



Dear NCCians.

Welcome to the 65th issue of Samashti. We have received good feedback to the last issue of Samashti, and in this issue, we are introducing a new section: 'Letters to the editor' which will feature your comments and suggestions. As the first guarter of 2023 is over, it is time to take stock of the goals we have set for the year and the progress we have made towards achieving them. So, in this issue, I would like to delve into the topic: Achieving Goals for personal and professional growth.

To be successful in achieving goals, we must adopt a systematic approach and take the following steps:

Plan for the change & make your goals inspiring: Before beginning to achieve your goals, think along these lines: What did I set out to do last year? Where did I succeed? Where did I fail? The key is to be positive. Set goals that are important to you and only you. Let your goal have some value or benefit for you. Only then will you be inspired to achieve it.

Samashti is your magazine. We constantly endeavour to improve it with your support. Do write to us, and give us your comments, suggestions, and feedback.



The last issue of Samashti got a lot of good feedback from you. We hope to continue bringing out Samashti with features and news stories that inform and engage you while raising the bar of content and design

Be Specific & divide big goals into smaller goals: Let your goals be Specific, Measurable, Attainable, Relevant, and Time Sensitive. Divide goals into small, achievable ones and have tasks planned accordingly to achieve them.

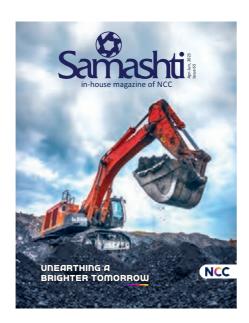
Write down your goals: Writing determines intention. It helps you make clear what you want to achieve. Written goals can be an inspiration for achieving them.

Review your goals: Think about your goals regularly, and take small, incremental steps daily. This will lead to massive changes over the course of the year.

If you fall off track, get back on quickly: Once you've made a mistake, own it, and move on. Get on track quickly, and don't let mistakes spoil your chances of achieving your goal.

These tips will help us take decisive strides towards achieving our personal and professional goals. Samashti is your magazine. We constantly endeavour to improve it with your support. Do write to us, and give us your comments, suggestions, and feedback.

Best Wishes, Dey son) AGK Raju



ABOUT THE COVER

The cover shows mining activity in a coal mine in India. With a history of coal mining for around 220 years, India has come a long way. Today, it is the second largest producer and consumer of coal, behind China.

India plans to transition from coal to cleaner technologies for power generation considering environmental factors such as reduction of carbon footprint and abatement of global warming. However, India continues to use coal as primary source of energy for its abundance, availability and affordability. Coal accounts for 55% of India's primary commercial energy.

Apart from its other infrastructure divisions, which is making useful contribution in fulfilling India's development needs, NCC through its mining division is also doing its bit by mining natural resources to fuel India's energy needs. Site watch of this issue focuses on NCC's mining division.

This is for internal circulation only. The views expressed in the magazine are not necessarily that of the management. Edited by editorial team and printed & published by the Corporate Communications department for and on behalf of NCC Limited.

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Editorial Team

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Dear Colleagues,

I am excited to present to you our annual results for the financial year (FY) 2022-23. This year has been an extremely good one for all of us here at NCC. We emerged stronger

and more resilient, and our confidence in our capabilities is reflected not only in our growth numbers but also in the trust that our clients have placed in us. I am grateful to our clients, partners, employees, and other stakeholders for their steadfast support to make this happen.

Last year, we were able to manoeuvre through challenging times unpredictable market conditions effectively and achieve strong growth. We achieved this by aligning with our clients' vision, focusing persistently on growth, and retaining strong operational rigour. This

indicates the unwavering determination of our teams that led to the execution of major, challenging projects on time in our respective divisions.

Q4. 2022-23 Results

Coming to the 4th quarter results, on a consolidated basis, NCC Limited has achieved a turnover of Rs 4981.36 Crore

> for the guarter ended 31 March 2023. The operations of the company have resulted in the EBIDTA of Rs 464.61 Crore and Net Profit (attributable to shareholders of the company) of Rs 190.86 Crore.

Financial Year 2022-23

On a consolidated basis, the Company has achieved a Turnover of Rs 15701.00 Crore for the year ended 31 March 2023 as against Rs 11208.68 Crore in the previous year. We posted an EBIDTA of Rs 1458.99 Crore and Net Profit (attributable to shareholders of the

company) of Rs 609.20 Crore, as against Rs 1023.80 Crore and Rs 482.41 Crore respectively in the previous year. The company has an order book of Rs 50244.00 Crore as of 31 March 2023.



On a consolidated basis, the Company has achieved a Turnover of Rs 15701.00 Crore for the year ended 31 March 2023



The exceptional financial result wouldn't have been possible without your significant contribution. Your great work has resulted in tangible, beneficial results for all of us.

It is time for us to push the boundaries and pursue greater heights in excellence. The number of ways to expand, enhance and excel are not limited. We are a growing organisation.

We have grown at a commendable pace over the last four guarters. The exceptional financial result wouldn't have been possible without your significant contribution. Your great work has resulted in tangible, beneficial results for all of us. NCC has now become a name to reckon with in the infrastructure sector, all due to the hard work, dedication, and combined efforts put in by each of you. Keep up the good work! Focus on quality and timely execution and create value for our clients as well as our shareholders.

