total Investment in the project is around Rs 300 crore.

Financial Results for the fiscal year 2016-17

The audited financial result of HCL for the financial year 2016-17 was approved by its Board of Directors in the meeting held in New Delhi on 17.05.2017. During the year the financial performance of the Company has improved substantially even in the face of adverse market conditions. Celebrating its golden jubilee year, the Company has registered 63% increase in Profit After Tax (PAT) from Rs 37.97 crore in the FY 2015-16 to Rs 62.17 crore in the FY 2016-17.

Profit Before Tax in fiscal 2016-17 was Rs 94.55 crore against Rs 39.96 crore in 2015-16. The Copper sales volume in FY 16-17 has increased by 20% to 28,888 tonnes compared to 24,112 tonnes in the previous fiscal, while turnover registered a growth of 14% to Rs 1216.94 crore from Rs 1068.95 crore in the previous year.

Considering the capex requirement in coming years, the Board declared dividend to its shareholders at the rate 30% of the Profit After Tax from continuing and discontinuing operation.

During the year, the Company expects significant progress in mine development activity with MDO for Banwas mine at Khetri been appointed. Also, Environment and Forest clearances have been obtained for its Kendadih and Rakha mine re-opening projects located at Ghatstla, Jharkhand. The Company’s mine expansion projects of Malanjkhand underground mine is progressing well.

HCL inaugurates Nickel plant at Ghatstila

Shri Balvinder Kumar, the then Secretary, Ministry of Mines, inaugurated the Nickel, Copper and Acid Recovery Plant of Hindustan Copper Limited in Indian Copper Complex, Ghatstila, Jharkhand, on 10.08.2016. This is the first facility in India to produce Nickel metal of LME grade from primary resource.

The Singhbhum Copper Belt has unique ore characteristics which contains appreciable quantity of Nickel. HCL has installed and commissioned the technology to recover the Nickel metal.

This project will utilize an eco-friendly technology and will check pollution, eliminate the use of Lead, reduce liquid effluent, generate 75% less solid waste, utilize less energy, provide safe working environment and utilize and conserve natural resources.

At present, the capacity of the plant is 50 MT per annum, considering the current production rate from the Surda mines. The Nickel output is expected to increase by eight times after the completion of mine expansion projects located at Ghatstila. The annual demand for pure Nickel in India is around 45,000 MT and its market in the country is totally dependent on import.
Hindustan Copper wins Industry Leadership Award – Base Metals at the 2016 Platts Global Metals Award, London

The then CMD, Shri K. D. Diwan received the Industry Leadership Award – Base Metals on behalf of the Company at the 2016 Platts Global Metals Awards, held in London on May 19, 2016.

The award ceremony was hosted by S&P Global Platts, a leading global energy, metals and commodities information provider. The annual awards programme honours exemplary performance in fifteen categories spanning the entire steel, metals and mining fraternity.

“With each year, entries for the awards programme become more competitive and winning is no small feat,” said Imogen Dillon Hatcher, President of S&P Global Platts. “We congratulate Hindustan Copper Limited for its impressive win in the 2016 Platts Global Metals Awards.”

Metals and Steel industry executives from around the globe attended the 2016 black-tie awards ceremony at the Marriott Grosvenor Square in central London. Winners in fifteen performance categories received honours on stage, having been selected by an independent panel of judges.

Joint Venture agreement signed between HCL and CMDC

HCL has signed a Joint Venture Agreement with Chhattisgarh Mineral Development Corp. Ltd., a PSE of State Government of Chhattisgarh, on 30.08.2016.

The JV agreement was signed by Shri K.D.Diwan, the then Chairman cum Managing Director, on behalf of Hindustan Copper Ltd., and Ms. Reena Kangale, IAS, Managing Director, of behalf of CMDC Ltd. In the JV Company, Equity shareholding of HCL is 74% and CMDC is 26%. The Joint Venture Company formed will undertake Exploration and Mining of Copper ore in Chhattisgarh State.

Shri Shiv Ratan Sharma, Chairman, CMDC Ltd. and Shri Subodh Singh, IAS, Secretary Mining and Mineral Resource spoke during the signing ceremony.

The signing of Joint Venture Agreement was witnessed by senior executives of Hindustan Copper and CMDC Ltd that included Shri S.K.Bhattacharya, Director (Mining) and Shri O.N.Tiwari, Executive Director, Malanjkhand Copper Project.

HCL’s 50 years of expertise in the field of exploration and production of Copper ore together with refining, smelting, and production of Copper Cathode and other saleable products and the infrastructure and expertise of CMDC in commerce & marketing of mineral resources can give great result in the area of exploration of Copper in the state by working jointly. This will also strengthen the raw material security for the nation; an important responsibility entrusted to HCL by the Government of India.

Also, CMDC Ltd is engaged in mining of major minerals since inception of the State. With this initiative, HCL will extend its operations footprint in the State of Chhattisgarh as well.
HCL wins Golden Peacock Award 2016 for CSR

Hindustan Copper Limited has won the “Golden Peacock Award 2016 for Corporate Social Responsibility.”
On behalf of the Company, Shri Santosh Sharma, CMD, HCL, along with Shri Kamlesh Soni, the then DGM (HR) and Shri R.S. Sajwan, AGM (HR), received the trophy and the citation from His Holiness Sri Sri Ravi Shankar, Founder, The Art of Living, during the ‘11th International Conference on Corporate Social Responsibility’ on 20th January 2017 at Hotel Lalit Ashok, Bengaluru.

NJCC Meeting and 7th All India Wage Settlement

The tenure of the 6th Wage Settlement expired on 31.10.2012. The recognised Trade Unions operating at KCC, ICC, MCP, TCP and CO affiliated to AITUC, BMS, INTUC and INTTUC had jointly submitted a Charter of Demands dated 16.07.2013 for the 7th wage settlement for revision of pay scales and allowances of workmen to be effective from 01.11.2012.

Several rounds of negotiations were held at the bipartite level in National Joint Committee for Copper (NJCC) meetings held during July-September 2014. Memorandum of Understanding was reached between the Management and Trade Unions on 31.07.2014 and 08.09.2014. Final round of negotiation was held in the NJCC meeting in New Delhi on 08.03.2016. Though consensus on most of the issues was reached but few issues still remained to be resolved. The Chief Labour Commissioner (Central), New Delhi intervened in the matter for amicable resolution of dispute leading to wage settlement on 09.03.2016 at New Delhi.

Management of Hindustan Copper Limited was represented by the then CMD, Shri K.D. Diwan, Shri Anupam Anand Dir (Personnel), Shri V V Venugopal Rao Dir (Finance), Shri S K Bhattacharya Dir (Mining), Shri Santosh Sharma, CMD, HCL, Shri Kamlesh Soni, the then DGM (HR) and Shri Vivek Tripathi DGM (Fin).

Workmen were represented by the representatives of Khetri Tamba Shramik Sangh (AITUC), ICC Workers Union (AITUC), Bharatiya Khanij Mazdoor Sangh (BMS), Engineering Workers Association (INTUC), and Hindustan Copper Head Office Staff Union (INTTUC)

During the course of conciliation, the Memorandum of Settlement was signed between the Management and the Recognised Unions before Shri Anil Kumar Nayak, Chief Labour Commissioner (Central) New Delhi. Shri Rajan Verma, Dy. CLC (C) was also present.
Annual General Meeting 2017

The 50th Annual General Meeting (AGM) of Hindustan Copper Limited was held on Wednesday, 22nd August 2017, at its Corporate Office at Kolkata. Shri Kailash Dhar Diwan, the then Chairman-cum-Managing Director (CMD), chaired the meeting. Shri Hemant Mehtani, Independent Director and Chairman Audit Committee, Shri Santosh Sharma, the present CMD, Shri Anupam Anand, Director (Personnel), Shri S. K. Bhattacharya, Director (Mining) attended the meeting.