I and the entire senior management team would like to thank each one of you for your active support and wholehearted effort. Your efforts have encouraged us to scale up and unleash our potential for the next phase of our growth.

It is time for us to push the boundaries and pursue greater heights in excellence. The number of ways to expand, enhance and excel are not limited. We are a growing organisation. We need to expand our understanding of reality and push the boundaries to travel in the next orbit of growth.

For creating shareholder value by capturing cost efficiencies and leveraging resources for productive gains, NCC has restructured its business this year and consolidated it into seven distinct divisions: Buildings, Water & Environment, Transportation, Railways, Irrigation, Mining and Electrical (T&D). NCC 's diversified business portfolio, geographical reach, robust balance sheet, and strong order book are reliable signposts pointing to a brighter future. Further, the company's proven execution strengths and committed workforce are helping it seamlessly transition to a more evolved work environment.

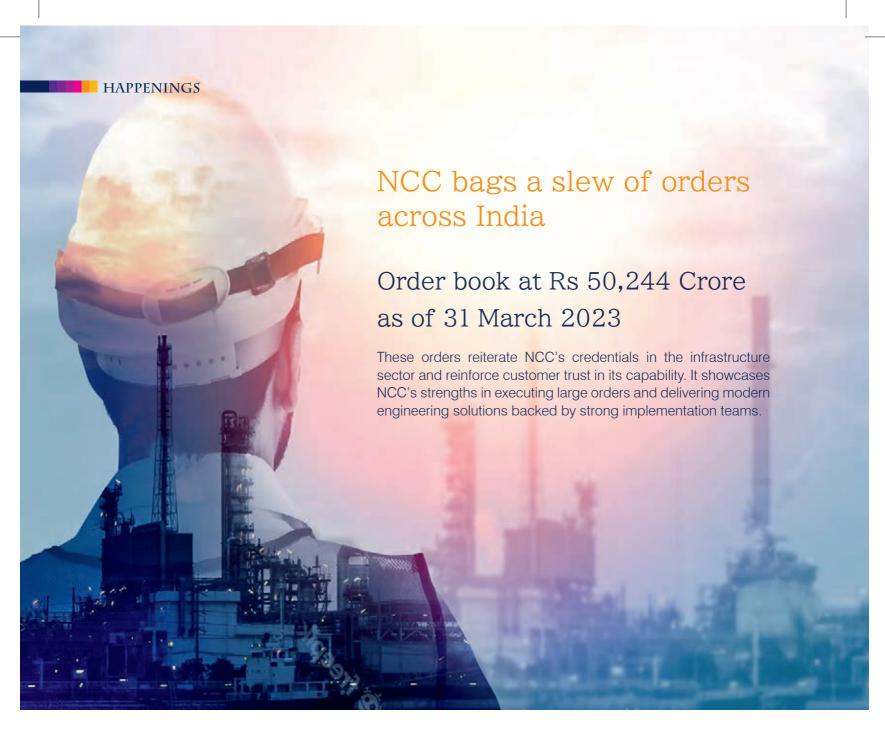
As a future-ready enterprise, in addition to creating financial capital, NCC must also focus on the global benchmarks of corporate sustainability such as the ESG Framework. We aspire to be an enterprise known for its Environmental Stewardship, Social Responsibility and Good Governance.

NCC's vision is to serve the larger national purpose by not only building large scale infrastructure projects, but also helping to build economic, environmental and social capital for the nation. Let us continue to keep the flag of our country always flying high!

Best Wishes,

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A Ranga Raju





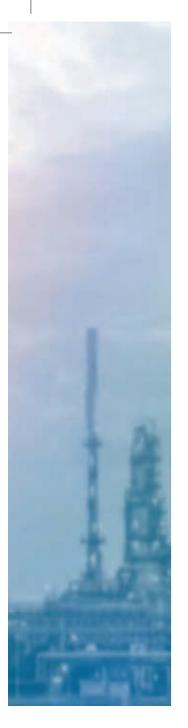
Rs 1223.84

ROAD IMPROVEMENT ORDER FROM BMC

Suburban Road Improvement in Mumbai, Maharashtra

The Transportation division of NCC has secured a major order valued at Rs 1223.84 Crore from Brihanmumbai Municipal Corporation for the improvement of various roads and passages in the western suburb of Mumbai.

Mumbai has a road network of 2000 kms which is maintained by the BMC. The onset of monsoons and heavy downpour contribute to the deterioration of roads leading to potholes and the frequent breakdown of vehicles. The above project will bring a sigh of relief to the commuters of Mumbai's western suburbs.



Supplying Clean Water in Rewa, Madhya Pradesh

The Water division of NCC has secured an order from Madhya Pradesh Jal Nigam Maryadit for Engineering, Procurement, Construction, Testing and Commissioning of Tamas Multi-Village Water Supply Scheme in Rewa District on Turn-Key Basis including Trial Run and Operation & Maintenance for 10 Years.

According to the new guidelines of Government of India under the Jal Jeevan Mission, action plans are being prepared in the direction of providing water to every household through a tap connection by the year 2024.



Providing Power to Cluster 1, UP

Rs 693.01 CRORE **ELECTRICAL** DISTRIBUTION ORDER, LUCKNOW, UP

Madhyanchal Vidyut Vitran Nigam Ltd has awarded an order to NCC under the National Competitive Bidding for the supply of plant and installation of plant and equipment under the "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis in Cluster-1 (District -Lucknow).