The shareholders approved the Annual Report for the year 2016-17, including the annual and consolidated financial statements of the year. The shareholders also approved the payment of dividend at the rate 4% on equity, i.e. Re 0.20 per share of Rs. 5/- face value for the year 2016-17 at the AGM. The outgo on this account will be Rs. 18.50 crore for dividend and Rs. 3.77 crore towards tax on dividend, aggregating to a total outgo of Rs. 22.27 crore.

In his address, Shri Diwan highlighted the progress of the Company since its inception in November 1967 and highlighted the impressive landmarks achieved in its 50 years of its operations. Shri Diwan underlined that during the fiscal year 2016-17, despite difficult situation and volatile market scenario, HCL has posted reasonably good results as compared to other integrated Companies in metal sector.

Overall sales volume during the year 2016-17 was 28,888 tonnes as against 24,112 tonnes during the previous year, thereby registering a growth of 20%. The Company has registered 63% increase in Profit After Tax (PAT) this year to Rs 62.17 crore from Rs 37.97 crore in the FY 2015-16. Profit Before Tax (PBT) during the fiscal year 2016-17 was Rs 94.55 crore as against Rs 39.96 crore in 2015-16. Sales turnover registered a growth of 14% to Rs 1216.94 crore from Rs 1068.95 crore in the previous year. Sh. Diwan also mentioned that the Company is emphasising on initiatives to reduce their cost of production and internal improvement programme to generate additional revenue.

CMD addresses the ICDC Golden Jubilee celebration

The then CMD, Shri K.D. Diwan addressing the gathering on the occasion of Golden Jubilee of Indian Copper Development Centre on 15.12.2016

HCL Observes Constitution Day

Constitution Day was observed at the Corporate Office, Units and the Regional Sales Offices of Hindustan Copper Limited on 26.11.2016.

In order to promote awareness and values among the employees, various events were arranged.

Besides, reading out the ‘Preamble’ to the Constitution, lecture sessions were organized to increase awareness and understanding of the Constitution of India both in its development and its contents. Essay Competition was also organized among the employees and relevant banners were displayed at strategic locations.
HCL receives CSR Leadership Award

Hindustan Copper Limited received the ABP News CSR Leadership Award for Best Use of CSR Practices in an event organized at Taj Lands End, Mumbai, on 17.02.2017.

HCL conferred Best Employer Brands Award

Hindustan Copper Limited has been conferred BEST EMPLOYER BRANDS AWARD (Regional Round – Hyderabad). The Event is a celebration of best talent in Human Resources Development and recognizes organizations that have achieved Excellence in Building the Employer Brand as an Employer of Choice. The Employer Brands have a distinct identity that is visible through the HR practices, polices and strategies.

The BEST EMPLOYER BRANDS AWARD is hosted by Employer Branding Institute & World HRD Congress with a CHRO Asia as a Strategic Partner and endorsed by the Asian Confederation of Businesses.

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HCL celebrates International Women's Day

To mark International Women's Day and celebrate achievement of Women across the Globe, Hindustan Copper Limited (HCL) , Corporate Office, organized special lecture by inviting external faculties on 08.03.2017.

Ms. Sujata Sen, CEO, Future Hope India, Kolkata and Ms. Smita Mukherjee, Senior Teacher at Pratt Memorial School and Volunteer for Swadhina, which is an Organisation for Women and Children, were invited on the occasion.

Speaking during the programme, Shri Anupam Anand, Director (Personnel), HCL said “HCL is an equal opportunity employer and does no discrimination among employees based on colour, caste, creed, religion, race and gender. Further he said that HCL follows the directives of GoI during recruitment’.

Ms. Sujata Sen who also happens to be the former Director of British Council, while addressing the audience, recollected the events that had happened in her life relating to her mother and on the occasion of Women’s Day took the opportunity to thank her for being the greatest mother.

In addition, Ms. Smita Mukerjee with her rich experience being a volunteer of Swadhina shed light on “Women Entrepreneurship in Rural areas “. Her suggestions will enable HCL to garner perspective on our CSR and Sustainability initiatives.

This programme provided the unique opportunity for HCL executives to interact with the guests and have deliberations across the table.
Ex-CMD visits GCP

Shri K.D. Diwan, the then CMD, HCL, along with Shri Santosh Sharma, CMD, HCL, visited Gujarat Copper Project on 18.02.2017. Shri Diwan reviewed the progress of the Kaldo furnace refurbishment and the ongoing operations.

Banwas Mine inaugurated

The then CMD, Shri K. D. Diwan inaugurated Banwas Mine in Rajasthan on 31.05.2017. The capacity of Banwas Mine is 0.6 Million Tonnes per annum. An amount of Rs 90 crore has been spent on development of Banwas. The mine production is expected to start this fiscal.

MOU with Momentum Jharkhand

The then CMD, Shri K.D. Diwan signed an MoU with the State Government of Jharkhand for investment in the State on the sidelines of Momentum Jharkhand on 21.02.2017.
MTA Seminar in MCP

A national seminar on “Strategies Fostering Systematic and Sustainable Growth in Non-ferrous Mineral Industry” was organized under the aegis of Malanjkhand Technical Association, a professional body of Malanjkhand Copper Project here on 18.12.2016.

The seminar was inaugurated by Shri K.D. Diwan, the then CMD, HCL. The inaugural session started with the lighting of ceremonial lamp by the Chief Guest Shri Diwan, and other dignitaries who were present.

Shri Diwan also released a souvenir published on this occasion. Shri Sree Kumar, DGM (Mines) and Secretary of MTA, welcomed the guests and delegates and presented the Activity- Report on activities of MTA. Shri Adwait Kumar, Joint Secretary of MTA, proposed the vote of thanks at the end of inaugural session.

Shri Diwan in his inaugural speech reminded the gathering that 2017 was the Golden Jubilee Year of Hindustan Copper Limited and threw light on the journey of the Company and discussed its current state of affairs.

Shri Diwan expressed his hopes but at the same time he also informed the gathering about the global concerns for environment vis-a-vis the Company’s resolution to comply with all the regulatory regimes instituted to ensure protection of mother earth.

Shri Diwan emphasized that the Company was bound to follow all the rules and regulations while moving ahead for developmental projects as well as in the day-to-day business of mining.

This is essential for making strong foundation of progress of human society. In this connection Shri Diwan gave details of all those measures and upgraded technology that are recommended by the global fraternity of environmentalists, scientists and regulatory agencies.

In respect of Malanjkhand Copper Project Shri Diwan informed about the concerted effort to acquire appropriate technology for extraction of precious metals present in very small quantities in the solid wastes generated during the course of mining and beneficiation process of Copper ore.

Beside this, the Company will construct a new matching Concentrator Plant for 5 million ton per annum ore production through underground mining in 2-3 years. The Plant will have a new technology compatible to extract Copper from lean grade Copper ore.

The estimated cost of project will be around Rs. 500 crores. Shri Diwan appreciated the endeavor of MTA and congratulated Project Head Shri O.N. Tiwari and his team for organizing the National Seminar every year.

Shri S.K.Bhattacharya, Director (Mining), taking note of the topic of the seminar, established that the opening of Malanjkhand Copper Project itself is an example of sustainable growth.

He informed that Company owned a total of around 411 million tonnes of Copper ores in reserves distributed around the country and with this a big turnaround could be brought about in days to come by employing judicious mix of strategies and technologies. However, the Company has to be sensitive and respectful about the sentiments of the local population.
He expressed his hope that the current trend of improvement in the Copper price will continue and now it is our responsibility to devote all our skills, strength and talents to achieve the production and productivity goals set for the year.

Shri O.N.Tiwari, Executive Director of MCP and Chairman-Malanjkhand Technical Association presented the keynote address

As a special invitee, Shri M.K.Deshmukh, Independent External Monitor of HCL and former Director (Engineering) of MECON Ltd., presented several citations from the Vedas. Shri Deshmukh adjudged Malanjkhand Copper Project as one of the superb mining Units of country which otherwise was not possible had not the project authorities practiced the norms of ‘Systematic and sustainable growth’.