Most distribution utilities (discoms) have suffered from increasing aggregate technical and commercial (AT&C) losses. The Government of India has launched Revamped Reformsbased and Results-linked, Distribution Sector Scheme to reduce AT&C losses to pan-India levels of 12-15% by 2024-25.

Constructing Flyover in Nagpur, Maharashtra

The Transportation division of NCC has secured an order from National Highways Authority of India for the design & construction of elevated structure (flyover) from Indora Chowk to Dighori Chowk (Design Length – 8.90 km) in Nagpur city on Nagpur-Umred section of NH-353D in the state of Maharashtra on EPC mode.

This flyover will ease traffic congestion and benefit the people of Nagpur. Once this flyover is constructed, the journey from Indora to Umred will be completed in just one hour.





Rs 590.57

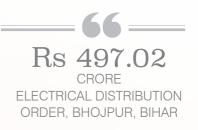
FLECTRICAL DISTRIBUTION ORDER, AMBEDKARNAGAR, AMETHI, AYODHYA, BARABANKI, AND SULTANPUR, UP

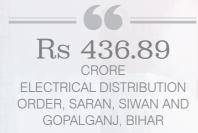
Powering Multiple Districts in Cluster 4, UP

Electrical division of NCC has won this order under the National Competitive Bidding from Madhyanchal Vidyut Vitran Nigam Ltd for the supply of plant and installation of plant and equipment in Cluster-4 (District - Ambedkarnagar, Amethi, Ayodhya, Barabanki and Sultanpur) of Uttar Pradesh under the "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis.

Supplying Electricity to Bhojpur, Bihar

South Bihar Power Distribution Company Limited awarded an order to NCC under the National Competitive Bidding for the supply of plant and installation services under the "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis at Electric Supply Circle Ara (Bhojpur) in Bihar.



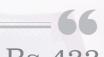


Powering Three More Bihar **Districts**

NCC has won an order for the supply of plant and installation services at Chapra Electric Supply Circle (Saran, Siwan and Gopalgani districts in Bihar) under "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis. This order, won under the National Competitive Bidding, was awarded by North Bihar Power Distribution Company Limited.

Development of Distribution Infrastructure in Cluster 5, UP

An electrical distribution order has been secured under the National Competitive Bidding from Madhyanchal Vidyut Vitran Nigam Ltd for the supply of plant and installation of plant and equipment under the "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis in Cluster-5 (District - Bahraich, Balrampur, Gonda and Shrawasti) of Uttar Pradesh.

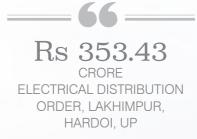


Rs 433.82

ELECTRICAL DISTRIBUTION ORDER, BAHRAICH, BALRAMPUR, GONDA, AND SHRAWASTI, UP

Supply and Installation of Plant and Equipment in Cluster 2, UP

Order have been won under the National Competitive Bidding for the supply of plant and installation of plant and equipment in Cluster-2 (District - Lakhimpur, Hardoi) of Uttar Pradesh under the "Development of Distribution Infrastructure for Loss Reduction" in Revamped Reforms-based and Results-linked, Distribution Sector Scheme on a turnkey basis. Madhyanchal Vidyut Vitran Nigam Ltd awarded this order to NCC.





Removal of Overburden at Majri, Maharashtra

The Mining division of NCC has secured an order from Western Coalfields Limited, Nagpur for removal of all type of materials (Hard OB, Soft OB/BC soil, and OB Rehandling) by hiring of equipment and as per the instructions of Engineer-in-charge at New Majri UG to OC mine of Majri Area. Over Burden (OB) is the rock or soil layer that needs to be removed in order to access the ore being mined. Black Cotton (BC) soil are inorganic clays of medium to high compressibility. They form major soil group of India.

Improving Road Infra in Bengaluru, Karnataka

The Transportation division of NCC has secured an order from Bangalore Development Authority for the formation of sites and construction of roads, roadside drains, cross drainage works, storm water drains, rainwater harvesting, and protection works including utilities development for Dr K Shivaram Karanth Layout, Sector-1, Bengaluru. The development of road infrastructure in Bengaluru will play a crucial role in the efficient movement of people and goods. It will also maintain stability and durability of the road by keeping it clean and dry.





Providing Housing Units in Shivamogga, Karnataka

The Buildings division of NCC has bagged an order from Rajiv Gandhi Housing Corporation Limited, Bengaluru for Construction of 2048 dwelling units in 44 Blocks of G+3 Floors on Build and Transfer Basis at Bullapura of Bhadravathi Taluk, Shivamogga District, Karnataka under Pradhan Mantri Awas Yogana Urban-HFA Scheme. The Pradhan Mantri Awas Yogana aims to provide housing for all and offers an interest subsidy for home loans for first-time home buyers in urban areas.



It is a moment of immense pleasure for NCC that our Hon'ble Prime Minister, Narendra Modi inaugurated AIIMS Guwahati, the first AIIMS of north-east India, on 14 April 2023.

NCC was involved with the design, engineering, procurement, and construction, including operation and maintenance of this Rs 757 crore project. It employed a manpower of over 3000 people comprising engineers and support staff who worked round the clock for the project completion.

During the visit, PM Modi inspected AIIMS Guwahati.'s newly built campus by NCC. It is indeed a proud moment for all of us.

AllMS Guwahati, with its 750 bedded hospital including 25 speciality and super speciality departments, is equipped with state-of-the-art amenities. The operationalization of AllMS Guwahati is a testimony of Prime Minister, Narendra Modi's commitment to strengthening health infrastructure across the country.

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NCC was involved with the design, engineering, procurement, and construction, including operation and maintenance of this Rs 757 crore project

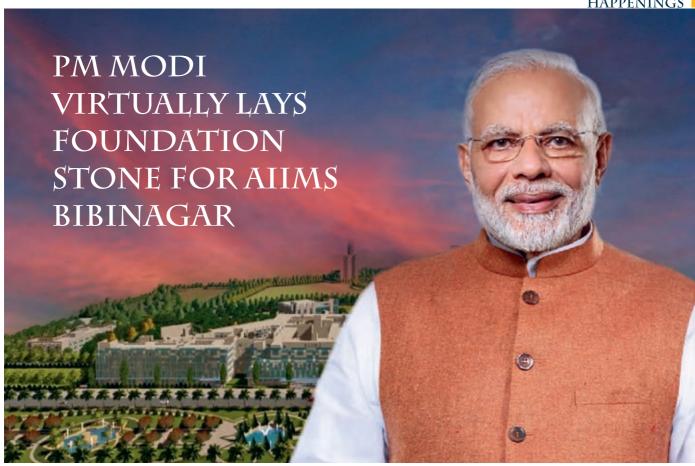
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Earlier, Assam Chief Minister Himanta Biswa Sarma visited the construction site of All India Institute of Medical Sciences (AllMS), Guwahati on 23 March 2023, to review the progress and ascertain the possibility of its inauguration during Prime Minister Narendra Modi's forthcoming visit to the state on April 14.

The Chief Minister visited all parts of the construction site including the main building and the pathways and reviewed the stage of their completion.



Assam Chief Minister Himanta Biswa Sarma visiting AIIMS Guwahati



It was a monumental moment for the people of Telangana and a proud moment for NCC Limited as our Hon'ble Prime Minister, Narendra Modi laid the foundation stone for

AIIMS Bibinagar in virtual mode at Hyderabad on 08 April 2023. The public function was held at the Parade ground in Hyderabad.



16 modular operation theatres with more than 40 major services will not only help the people of Telangana, but also those of the nearby states of Andhra Pradesh, Maharashtra

> and Karnataka in the long run. It will also provide a higher level of specialisation in medicine and research facilities in the medical field.

The establishment of AIIMS Bibinagar is a significant step towards providing international standard medical services at an affordable price to the public.

This is the 5th AIIMS project being constructed by NCC Limited. The 750 bedded hospital containing

NCC Limited the received Rs 1058.94 crore construction order for AIIMS, Bibinagar from HLL Infra Tech Services Limited (HITES) on EPC basis. The scope of work involved design, engineering, and construction, including operation and maintenance.



The establishment of AIIMS Bibinagar is a significant step towards providing international standard medical services at an affordable price to the public.



COMPOSITE CONSTRUCTION AT AIIMS KASHMIR

- Speedy, Strong and Seismic Resistant!





NCC Limited uses the latest technologies in construction at its sites. A case in the point is the construction of 750 bedded hospital block at AIIMS Kashmir project, where it uses composite steel-concrete structure, making the construction speedy, strong, and seismic resistant. Composite construction uses two different materials that are bound together so strongly that they act together as a single unit. In steel-concrete composite construction, steel section is encased in concrete for columns and the concrete slab is connected to the steel beam with the help of mechanical shear connectors so that they act as a single unit.

Why Composite Structure?

Steel structural members are prone to local and lateral buckling, whereas concrete structural members are generally thick and unlikely to buckle; but they are inclined to creep and shrink with time. Therefore, for AIIMS Kashmir, which requires diverse engineering design of stiffness and strength, steel-concrete composite structure is a viable solution. Moreover, this type of construction is speedy, which make it indispensable due to inclement weather conditions such as snowfall and rains which reduces available construction time at AIIMS Kashmir.

A comparative study validates the use of Composite Structure

In a comparative study of steel concrete composite with RCC options of commercial building situated in earthquake zone, it was observed that steel concrete composite construction system was an efficient, economical and innovative method for seismic resistance

of multi storied buildings. In this study, the provisions of IS:1893(Part1)-2002 for earthquake loading were considered and for modeling of composite, Steel and RCC structures, E-TABS analysis software was used.

Advantages over conventional construction:

- Extremely economical
- High Durability
- Rapid Erection
- Superior seismic performance characteristics

Composite construction is a teamwork of concrete and steel, resulting in superior seismic construction with better compression and tension. It is also speedy compared to conventional construction. It is therefore ideal for the construction of 750 bedded G+10 hospital block of AIIMS Kashmir project, which is situated in earthquake zone 5.



NCC Receives Completion Certificate from AIIMS, Bathinda

Hon. Prof. D K Singh, Director, AllMS Bathinda awarded the completion certificate to D Uma Sankar, AGM Tech and project in charge.

The AIIMS Bathinda project is a prestigious project of NCC Limited. It was completed against all odds, situations, and unforeseen circumstances (like Covid etc.), within the stipulated timeframe and without any liquidated damages.

The project has to its credit many noteworthy achievements such as safe manhours, 3-star GRIHA rating, and zero accident/casualty.