At the outset, the children of DAV-HCL Public School Malanjkhand presented the beautiful welcome song which was followed by prayer to the Almighty. The daylong seminar ended with a spectacular cultural programme presented by eminent artist and Padmashri Anuj Sharma and his troupe in the evening.

Dr. Smt. Arti Diwan, the better half of the then CMD, Shri K.D. Diwan Smt. Deshmukh, Smt. Nirmala Tiwari, President, Malanjkhand Ladies Club, S/Shri Naresh Kumar, GM (HRD, CSR, Town Administration), Umesh Kumar, DGM (Metallurgy) and Unit Head, TCP and Dr. V.K.Shukla, DGM(M&HS) also graced the occasion.

The seminar was co-sponsored by M/S IVRCL, M/s Chine Coal No-3 Mining India Pvt. Ltd., M/s Teknomin Construction Ltd., M/s DCS Ltd., M/s R K Transport and M/S Suryakiran Sales Corp.

The delegates arrived from different universities, research institutions and industrial groups. The seminar was conducted in three technical sessions and seven technical papers were presented.


Addressing the valedictory session, Shri S.K. Bhattacharya, Director (Mining), opined that this kind of seminars not only help to sort out the solutions of technical problems but also provide a great interactive forum to various industry stakeholders.

At the end of this twelfth seminar arranged by this professional body, Shri Adwait Kumar Saxena, AGM(M&C) proposed the vote of thanks.

Shri S. K. Bhattacharya, Director (Mining), HCL, was conferred with Dr J. Coggin Brown Memorial (Gold) Medal for Non-Coal Mining for 2015-16 on 20.09.2016 by The Mining, Geological & Metallurgical Institute of India.
Shri K.D. Diwan, the then CMD, Hindustan Copper Limited was on official visit to MCP recently. During his stay at MCP, Shri Diwan inaugurated the National Seminar organised by the Malanjkhand Technical Association of MCP on 18.12.2016.

On 19.12.2016, he inaugurated a Solid Waste Disposal Unit installed for the MCP township and a newly commissioned set of Weigh Feeders at the Concentrator plant.

The capacity of the shredder machine is to process 1 to 1.5 MT solid waste per day. The cost of installation up to final commissioning would be around 15.5 lakh rupees.

It is the Prime Minister’s vision for Clean India, which prompted Shri, Diwan, the then CMD, HCL, to issue directives for having a system to handle solid wastes at MCP. In other words this endeavor can be called as a small initiative in the line of Prime Minister’s call for “Swatchh Bharat Mission”.

Similarly a newly procured set of Weigh Feeders was also inaugurated by the then CMD, Shri K.D. Diwan, at the Concentrator Plant. The weigh feeders have been installed at all the 4 Ball Mills to record the quantity of ore fed there for milling.

The solid waste on passing through the machine after necessary segregation, containing mainly biodegradable discarded materials will be cut down into very small pieces. The shredded solid waste then can be dumped in a pit allowing them to decay by natural biodegradation process, and ultimately transform into manure for crops.

So the desired value can be exploited from the machine, if the township solid waste is subjected to systematic segregation of metal, glass, polythene and finally paper, cloth and other biodegradables prior to charging the waste into the machine.
MCP observed Industrial Safety Day

Industrial Safety Day was observed on 03.12.2016 at MCP in the memory of the victims of the Bhopal Gas Tragedy that took place in 1984. Shri Sree Kumar, DGM (Mines) in his inaugural speech said that Bhopal Gas Tragedy reveals that an industrial operation can potentially cause genocide. He informed that MCP has done substantial amount of work to suppress dust and noise emissions in the plant. He hailed the Concentrator Plant Team for achieving the target of Zero Accident in their area in the preceding years. In order to ensure safety in working areas one must follow the dictum issued by DGMS, i.e. “Suraksha Meri Jimmewari hai”, Shri Sree Kumar emphasised.

This theme has equal importance irrespective of the nature of work, whether it is mining or something different. He also assured the employees that management is taking all the necessary steps to save them from any occupational hazards.

Shri S.R. Gour, AGM (Conc.) citing the significance of the Day, welcomed the guests. A wide publicity campaign was launched to inculcate the safety consciousness among the employees on this day.

Shri G.N. Rajawat, GS of BKMS (a recognized union) also expressed his views on the occasion on behalf of his Union.

At the outset an oath was administered to employees. The programme was concluded with the vote of thanks proposed by Shri Ajay Giri, AGM (Conc.). The proceeding of the function was conducted by Shri S.S.Kushwaha, Manager (Instrumentation) and Shri Ranvijay Singh, Dy.Mgr.(Conc.). The programme was followed by inspection of Plant area by the members of the Plant Safety Committee.

Prize Distribution Function of Annual Mines Safety Week & other Events at MCP

MCP held a prize distribution ceremony on 15.01.2017. Winners of different competitions organised under the Annual Mines Safety week, Mines Environment and Mineral Conservation week, National Safety Day, Fire Safety week, Productivity and Oil Conservation Week were distributed attractive prizes and felicitated with certificates.
Shri O.N. Tiwari, ED, MCP, giving away the shields to the winners at the Prize Distribution Function of Annual Mines Safety Week

Addressing the large gathering of senior executives, employees, ladies and children at the community center, the chief guest Shri O.N.Tiwari, ED, MCP, congratulated the winners.

Making this occasion a special platform to share his thoughts with the employees, Shri O.N.Tiwari, ED, MCP and Unit Head, spoke on various aspects of the company’s affair.

First, he applauded the Mining team for maintaining the production level in spite of the number of constraints. He reminded the employees about their great patience, hard work and dedication that made the MCP the anchoring unit for the Company and, in turn, helped the Company successfully to come out of the blues in the past years.

And again the similar contribution and support is urgently required to face the challenges that have arisen out of the global economic slowdown, he said. He also briefed about the work done in the area of environment management.

The prizes of different competitions were given away by Shri Tiwari and other senior guests. At the very outset of programme Shri Sree Kumar, DGM (Mines) welcomed the guests.

Shri S.K. Dagliya, AGM (Mines) and Chief Safety Officer presented the annual report on the status of Mines Safety in the Project. Shri S.R.Gour, AGM (Conc.) proposed the votes of thanks.

The proceedings of the programme were conducted by Shri P.K.Pandey, Mgr. (Survey). Shri D.L.Mandle, senior office bearer of recognized union, BKMS also addressed on this occasion. Shri K.Hansda, AGM (Mines)-Operations also shared the dais.

Beside the presence of the senior executives, departmental heads, employees, workmens’ inspectors, office bearers of Officers’ Association, recognized Union and other Trade Unions, ladies and students were also present.

Dr. Smt. Arti Diwan, the better half of Shri K.D.Diwan, the then CMD, HCL, was on a goodwill visit to Malanjkhand Copper Project on 18.12.2016.

During her daylong stay she graced various programmes and events organized by Malanjkhand Technical Association, MCP, and Ladies Club Malanjkhand.

Ladies Club distributes sweaters to school children and fruits to indoor patients

In the series of charity and welfare activities run by Malanjkhand Ladies Club, sweaters were distributed to 75 school children of village Balgaon (Baiga Tola). Dr. Smt. Diwan accompanied by Mrs. Nirmala Tiwari, President, Malanjkhand Ladies Club, Smt. Deshmukh, better half of newly appointed Independent External Monitor to HCL, Shri M. K. Deshmukh, Smt. Usha Verma, Secretary, and other office bearers of Ladies club were present. A beautiful folk dance was presented by the dance group of village Balagaon. The group was later felicitated by Smt. Diwan with cash award as a token of appreciation.

Dr. Smt. Diwan accompanied with Smt. Nirmala Tiwari and office bearers of the Ladies Club also paid a visit to the MCP Hospital, where they distributed fruits to indoor patients.

On arrival to hospital, the chief of Medical & Health services, Dr. V. K. Shukla and his staff accorded warm welcome to Dr. Smt. Arti Diwan. They apprised the first lady of the progress of the various ongoing jobs of refurbishing in the MCP hospital.
Like previous years, the Annual Mines Safety Week in the metalliferous mining units under the jurisdiction of Nagpur Region I & II of Directorate General of Mines Safety has been observed from 21st November, 2016.

Shri O.N.Tiwari, Executive Director, inaugurated the Week at MCP. In his inaugural address, Shri Tiwari emphasised that safe and healthy workplace is the right of every employee.

However, the same employees are also expected to take responsibility of safety of their own while on duty. Training on different modules can help employees to observe safety rules and norms as a normal habit. In this line, United Nations too has recommended 17 Sustainable Goals for the mining industry, wherein safety aspect has given second top importance after meeting the basic needs of all stakeholders.

Shri Tiwari expressed his hope that the team constituted by employees, Workmen Inspectors, safety committee and Safety Dept. of MCP would again help to achieve the Zero Accident target by employing their long experience and determined efforts.

Safety is an inseparable component of any kind of production activity. He appealed for maximum participation in the various programmes to be organized under this week and wished for all success of this week.

The inaugural function was attended by members of the Inspection Team constituted by DGMS, viz. Shri S.D.Lokare, DGM (Elect.), MOIL, Shri Pravin Dave, AGM (Mines), MCP, Shri Vijay Patil, Dy. Chief Mgr. (Mech.), MOIL and Shri. Sanjiv Mohanty, Asstt. Mgr, ACC Ltd. Shri G. N. Rajawat, GS of recognized Union, BKMS, presented his views on the observance of Mines Safety Week.

At the outset, Chief Guest Shri Tiwari unfurled the safety flag. Shri Sreekumar , DGM (Mines) welcomed the guests. Shri Thakre, one of the Workmen’s Inspectors administered the safety oath.

The inaugural function was concluded with the Vote of thanks by Shri K. Hansdah, AGM (Mines). Shri B.K.Singh, Manager (Mines) and Safety Officer conducted the proceedings of the inaugural function and informed about the schedule of programmes and competitions to be held during the period of Safety week.

Beside the presence of departmental heads, employees, Workmen’s Inspectors, office bearers of Officer’s Association, BKMS, INTUC, and KKMS, also present were Shri Ashish Deb, DGM (Mech.), Dr. V. K.S hukla, DGM (M&HS) and senior officers of M/S IVRCL, an agency deployed for underground mine development work.
An essay writing competition on “Motivation Techniques to improve Work Performance” was conducted between Executives & Non-executives on 15.09.2016.

On 16.09.2016 a debate on “Usage of Smart phones- Boon or Bane” was conducted among all employees. On 17.09.2016, a Hindi Dictation was held among all employees. Winners of various competitions were felicitated by the Unit Head.

A view of the interactive session

CMD addresses Indian Foundry Convention

The then CMD, Shri K.D. Diwan, addressed the gathering on the Opportunities and Challenges of the Indian Copper scenario at the Indian Foundry Convention at Kolkata on 04.02.2017.

Auditorium for senior citizens under CSR

Shri Anupam Anand, D(P), HCL, inaugurated a ‘Sabhagar’, an auditorium, at the charitable old age home run by the Vihar Samaj Kalyan Sansthan in Village Kulgu, District Ranchi, on 10.03.2017 under HCL CSR. Vihar Samaj Kalyan Sansthan is an NGO founded by dedicated social workers catering to the needs of the senior citizens.

The Sabhagar will be of immense help to the old age home. Shri Anand also distributed pre-Holi gifts and clothes among the residents.
The 68th Republic Day was celebrated with zeal and patriotism at the Corporate Office and all the production Units.

Corporate Office
At the Corporate Office, the Tricolour was hoisted by Shri K.D. Diwan, the then CMD, HCL, in the presence of S/Shri Anupam Anand, D(P), V.V. Venugopal Rao, the then D(F), S.K. Bhattacharya, D(M), Santosh Sharma, CMD, HCL, and Rakesh Kumar, the then CVO, along with other executives and their family members.

The CMD also addressed the gathering. In his address, he informed that the Company has won the prestigious Golden Peacock Award 2016 for a successful journey in the field of CSR.

HCL has also been conferred with the Best Employer Brand Award by Employer Branding Institute & World HRD Congress in Hyderabad in December last year. Recognitions of such stature have given the efforts of the organisation its deserving place in the sun.

He also gave some production highlights. He also said that Gujarat Copper Project has already started its commercial production since October 2016. The plant has produced already more than 4000 tons of excellent quality Cathodes which is better than the LME specifications. The Kaldofurnace at GCP is also on the verge of being operational from May 2017 which will boost up the profitability of the Plant and thereafter, the GCP will operate in full capacity, he added.

MCP
At the very outset, the Tricolour was unfurled by Shri O.N. Tiwari, ED/MCP, followed by rendition of the National Anthem by students of DAV-HCL-Public School. Security personnel, Scouts & Guides and students of DAV-HCL-Public School, Kendriya Vidyalaya, Govt. H.S. School and Govt. Residential Model H.S. School, Malanjkhand, under the command of Shri Paramjeet Singh, saluted the flag with a warm and vibrant Guard of Honour. The students of DAV-HCL-Public School presented a bouquet of patriotic songs.
Like every year, President, Ladies Club, and her office bearers distributed sweets and fruits to indoor patients of the project hospital.

The Republic Day message of Shri K.D.Diwans, CMD, HCL, was read out by Shri Naresh Kumar, the then GM (HRD, CSR, Town Administration)/MCP, Officer on Special Duty.

On this occasion, offering rich tributes to martyrs of the Nation, the Chief Guest Shri O.N.Tiwari acknowledged the precious contribution of the martyrs in the making of an independent and modern India.

Highlighting the significance of the observance of 26th January every year as Republic Day, Shri Tiwari underlined the duties of every citizen of democratic India vis-a-vis citizens’ rights from the Indian Constitution.

Addressing the gathering, Shri Tiwari highlighted the efforts put in by the Project as a part of implementation of plans and programmes launched by the Prime Minister, which includes making 5 villages “Open Defecation Free” by constructing 253 toilets and “Installation of Shredder Machine” for Solid Waste Management under “Swachh Bharat” initiatives, Vocational Training to 40 youths for skill development by experts hired from “National Skill Development Corporation” under “Skill India” initiatives.

Shri Tiwari also highlighted the efforts of Company in the area of environment management. This includes a big initiative taken to recycle the effluent generated at Waste Dump and Tailing Pond for plant operations, which resulted a considerable saving of water of Banjar River Project and now more water is available for agriculture. Beside this, Hon’ble Supreme Court has given its order in favour of Hindustan Copper Ltd. in a long pending case of Electricity Duty charged at higher rate by MP Govt.

Shri Tiwari hailed the efforts of project to connect with local population in its different events and activities organized time to time. He praised the Ladies Club for its welfare activities and Trade unions and social fora for maintaining healthy industrial relations in the project.

The Republic Day Celebration at MCP is known for display of colorful tableau presented by various cultural organizations working in the project. The Day is also celebrated as concluding ceremony of Annual Sports, under which a day-long group of events and other athletic events are organized. The celebration is further spiced up with the several food stalls conducted by various associations where different regional dishes are served.

The athletic events were followed by felicitation of employees for their suggestions selected under the employees’ suggestion scheme named here as SRIJAN. A total of 43 employees of different departments were awarded with letter of appreciation and cash rewards by Chief Guest. Finally, the 68th Republic Day functions concluded with the Prize distribution to winners of Annual Sports and to participants of Tableau and that of Parade by Chief Guest, Shri Tiwari and Mrs. Nirmala Tiwari, President-Ladies Club.