NCC WINS FIRST PRIZE IN THE AWS INNOVATION PROGRAM



The NCC IT and AWS Team

We are thrilled to announce that our team has won the first prize in the Amazon Web Services Innovation Program held in March 2023!

This is an invitation only competition for the senior management of invited companies. In this AWS event, participating companies develop solutions for their business problems by applying Amazon's approach to developing innovative solutions. Notable participants apart from NCC were ITC, FHPL and TPA Limited among others.

We are honoured to have been recognised for our ground-breaking and innovative approach to solving NCC Asset Management Division's (AMD's) business problem, and we hope that this success will inspire others at NCC to embrace innovative thinking and adopt bold ideas. A joint team from the AMD and IT departments of NCC participated in this competition. The team comprised of Sanjay Varma, and Krishnam Raju KVSH from AMD and Satish Kumar A and Arindam

Das Purkayastha from IT. The AMD team, led by Sanjay Varma, put in significant effort in the run-up to the competition to establish which of the many challenges faced by AMD should be taken up in this event as a case study.

Our winning project was designed to leverage the power and capabilities of AWS to address a pressing challenge faced by AMD. We conceptualised a cutting-edge solution that will give all the stakeholders the ability to monitor the status, productivity, and other associated information and analytics of deployed equipment at projects from anywhere. This concept harnesses technologies such as IoT, various types of sensors, and analytics. Globally, construction and engineering companies are rapidly adopting the latest technologies to digitalize their operational value chain in order to improve productivity, achieve greater efficiency, and thereby improve overall transparency.

The winner is awarded US \$ 6.000

in credits towards developing the prototype. AWS also provides their in-house technical expertise to build the prototype solution. By harnessing the power of AWS, we will be able to achieve remarkable results, and our solution has the potential to transform the way such problems are addressed.

We could not have achieved this remarkable success without the support of our incredible team members, who worked tirelessly to bring our vision to life. We also owe a debt of gratitude to AWS for inviting us to this remarkable program and providing us with the platform to showcase our skills and innovation. This is a major achievement and demonstrates our team's ingenuity, hard work, and passion for pushing the boundaries of technology to solve business problems.

We thank everyone from the AMD and IT departments who contributed to this project and supported this effort. This award is a testament to our collective commitment to excellence, and we are proud to be recognised by AWS from among the participants across India. We are currently working to bring this concept to life with support from AWS and our leadership team.



NCC COLLABORATES WITH ISB FOR ENTREPRENEURSHIP DEVELOPMENT

A Two-day workshop for training NCC's next generation leaders on "Sustaining Family Business for Generations" was held on 10 and 11 December 2022 at Indian School of Business (ISB), Hyderabad.

NCC took the initiative of hosting this programme for its NextGen leaders in collaboration with ISB. It also went a step further to involve the NextGen leaders from other corporates such as Capacite Infra Projects Ltd, APCO Infratech Pvt Ltd, Ashoka Buildcon Pvt Ltd, GVPR Engineers Ltd, Ramky group, Kumar Infraprojects, PNC Infratech Ltd, and D.E.C Infrastructure Ltd. Over 40 participants from 10 reputed companies across India participated in the workshop.

Two main themes covered in the programme were Professionalisation of Family Business, and Stakeholder Management. The programme equipped the participants with the skillset to professionalise their family run organizations in cognizance of the complexities involved. It also inculcated a comprehensive approach to dealing with and managing stakeholders under challenging circumstances.

The key takeaways were training next generation leaders for succession planning, building corporate networking for NextGen leaders, promoting healthy competition in infrastructure arena, and exposing the NextGen leaders to international family business case studies

This was done with a view to give an exposure to the NextGen into the nuances of running a family business. The participants were also able to network with each other and get familiar with the future leaders across industries.

Here are bytes from a few participants:

Lots of thanks to the whole NCC team for conducting such a great workshop. It was amazing to meet everyone and get such great exposure. Looking forward to meeting you all soon again.

Harshvardhan Jain, Vaibhav Jain, Anuj Jain & Saksham Jain - PNC Infratech Ltd.

Thanks a lot to the whole NCC group for being not just a gracious and welcoming hosts but also for getting all of us together for such an informative networking event! Looking forward for continued interactions with all!

Thanks a lot NCC group for conducting and inviting us for knowledgeable sessions.

Sekhar Reddy - GVPR Engineers

Thanks for conducting such a wonderful and knowledgeable session. I thank both professors Mr Gagandeep and Mr Jeena for taking out time for us. I also thank NCC and ISB for calling us in such useful session.

Arpit Singh, Priyadarshini Singh & Ankit Singh - APCO Infratech Pvt Ltd It was a brilliant workshop hosted by NCC, it was a great way to learn and interact with other NextGen leaders and network. Looking forward to being a part of more of these workshops.

Sneha Raju, Management Executive, Corporate Communications and HR, NCC Limited

It was a very good experience. The explanation of case studies was excellent, and the workshop was a good opportunity for networking.

Vishnu Varma, Director (Projects) NCC Limited



Assam CM performs Bhoomi Pujan of Integrated Directorate Complex

The Chief Minister of Assam, Himanta Biswa Sarma performed Bhumi Pujan for the Integrated Directorate Complex at Betkuchi, Guwahati on 5 January 2023. The Integrated Directorate Complex will house various government directorates spread across the city in a single complex away from the central place, thereby reducing the traffic congestion of the city.