Shri Naresh Kumar, the then GM (HRD, CSR, Town Administration) /MCP, Dr. V.K.Shukla, DGM(M&HS), S/ Shri Sree Kumar, DGM (Mines), S.S.Patil, Advisor(Conc.), M.R.Chaudhary, Working President, BKMS, A.K.Pandey, Working President-OA, Office bearers of other registered Trade Unions, Shri Mishra, Principal, DAV-HCL-Public School, etc. were present at the function. The programme was conducted by Shri P.K.Pandey, Manager (Survey).
ICC

Indian Copper Complex celebrated the 68th Republic Day with great enthusiasm and festivity on 26.01.2017. Shri D.K. Choudhury, the then GM and Unit Head, ICC, along with Dr. P.N. Mishra, DGM (M&HS), S/Shri Sanjay K. Singh, DGM (W), K.P. Biso, AGM (HR&A), B.N. Singdeo, President, ICCWU, O.P. Singh, GS, ICCWU, senior executives and others offered floral tributes at the “Shahid Sthhal” to the martyrs. Shri D.K. Choudhury, GM, ICC, as Chief Guest, hoisted the National Flag that was followed by rendition of the National Anthem by the students of the SNSVM School at the Tamra Pratibha Manch Ground. Thereafter, he inspected the Guard of Honour, students of St. Joseph’s Convent Schools, Mosaboni and Moubankar, St. Nandlal Smriti Vidya Mandir and Toddlers’ Roost Nursery School, Moubankar.

Shri O.P. Singh, GS, ICCWU, also delivered an address.

On the occasion, school children presented a spectacular cultural programme. Sports including competitions of students of Toddler’s Roost Nursery School and tug-of-war competition for women were organized. Shri Choudhary and his better half distributed prizes to the winners of various competitions organized on the occasion.

The Tricolour was also hoisted at Moubankar Works by Shri Sanjay Kr. Singh, DGM (W), ICC Workers’ Union Office by Shri O.P. Singh, GS/ICCWU and at Bari Maidan by Shri. B. N. Singdeo, President of ICCWU and at various registered Union Offices, Clubs etc.in the Township.

Smt. Papiya Dey Choudhary, the then President, accompanied by the members of the Ladies Club distributed fruits to the Indoor patient at the ICC Works Hospital.

KCC

The 68th Republic Day was celebrated at KCC on 26.01.2017. Shri Amit Kumar Sen, the then ED, KCC, hoisted the National Flag and inspected the Guard of Honour. Shri Sen, addressed the Republic Day message of Shri K.D. Diwan, CMD, HCL.
Shri Amit Kumar Sen, the then ED, KCC, paying tribute to the Tricolour on the occasion of Republic Day.

Subsequently, he visited the stall of Mahila Samaj, Khetri Nagar with senior executives of KCC, where he was received by Smt. Savita Pareek, Secretary, Mahila Samaj, Khetri Nagar.

Thereafter, Shri Amit Kumar Sen, the then ED and Smt. Samita Sen, the then President, Mahila Samaj, distributed fruits to the indoor patients of KCC Hospital.

A cultural event and a prize distribution function were organized on 27.01.2017 at the Copper Club, Khetri Nagar. School students put up a spectacular show and prizes were distributed by Shri Amit Kumar Sen, the then ED, KCC, to the winners of various competitions/events.

Students of Kendriya Vidyalaya presenting cultural programme on the occasion of the Republic Day.

Sh. Amit Kumar Sen, the then ED distributing fruits to indoor patient of KCC Hospital.

Smt. Samita Sen, the then President, Mahila Samaj, Khetri Nagar distributing fruits to female indoor patient of KCC Hospital.
The Republic Day was celebrated at TCP with Shri Umesh Kumar, DGM, and Unit Head, TCP, unfurling the National Flag and addressing the gathering of employees and their families. Sports were also arranged for the employees and their families. Children along with the employees of TCP took active participation in various sports events organized. The winners of various sports were awarded by Shri Umesh Kumar.

Smt. Samita Sen, the then President, Mahila Samaj gave away the Shield to the winners and runners up of the parade presented by the school students.

TCP

The Republic Day was celebrated at TCP with Shri Umesh Kumar, DGM, and Unit Head, TCP, unfurling the National Flag and addressing the gathering of employees and their families. Sports were also arranged for the employees and their families. Children along with the employees of TCP took active participation in various sports events organized. The winners of various sports were awarded by Shri Umesh Kumar.
The 68th Republic Day of the Nation was celebrated with much grandeur and enthusiasm at Gujarat Copper Project. Shri S. S. Sethi, AGM (Works) hoisted the tricolour on this occasion in front of the Administrative Building at 9:30 a.m.

Shri S. S. Sethi, AGM (Works), GCP hoisting the tricolour on the occasion of Republic Day

The security personnel, in ceremonial gear, executives, contractors and workers paid tribute to the tricolour and rendered the National Anthem.

The AGM (Works) addressed the gathering and expressed his gratitude to all the executives and workers who have put in their best and hence GCP has started commercial production. He also expressed confidence in the GCP personnel that the production targets would be achieved if the same tempo and spirit was maintained.

The Republic Day message of Shri K.D. Diwan, Chairman-cum-Managing Director of HCL was read out by AGM (Works) which will motivate and encourage all the stakeholders to work even harder to take this company to greater heights.

We took this opportunity to recognize the duties that the security personnel of GCP perform to protect the plant, machinery and personnel of the project. A token of gift was presented to them by the AGM (Works) on this occasion. In addition, some of the workers deployed through the contractors, who have contributed significantly to the functioning of the plant, were also rewarded. It was clarified that though we could reward only a few workers, yet the contribution of the others can never be overlooked since GCP has worked as a team.

Finally, the participants were once again congratulated on the occasion of Republic Day and the programme came to an end with thanks to all.

Tamralipi wins three ICE Awards in 2016

Tamralipi, the house journal of Hindustan Copper Limited, has won the In-house Communication Excellence (ICE) Award 2016 in the categories of a) Most Creative Name as the Winner b) Best Magazines Among Government and Other Organisations as the First Runner Up and c) Best Magazine in a Regional Language as the First Runner Up. Smt. Sampa C. Lahiri, AGM (A&CC), received the awards on behalf of HCL at the ICE Awards Ceremony 2016 organized in Mumbai on 04.06.2016 by the Shailaja Nair Foundation.

HCL and HEC sign MOU

Shri K.D Diwan, CMD, Hindustan Copper Limited signed a Memorandum of Understanding with Shri Avijit Ghosh, CMD, Heavy Engineering Corporation Limited, for the supply of spare parts for mining and concentrator plant equipments on 04.02.2017.
In this Kaliyuga (the epoch of machines) the brain child of Charles Babbage has become an inseparable commodity. This brain child which we know as “the digitally programmable computer” has influenced our lives significantly. However with the advent of computers a few new terms have been added to our dictionary. Cyber is one such term. Cyber relates to computers, information technology or the internet. Many a times the term also encompasses devices which work with the help of computers (e.g. mobiles). Vigilante is term of Spanish origin meaning guard or watchman. Cyber Vigilante refers to guard or watch against crime in cyber world. This term is becoming important because of a golden proverb; prevention is better than cure.

Cyber crimes are crimes that are perpetrated using computer as tool or with computer as target. These crimes can generally be classified in following categories. Neither the list of cyber crimes categorized below nor the examples attached with categories is exhaustive.

- Cyber Crimes against government or state
  - Cyber Terrorism
  - Cracking of government or defence maintained websites
- Cyber Crimes against property
  - Computer Vandalism
  - Siphoning of funds
  - Phishing
  - Transferring of harmful programmes
- Cyber Crimes against person
  - Trafficking, distribution, posting & dissemination of obscene material
  - Cyber Stalking
  - Cyber Defamation or Cyber Smearing
  - Hacking of personal email & computer system

However, it is possible that a crime may have components of two or more categories. Thus in such scenarios classifying the crime in water tight compartment may not precisely work. Let us briefly discuss about the above mentioned cyber crimes.

- Cyber Terrorism: It is motivated use of computers and information technology to cause severe disruption or widespread fear. E.g. hacking the computer in atomic installations or hacking computers in Airways or Railways Traffic Control, then using them or threaten to use them.
- Cracking of government or defence maintained websites: Cracking refers to removing or disabling certain features to make software vulnerable. E.g. ability to download data from or upload data to website without logging in into it.
- Computer Vandalism: It is damaging information infrastructures purely for own enjoyment and pleasure. The primary motivation is not financial but to prove that the feat could be accomplished.
- Siphoning of funds: Computers, networks, Internet have been used to siphon funds. E.g. Salami Attacks use a simple but effective tactic of transferring the insignificant fractional value in decimal number of several source bank accounts to one or few destination bank accounts. Since the fraction value is too less small to be noticed, the attack may go completely unnoticed. However the destination bank account keeps on accumulating money.
- Phishing is social engineering in cyber context. User is made to reveal sensitive or private data or transfer funds. This is achieved in number of ways. Sometimes a user may get an email or phone call from a person posing as an authorized representative of a company or bank. Though communication unsuspecting users are made to reveal sensitive or private data or transfer funds.
- Transferring of harmful programmes (Malicious Software or Malware): Malwares present a potent threat to cyber security. According to the modus operandi adopted by the malware, it can further be classified into the following:
- Spyware – Software that enables a user to obtain covert information about another's computer activities by transmitting data covertly.
- Scareware – Malicious computer programmes designed to trick a user into buying and downloading unnecessary and/or potentially dangerous software, such as fake antivirus protection.
- Adware – Software that automatically displays or downloads advertising material such as banners or pop-ups when a user is online. It automatically renders advertisements in order to generate revenue for its author.
- Ransomware – Software designed to block access to a computer system until a sum of money is paid. Advanced ransomware encrypts the victim's files, making them inaccessible, and demands a ransom payment to decrypt them.
- Trojan Horse – Programme designed to breach the security of a computer system while apparently performing some unobjectionable function. It misleads users of its true intent. E.g. user may loose his control on computer to unauthorized person. Trojans generally do not attempt to inject themselves into other files or otherwise propagate themselves.
- Worm – Standalone programme that replicates itself in order to spread to other computers. Often, it uses a computer network to spread itself, relying on security failures on the target computer to access it.
- Virus – A piece of code which is capable of copying itself and typically has a damaging effect, such as corrupting the system or destroying data. It may also perform some type of harmful activity on infected host computers, such as acquisition of computer resources. It replicates itself by attaching to a computer programme and grows within the computer. Unlike a worm, a virus doesn’t use computer network to spread itself.
- Trafficking, distribution, posting & dissemination of obscene material.
- Cyber Stalking: It is repeated use of electronic communications to harass or frighten someone, e.g. by sending threatening emails. It starts with following the victim using internet or any other electronic means, leaving message or object and finally vandalizing victims property.
- Cyber Defamation or Cyber Smearing: Intentional infringement of another person’s right to good name by publishing a defaming article or writing on bulletin board.

- Hacking of personal email or computer system: Hacking is intrusion into a computer system generally for act of stealing private or personal data without consent of owner.

Hacking vis-à-vis Cracking: Though many a times these terms are used interchangeably as the borders between the two are bleak with cyber experts not zeroing on a particular definition of both. However the following example may help in understanding the difference between two. E.g. if a software (website/email/application) is secured by some authentication (username-password pair) and an unauthorized person is able to login into the software, it is generally classified under hacking. But if an unauthorized person is able to remove the login feature from that software, it is generally classified as cracking.

The biggest challenge we face is that “Many victims yet don’t know that they are victims”. The following steps can be taken to prevent cyber crimes to some extent:

- Use original software
- Download from authentic sources
- Use strong credentials & do not share them
- Patch OS & other application software regularly
- Update antivirus and cyber security software regularly
- Do not open emails, webpage links or related attachments from un-trusted sources
- Be cautious & use common sense when communicating with user you know or you do not

Awareness & information has helped the mankind to eradicate many potent threats to its existence. Diseases like polio, smallpox have been eradicated from some countries and will be eradicated from others because of awareness created about them. Awareness against cyber crimes will surely help mankind in fighting the menace.

Be Safe, Be Secure, Be Vigilant, Be Informed, Be Aware
Different types of business entities in India  
Mritunjay Kumar Dev

In India, we have various options to choose an appropriate form of business platform. However, before choosing an appropriate platform, we should consider factors like nature of our business, its volume, area of operation, finance, ownership and control, liability and independence. Following are the types and salient features of business entities in brief:

<table>
<thead>
<tr>
<th>Business Entities</th>
<th>Number of members</th>
<th>Registration</th>
<th>Nature of entity</th>
<th>Liability of owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietorship (SP)</td>
<td>One</td>
<td>No separate Registration required</td>
<td>No separate legal entity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Hindu Undivided Family (HUF)</td>
<td>Only members of family</td>
<td>-do-</td>
<td>-do-</td>
<td>Members liability is limited but liability of Karta is unlimited</td>
</tr>
<tr>
<td>Partnership Firm (PF)</td>
<td>2-50</td>
<td>May or may not be registered with the Registrar of Firms</td>
<td>No separate legal entity</td>
<td>unlimited</td>
</tr>
<tr>
<td>Co-operative Society</td>
<td>10 to unlimited</td>
<td>Registration required under Co-operative Societies Act</td>
<td>Separate legal entity</td>
<td>limited</td>
</tr>
<tr>
<td>Limited Liability Partnership (LLP)</td>
<td>2 to unlimited</td>
<td>Registration required with Registrar of Companies</td>
<td>Separate legal entity</td>
<td>limited</td>
</tr>
<tr>
<td>One Person Company (OPC)</td>
<td>1</td>
<td>-do-</td>
<td>-do-</td>
<td>-do-</td>
</tr>
<tr>
<td>Private Limited Company (Pvt Ltd)</td>
<td>2-200</td>
<td>-do-</td>
<td>-do-</td>
<td>-do-</td>
</tr>
<tr>
<td>Public Limited Company (Ltd)</td>
<td>7 to unlimited</td>
<td>-do-</td>
<td>-do-</td>
<td>-do-</td>
</tr>
</tbody>
</table>

Financial Communication and Investor Relations  
Aparajita Sanyal Roy

Financial communication should ensure that transparency should prevail while dissemination of all information, disclosure of non-financial information. Also, ownership pattern and company information is to be disclosed from time-to-time.

Disclosure of such financial information will have to be made simultaneously to investors and the public at large. Information should be on the company website for at least five years.

Dissemination of such accurate and transparent information through stock exchanges, company website, by means of public notice, depository systems, prints and electronic media and social media are imperative.

Right and effective communication strategy that puts complete focus on creating a brand especially around a personality i.e. the CEO here is necessary. Lack of visibility of CEOs of PSUs in the media results in lack of prominence of PSEs. Lack of presence of PSEs in social media. Focus lacks in highlighting the good things that are happening / being done in / by the organization.

In investor relations, the three Cs that are to be taken care of: a) Community (Contact and relationship base), b) Conversation (Maintain two-way conversation with customers and investors) and c) Cost effectiveness (Use both traditional as well as modern media to make larger impact through smaller investments.

PSU stocks will become robust through fair and full disclosure. Also, the Board of Directors has to be accountable towards sensitive information. Regular interaction with print and electronic media and updates on social media is imperative. Transparent brand image in the market and interaction with sector specialists from time-to-time are necessary. Attractive and updated investors’ section in the website based on in-depth research has to be included.
Before knowing about Nobel Prize, why not start with the person who created them! - Alfred Nobel, a Swedish Chemist, Engineer, Inventor, Businessman and Philanthropist, who had signed his will in 1895 and had left much of his wealth for the establishment of the Nobel Prize. In his will, he mentioned 5 categories in which Nobel Prize was to be given and Physics was the prize area he mentioned first in his will. Reason may be that, at the end of the nineteenth century, many people considered physics as the foremost of the sciences, and perhaps Nobel saw it this way as well. His own research was also closely tied to physics.