Chief Minister of Assam, Himanta Biswa Sarma performing Bhumi Pujan

Speaking on the occasion, the Chief Minister, Himanta Biswa Sarma said, "As part of our efforts to make governance more citizen centric by making public services available under a single roof, performed Bhumi Pujan for Integrated Directorate Complex at Betkutchi, Guwahati."

The Chief Engineer PWD (Building) Assam, Chandmari, Guwahati has awarded the Rs 440.50 Crore project for the construction of an Integrated Directorate Complex at Betkuchi, Guwahati, Assam to NCC Limited.



At Lucknow International Airport Limited (LIAL) project site, S K Mahadevan,GM, D Lakshmipathi Raju, JGM, CHV Madhava Rao, AGM and NCC Staff distributed gifts among the labour camp children along with Sr Officials of Adani. They also celebrated the birthday of LIAL staff with the children.



TITBITS

A get-together of SWSM-UP-Gulara & Burpura W&E team at Jhansi with RV Ravi, Sr Executive Vice President



Keshab Mahanta, Hon'ble Minister, Health & Family Welfare, Science & Technology and Information Technology, Govt. of Assam, Paban Kumar Borthakur, IAS Chief Secretary and Keerthi Jalli, IAS Deputy Commissioner visited AIIMS Guwahati on 2 March 2023

NCC celebrates International Women's Day with Pomp and Gaiety



Lamp lighting by the chief guest, Kausalya Bhupatiraju, Associate Director

International Women's Day was celebrated at NCC House on 8 March 2023. The half-day event 'for the women, of the women and by the women' was organised at Corporate Office by the women themselves, taking another step towards empowerment.

The day began on a special note, with women employees starting their day with a "surprise handwritten greeting card" at their respective desks. All women employees gathered at the Training Hall, which was artistically decorated with

flowers. The women employees were welcomed with a flower bouquet. The programme began with welcoming of the Chief Guest, Kausalya Bhupathiraju, Associate Director. Thereafter, the auspicious Lamp lighting ceremony was done by the Chief Guest, Kausalya Bhupathiraju, along with women colleagues: Durga Rani, Geeta Vani. Sai Vara Laxmi and Chandana Suram. This was accompanied a praver sona beautifully rendered by Shashikala. Later, Kausalya Bhupathiraju addressed

the women with her kind words of encouragement. Then, N Durga Rani delivered a short talk motivating the gathering. This was followed by a group photograph as a token of remembrance of the day. The organizing committee comprising Shashikala, Chandana, Lalithamba and Jyostna planned various fun activities and games. They were ably supported by Ishwarya and Aparna in co-ordination with Sirisha for refreshment and lunch arrangements. Women participated and encouraged cheerfully each another. The "Know colleagues" session was quite a hit, where every woman spoke about herself, her best abilities, qualities and what makes her happy. This helped women open up, know each other better and bond well. A sweet moment was the "surprise chocolates" for women employees from the Managing Director.

Later, the gathering was enthralled by cultural performances of women employees. During the "mastitime", women walked the ramp and presented gifts to each other as a token of appreciation of uniqueness and togetherness. This brought a befitting end to the colorful event.







Republic Day celebrations were held across NCC offices and sites with the hoisting of the tricolour flag, singing of patriotic songs and the distribution of sweets. During the celebrations, employees paid tribute to the brave freedom fighters of our glorious nation who laid down their lives for our country. India celebrated its 74th Republic Day on 26 January 2023. It was on this day, in 1950, that the Constitution of India was adopted. Republic Day is one of the most important National Holidays in India, which is also known as Gantantra Diwas. Every year, the celebrations marking the day feature spectacular military and cultural pageantry.







Greenpeace organises Environmental **Awareness** drive at NCC

Greenpeace organised an environmental awareness programme at NCC on 18 January 2023. Greenpeace representatives engaged in meaningful conversations with NCCians and empowered them to act in their homes and communities towards a safer and greener future. Many of them pledged to take up sustainable lifestyle changes. Greenpeace is an independent, non-profit, global campaigning organization that uses non-violent, creative confrontation to expose global environmental problems and their causes. Greenpeace's goal is to ensure the ability of Earth to nurture life in all its diversity.

The Green Warrior

J Gautam sits on the 4th floor of NCC Corporate office. He is a Senior Engineer (Design), Planning & Engineering Department. He believes in the concept of greenery in the workplace.

He decorates his cubicle with greenery and shares plants with his colleagues. He is of the opinion that decorating one's cubicle with plants is an excellent way to liven up your workspace. But did you know that apart from adding colour, plants also boost your health?

Studies suggest that plants offer a visually meditative effect to the workspace, leading to happier and healthier employees who are more productive. Apart from improving air quality, reducing fatigue, and bringing down instances of



cold, cough, and sore throat, they have psychological effects (such as being mood uplifters) that reduce stress.

It is well known that stress is a major cause of health problems in the working population, and this is Gautam's small way of getting away from it and helping others too to get away from the stress.

This connection between office greenery, workplace happiness, and productivity is founded on an inherent love for nature that he developed from his parents.

INTERNAL AUDIT

IMS Internal Audit was conducted at Head Office on 23 - 25 January 2023. The Review Meeting of this audit was held on 10 February 2023.

QMS Recertification Audit was conducted by TUV Nord on 13 & 14 March 2023 at Bhilwara Package 1 O&M Water Supply Project, Rajasthan.

QMS Recertification Audit was conducted by TUV Nord on 22 March 2023 at Nasirabad R&M Water Supply Project, Rajasthan.



QMS Certification Audit Stage 1 was conducted by TUV Nord on 23 March 2023 and Stage2 audit was conducted on 27 March 2023 at JhunJhunu O&M water supply project, Rajasthan.



QMS Recertification Audit was conducted by TUV Nord on 15 & 16 March 2023 at Bhilwara Package2 O&M Water Supply Project, Rajasthan.



QMS Recertification Audit was conducted by TUV Nord on 18 March 2023 at Bungi O&M Water Supply Project, Rajasthan.



QMS Recertification Audit was conducted by TUV Nord on 19 March 2023 at Bassi O&M Water Supply Project, Rajasthan.



QMS 2nd Surveillance audit was conducted by TUV Nord at Mandal, Rajasthan on 24 March 2023.



QMS Recertification Audit was conducted by TUV Nord on 20 & 21 March 2023 at Ratangarh-Sujangarh O&M Water Supply Project, Rajasthan.



QMS Recertification Audit was conducted by TUV Nord on 17 March 2023 at Bhilwara Package3 O&M Water Supply Project, Rajasthan.



NCC Conducts In-house Training Programme on Team Building

An In-house training programme was held on 18 February 2023 at Training Hall, Ground floor, NCC house on "Improving Team Spirit at Work". A total of 38 employees from Head Office & Asset Management Division (AMD) had participated from the cadres of Officer to DGM. Ravindra Varma PVS, SGM-Human Resources, the faculty for this training programme, initiated the session with the Bhagavad-Gita Sloka:

"vidyā-vinayasampanne brāhmaņe gavi hastini, shuni chaiva shva-pāke cha panditāh samadarshinah" meaning - a truly learned person endowed with spiritual knowledge sees them all as eternal souls.

He began the programme by explaining that this sloka teaches us that all the employees at workplace should not distinguish within the team members and should view everyone with an equal eye to maintain the team spirit.

The training programme covered the following topics:

Effectiveness of individuals vs teams, Team/ Team development/ Teamwork and Team Synergy, Stages of team development, Dysfunctions of teams – factors which hinder good working relationships, Team Communication, Team Motivation and Overcoming Challenges, Teamwork and Team building exercises.



Director's Site Visit

State Water Sanitation Mission, Mainpuri, Uttar Pradesh

ASN Raju, Director visited SWSM-UP Mainpuri project on 04 January 2023 to oversee the project developments.

The project aims to provide "Har Ghar Nal Jal". It envisages the construction of an Overhead Tank capacity of One lakh fifty thousand litres from which water will be supplied for more than 500 hundred houses, along with pipe and tap connection for every panchayat.

Best safety performance prizes for employees in MMRDA CA-07 project

A radical shift in workplace safety, health, and environment aspects have been witnessed lately in organisations across the globe. These aspects are soon becoming an integral part of the business operations driven by technological interventions, international benchmarks, evolving national legislative landscape and most importantly the overall value system of the organisation. A holistic and proactive approach is the need of the hour, to ensure that the employees plan, execute and monitor their work in a safe and sustainable manner. With this objective in mind, prizes were distributed to workers on 03 October 2022 for best safety performance at MMRDA CA-07 project site.

Medical camp and corona virus awareness program at MMRDA site



It is important for every company to maintain and improve the health of employees so that they feel a sense of belonging. The easiest way to achieve this is by introducing preventive healthcare in the corporate culture which are measures taken to prevent diseases rather than treating them. A medical camp and corona virus awareness programme for employees was held at MMRDA CA-07 site on 22 December 2022. It was very beneficial to employees as they became aware of various preventive measures to be taken to safeguard their health.

Safety Awareness programme conducted at MMRDA project

An effective safety programme can be instrumental in reducing accidents and injuries. In fact, according to OSHA (Occupational Safety and Health Administration), companies that do not perform regular safety training programmes have a fatality rate that is five times higher than those with regular safety programmes. Safety Awareness programme was conducted in our project at MMRDA CA-07 site on 31 December 2022. It was an interactive programme where employees cleared their doubts pertaining to safe working procedures to be followed at site.

Scaffolding Training Conducted at MMRDA Project

A scaffolding training programme was conducted at MMRDA CA-07 project site on 06 March 2023. Workers were given safety tips and trained on how to work on scaffolds. They were also trained in the construction of scaffolds as per OSHA regulations.

Road Safety Awareness Programme conducted at MMRDA, CA-07 Project

Road safety awareness programme was conducted at MMRDA, CA-07 Project site on 12 January 2023. The focus was on ways to reduce road injury rates based on the ability to gauge and mitigate situations that contribute to traffic accidents. The programme covered the following topics:

Education



Information was given to drivers about the rules of the road and the importance of making good choices: wearing seatbelts, not texting while driving and avoiding alcohol or medications that affect awareness.



Engineering

Knowledge was shared on making roadway improvements that prevent crashes or reduce their severity.



Techniques were demonstrated on responding rapidly to collisions to stabilize the victims and quickly transporting them to medical facilities.