By the terms of Alfred Nobel’s will, the Nobel Prize in Physics is awarded by the Royal Swedish Academy of Sciences, Stockholm, Sweden. The academy has awarded 110 Nobel Prizes in Physics from 1901 to 2016.

Nobel Prize – the most prestigious award is given to the person who has made the most important discovery or invention within the field of physics. So, as decided by Royal Swedish academy of Sciences, Nobel Prize for Physics for year 2016 is awarded to following three persons:

1. David James Thouless - Born in 1934 in Scotland, Professor emeritus at the University of Washington, Seattle, WA, USA
2. John Michael Kosterlitz - Born in 1942 in Aberdeen, Scotland, a Professor of Physics at Brown University, US,
3. Frederick Duncan Michael Haldane - Born in 1951 in England, UK, a professor of physics at Princeton University, USA.

As per the announcement made by Nobel Committee on 4th October,2016 - “The Nobel prize in Physics is awarded to the three scientists with one half to David Thouless and other half shared between F. Duncan Haldane and Michael Kosterlitz for “theoretical discoveries of topological phase transitions and topological phases of matter.” This is the title of this year’s prize.

Sir Albert Einstein has told us: If you can’t explain it simply, you don’t understand it well enough. So let me start from basics. The basis of this year’s prize is ‘Exotic Matter’. ‘Exotic’ is not a precise scientific term. Exotic means something that is strikingly strange or unusual. ‘Matter’ as everybody knows is any physical substance that has mass and that occupies space. So Exotic Matter is the matter which is exotic in nature.

Basically, the world is richer than we think it is. There are all kinds of things out there that actually happen, or can happen, but we don’t see them because we are not able to understand them and can’t even dream that such things are possible. So these things are kind of secret until they are revealed. And this trio of David Thouless, Michael Kosterlitz and Duncan Haldane, **they Revealed the Secret of Exotic Matter**.

‘Phases’ are the States in which matter can exist. Matter always exists in phases and from our childhood science books, we know that the matter exists in three phases-Solid, Liquid & Gas. But, if I say that there are other states in which matter can exist! To which, the reaction of everybody would be like- wow! That’s really exotic! YES! Extreme high and extreme low temperature can cause matter to change into a more exotic state. They were exotic years ago but not any longer.

‘Transition’ is the transformation of matter from one phase to another. Take some ice, put in sunlight, it will melt. Solid state is changed to liquid state-this is a simple transition. These transitions can occur in exotic matter also, and these phase transitions are known as Exotic Phase Transitions.

Now coming to the last and the most important term “topological” in the prize title. ‘Topology’ - this term comes from mathematics. It is the branch of mathematics, actually advanced mathematics that describes properties that change stepwise only and do not change when an object is squeezed or twisted (but not broken). The simplest example for such a property is - “The number of holes in an object”. If I show you a bangle or a circle, the number of holes one can see in it is 1. If we take a figure of digit eight (8) or spectacles frame, the numbers of holes one will see are 2. Now if I ask, is there anything that has half of a hole? Can we imagine something with 0.5 hole or 1.5 etc.? No! We can’t imagine anything with half hole. The hole has to be a whole number like 1,2,3,4….and 0 also (in case of a bun or double roti). Also, the number of holes can change.
in steps of 1, 2, 3 and so on, but not in points. For example if I bend a bangle (circle) to make it a triangle or square, is the number of holes changing? No! This phenomenon also described by topology only. And the number of holes here, is a topological property and the numbers 1,2,3… are known as topological invariants.

The three scientists used this topology as a tool, to explain their experiments. They experimented with very thin films or thin layers of matter which show some strange properties and can’t be explained simply. They used topology to understand the strange properties of exotic matter, just in the same way as a physics student use vectors to solve the problems of the forces acting in different directions, or use geometry to make figures etc.

In 1970s, Michael Kosterlitz and David Thouless explained the strange phenomenon shown by some exotic materials. Like superconductivity, the phenomenon where the material conducts with 0 resistance at all. Michael Kosterlitz and David Thouless overturned the then current theory that superconductivity or super fluidity could not occur in thin layers. They demonstrated that superconductivity could occur at low temperatures and also explained the mechanism, phase transition that makes superconductivity disappear at higher temperatures.

In the 1980s, Thouless explained a previous experiment with very thin electrically conducting layers in which conductance was precisely measured as integer steps. That was strange phenomenon. He applied topology there and explained that conductance here is topological property and will change stepwise only, as per topological invariants which changes only in integer steps.

At around the same time, Duncan Haldane discovered how topological concepts can be used to understand the properties of chains of small magnets found in some materials. In Duncan Haldane words “The dramatic transitions in the electrical behaviour of some materials was so surprising that it took me a while to realize what i was observing. But once you see it, you think why didn’t anyone else think of it before?”

One common thing about the three laureates is that they all were born and initially educated in UK and then all moved to the States? On asking about this, in an interview with the Nobel media, Duncan Haldane says-“I suppose in the late 70s, there was a bit of de-emphasis by British funding things on fundamental research as opposed to useful research. I think it is a very bad thing when government agencies start to say "What's it used for?" Duncan says that one should never ask this from a researcher because all the big discoveries of really useful things don't really come about because someone sits down and thinks “I want to discover something useful”. They occur because someone discovers something interesting and it turns out to be tremendously useful.” It’s Very Difficult To Know Whether Something Is Useful or Not, But One Can Know That It’s Exciting.

And yes! That’s the history of each and every discovery in every field of science. From Newton’s excitement for the apple falling from tree leading to discovery of Theory of Gravitation to this trio’s excitement about the strange behaviour of materials leading to invention of unbelievable things, Scientists have come a long way. One another scientist in one corner of the world has already started to practically realize them in real life.

In Alfred Nobel’s words “Nobel are the prizes to those who shall have conferred the greatest benefit to mankind.” And this theory of topological phase transition & topological phases of matter will surely benefit the mankind because Materials found through this area of research can be used in future generations of Quantum Computers which will be used in advanced medical sciences. Quantum computers, the super fastest computers, that will work 1000 time faster than the computers we use today. Their technology is based on fundamental properties of materials and after this theoretical discovery; scientists can understand these properties better. We know about Conductors (material in which current can flow for ex. our very own copper wire and Insulators (current doesn’t flow at all for ex. Rubber). But can something Acts like both at the same time?? We used to think that was impossible. But this theory has paved the way for new kind of material called ‘topological insulator’ in which most of the material will be insulator but its surface can carry current and they will have applications in quantum computing.

This year David Thouless, Duncan Haldane & Michael Kosterlitz are awarded for their discoveries made in 1970s and 80s. So it was a long awaited prize. But as Nobel physics laureates, the trio of researchers joins the ranks of some of the greatest names in science, including Albert Einstein, Niels Bohr and Marie Curie.
Juan Manuel Santos Calderón was born on 10 August 1951, is the 32nd and current President of Colombia and the sole recipient of the 2016 Nobel Peace Prize. An economist by profession and journalist by trade, he belongs to the wealthy and influential Santos family. The Santos family was the majority shareholders of the newspaper El Tiempo from 1913 to 2007.

Juan Manuel Santos graduated from the University of Kansas. Thereafter he joined the National Federation of Coffee Growers of Colombia as an Economic Advisor. He went to London as a delegate to the International Coffee Organization and attended the London School of Economics. He went on to attend the Harvard University and holds an honorary Doctor of Laws degree.

In 1981, Santos was appointed Deputy Director of El Tiempo newspaper and he became its Director two years later. In 1991, he was appointed Colombia’s first Minister of Foreign Trade. In 2000, he was appointed the 64th Minister of Finance and Public Credit. Santos rose to prominence during the Administration of President Álvaro Uribe Vélez.

In 2005, he co-founded and led the Social Party of National Unity (Party of the U). In 2006 Santos was appointed Minister of National Defence. He continued defending the security policies of President Uribe.

Santos took a strong and forceful stance against FARC and the other guerrilla groups operating in Colombia. The award to Santos was remarkable, mostly for its timing, in a different way. It came just days after Colombians had voted to reject a peace.

The deal was secured by the Santos government after four years of negotiation with the FARC guerrilla group. The Nobel committee made it clear that the award was didactic. It was being given to someone who had failed to secure peace so far. But in the hope that he might succeed.

The Nobel committee said: “The referendum was not a vote for or against peace”. “What the No side rejected was not the desire for peace, but a specific peace agreement.” The plebiscite was supposed to bring an end to the world’s longest-running war. Between the Colombian military and the Marxist guerrilla insurrection of FARC, the Fuerzas Armadas Revolucionarias de Colombia.

FARC was founded in 1964 in response to an army attack on a rural enclave occupied by armed peasants affiliated to the Communist Party.

FARC’s protest originated in the systemic concentration of agriculture in the hands of a few landowners.

This had continued from Spanish colonial rule into independence. The peace deal had been acclaimed by Pope Francis, President Obama and the diplomats from the world over. Santos and the leader of the FARC rebel group, Rodrigo Londoño, known as Timochenko, were both considered leading contenders for the prize.

After they signed the peace deal last month to end 52 years of war. The Nobel committee said it hoped the prize would encourage all parties to continue working towards peace.
Now a days Desktop is an important essential commodity in each and every house. So it is very much required to know its management as calling an engineer each and every time for any small problem cost a lot. So the presentation given is to make aware users, how to manage their desktops, so that minor problems can be avoided and make them self-sufficient to handle the problem on their own. The following points may be remembered:

1. Always use Original Operating System
2. Always use Antivirus from reputed Company
3. Keep the OS at its current level by Patching at proper time
4. Keep Antivirus Up-to-date at any point of time
5. Never use any pirated software/ free software from not known sources
6. Use UPS for stabilized voltage from a good company
7. Do not use PC in power supply through generators
8. Do not download software programmes/games from websites not known to you
9. Try to keep Popups blocked as through Popups lots of ads will display which will open your desktop to the world then problem starts like Malware infection, Trojan horse attacks etc.
10. Try to remove internet temp files regularly after the internet session is over
11. Do not open any mail not known to you or not related to you or from unknown sources
12. Remove Unused Programmes regularly
13. Do not use Pen Drives used outside in your desktop
14. Do not store files in your desktop

- Scan your System fully through antivirus/anti spyware programme on regular basis
- Divide your Hard disk to at least 2 or more partitions and use one of them except C: \ drive to store your regular files.
- At least leave space of 100 GB at the time of partition in C: \ because OS Patches will eat up your space.
- Keep your files organized
- Store files within different folder names which you can remember and retrieve in time
- Do not add pages to a single file better to store it in different names
- Keep Data and video/photographs in different drives/locations
- Do not use Skype/social media sites with unknown persons
- Do not share your Wi-Fi password with any person except your family members
- Avoid using internet connections from cable operators
- Run Ccleaner to repair and clean the file system which also removes the unwanted files.
- Backup weekly
- Check Hard Disk For Errors
- Use Disk Clean up regularly/ Disk Defragment
- Do not use any water/sticky type substance to clean your PC
- only with dry smooth cloth clean the PC when it is disconnected from Power supply
- Quarterly or half yearly open the cover and de-dust the cabinet by blower, do not use sucker
- Do not keep any pin or clip around your key board
- Use hard brush to clean the key board
- Do not keep your laptops in hibernate mode as the battery life reduces
Leila Seth no more

Leila Seth, the first woman judge of the Delhi high court, died of cardiac arrest at her Noida home on May 05, 2017. She was 86.

As per her wish, her body was donated to the Army College of Medical Sciences for medical research. Leila Seth is the mother of novelist Vikram Seth.

Justice Seth broke many a glass ceiling during her lifetime, becoming the first woman chief justice of a high court when she was elevated as the chief justice of the Himachal Pradesh high court. She was the first woman to top the London Bar exam and the first female judge of the Delhi high court.

She was also a part of the Justice JS Verma committee that was set up to re-look at rape laws in India after the December 16, 2012 gang rape in Delhi.

She was survived by husband, two sons, and a daughter. Leila Seth was considered a pioneering legal mind who was appointed the first woman judge of the Delhi HC in 1978.

Vikram, his younger brother Shantum, a Mussoorie-based Buddhism preacher, and sister Aradhna, a filmmaker who lives in Goa, had gathered at the house on April 15 for Shantum’s birthday. The brothers stayed back and the sister left for Goa after the birthday function.

The family said she would spend most of her time in her study -- an eight by eight room filled with books, awards and trophies. “She was satisfied that she could write an autobiography -- On Balance,” said Shantum.

A sack of books, a computer and a printer stood a on the table in front of the chair where she would sit.

She launched her career by enrolling as an advocate in the Calcutta high court as well as the Supreme Court in 1959. It was after 20 years of legal practice that she finally became a judge of the Delhi high court.

Like her son Vikram, Justice Seth has written a number of books. Her first literal work was an autobiography, titled ‘On Balance’.

She later went on to author ‘We, the Children of India’ (2010), which explains the Constitution’s preamble to younger readers, and ‘Talking of Justice: People’s Rights in Modern India’ (2014), a work that discusses several critical issues she experienced during her legal career spanning 50 years.

Fitness Tips: Stay Healthy, Manage Stress

How To Deal With Stress And Anxiety

Take a time-out.
Practice yoga, listen to music, meditate, get a massage, or learn relaxation techniques. Stepping back from the problem helps clear your head.

Limit alcohol and caffeine.
Alcohol and caffeine can aggravate anxiety and trigger panic attacks. Instead, drink water.

Exercise daily.
Exercising can help you feel good and maintain your health.

Slowly count to 10.
Repeat and count to 20 if necessary.

Accept that you cannot control everything.
Put your stress in perspective: Is it really as bad as you think?

Give back to your community.
Volunteer or find a not her way to be active in your community, which creates a support network and gives you a break from everyday stress.

Talk to someone.
Tell friends and family you’re feeling overwhelmed, and let them know how they can help you. Talk to a physician or therapist for professional help.

Eat well-balanced meals.
Do not skip any meals and always keep healthy, energy-boosting snacks on hand.

Get enough sleep.
When stressed, your body needs additional sleep and rest. It’s important to get 3 hours of sleep per night!

Take deep breaths.
Inhale and exhale slowly throughout the day when you are feeling stressed.

Do your best.
Instead of aiming for perfection, which isn’t possible, be proud of however close you get.

Maintain a positive attitude.
Make an effort to replace negative thoughts with positive ones.

Learn what triggers your anxiety.
Is it work, family, school, or something else you can identify? Write in a journal when you’re feeling stressed or anxious, and look for a pattern.

Get help online.
For the biggest benefits of exercise, try to include at least 2½ hours of moderate-intensity physical activity (e.g. brisk walking) each week, 1¼ hours of a vigorous-intensity activity (such as jogging or swimming laps), or a combination of the two.

- **5 X 30:** Jog, walk, bike, or dance three to five times a week for 30 minutes.
- **Set small daily goals** and aim for daily consistency rather than perfect workouts. It's better to walk every day for 15-20 minutes than to wait until the weekend for a three-hour fitness marathon. Lots of scientific data suggests that frequency is most important.
- **Find forms of exercise** that are fun or enjoyable. Extroverted people often like classes and group activities. People who are more introverted often prefer solo pursuits.
- **Distract yourself** with an iPod or other portable media player to download audiobooks, podcasts, or music. Many people find it’s more fun to exercise while listening to something they enjoy.
- **Recruit** an “exercise buddy.” It’s often easier to stick to your exercise routine when you have to stay committed to a friend, partner, or colleague.
- **Be patient** when you start a new exercise programme. Most sedentary people require about four to eight weeks to feel coordinated and sufficiently in shape so that exercise feels easier.

*Source: https://www.adaa.org/tips-manage-anxiety-and-stress*