MMRDA Project Conducts Medical Health Camp and Cancer Awareness Programme

Cancer is quite common in both developing and developed countries. Yet, its awareness is poor among the general population. Poor awareness generally leads to poor screening modalities and delays in diagnosis. The poor awareness level among the Indian population shows the need for health education and sensitisation regarding cancer and its different aspects. With this in view, NCC conducted a medical health camp and a cancer awareness programme at the MMRDA CA-07 site in Mumbai on 21 March 2023.

Scaffolding collapse mock drill programme at Mumbai Metropolitan Region Development Authority (MMRDA) project

A scaffolding collapse mock drill programme was conducted at NCC's MMRDA CA-07 project site on 01 October 2022. Workers were given safety tips and acquainted with procedures to follow while working on scaffolds. Workers were also trained in the construction of scaffolds as per OSHA regulations. The construction industry is known for a significant percentage of fatalities resulting from falls every year. Many of these deaths result from falls off unsafe scaffolding structures. Workers will not have to fear a scaffold collapse on a stable and safe structure if they are equipped with the necessary personal protective equipment during every shift throughout a project. Hazards that cause slip-and-fall accidents can also be avoided by maintaining an organized work area on the scaffold. Construction sites have also witnessed people on the ground level being struck by tools that fell from overhead scaffolds. Managing the tools safely can prevent falls of tools and injury to workers.

National safety day celebrated across NCC sites

National Safety Day is observed every year on 4 March to commemorate the establishment of the National Safety Council. On 4 March 1966, the Ministry of Labour and Employment of the Government of India established the National Safety Council as a non-profit, self-financing body. The main goal of the day is to highlight safety measures and ensure that people are aware of them and follow them in order to avoid workplace accidents. This year's theme of the 52nd National Safety Day is "Our Aim – Zero Harm". The theme emphasises the significance of protecting society as a whole. The goal of the event is to cause as little harm as possible. Every year, a new theme is chosen for National Safety Day.





Khordha-Balipatna Site, Odisha Site.



AIIMS-Guwahati Project.



Silchar Medical
College and Hospital
site



GMC-Paderu project

Mining

This issue's Site Watch features the Mining Division of NCC, which is fuelling the Nation's growth through its multiple projects.

The mining industry in India

The mining industry in India is a major economic activity which contributes significantly to the economy of India. The gross domestic product (GDP) contribution of the mining industry varies from 2.2% to 2.5% only but going by the GDP of the total industrial sector, it contributes around 10% to 11%. Even mining done on small scale contributes 6% to the entire cost of mineral production. Indian mining industry provides job opportunities to around 11,40,000 individuals.

The tradition of mining in the region is ancient and underwent modernization alongside the rest of the world as India has gained independence in 1947. The economic reforms of 1991 and the 1993 National Mining Policy further helped the growth of the mining sector.



Overview

The Mining industry in India is one of the core industries of the economy. It provides basic raw materials to many important industries.

India is the world's second-largest coal producer and the 5th largest country in terms of coal deposits. The estimated value of mineral production for the period 2022-23 is Rs 100,709 cr. India Targets 1.3 bn Ton Coal Production by FY25 and 1.5 BT bn Ton by 2030.

India is home to 1,533 operating mines and produces 95 minerals, which includes 4 fuels, 10 metallic, 23 non-metallic, 3 atomic and 55 minor minerals (including building and other materials). India has rich deposits of coal. The

total estimated reserves of coal in 2020 were 344,02 bn tonnes, an addition of 17.53 bn tonnes over 2019.

Ministry of Coal has taken up 67 First Mile Connectivity Projects, which will be completed by 2027.

Coal Ministry auctions a total of 29 Coal Mines in 6th round of auctions, having geological reserves of 8160 Mn Tonnes and estimated to attract capital investment of Rs 11,250 crore. Coal Sector to Invest Rs 12500 Crore for 35 First Mile Connectivity Projects. Coal Ministry Expects Operationalization of 58 Coal Blocks During 2022-23: Targets 138.28 Million Ton Coal Production.

"Our mining team has been doing a great job working in adverse conditions prevailing in mines. I take this opportunity, on behalf of NCC, to thank each member of the mining team for your valuable commitment and contribution. Your safety is our prime concern. We consider you to be the most precious thing that comes out of a mine. You are the pillars on which the growth of our division and our company is built upon. Keep up the good work and have a safe day!"

RS Raju Director (Projects)



How NCC is Contributing to India's Mining Goals

Playing a catalytic role in making India self-reliant in mining natural resources, NCC's mining division focuses on businesses for Mine Developer-cum-Operator (MDO), removal of overburden and the extraction of coal / lignite / other minerals from open cast mines in India.

NCC's Mining Portfolio

- Mine Developer Cum Operator
- Extraction of Overburden
- Extraction of Coal
- Bulk Material Handling
- Transportation of Coal
- Transportation of Minerals

NCC has gained substantial insights into

- Ferrous and non-ferrous mining
- Public and private projects
- Removal of overburden
- Bulk material handling technologies from open cast mines
- Execution of Mine Developer cum Operator(MDO) for open cast mines including Land acquisition, R&R, Obtaining statutory clearance from Govt agencies
- Construction, Operation and Maintenance of Mine infrastructure facilities







- Medapalli OCP, Karimnagar, Telangana
- MCL Kulda, Sundargarh, Odisha
- MCL Kaniha, Talcher, Odisha

- MCL Lakhanpur, Jharsugada, Odisha
- MCL Belpahar, Jharsuguda, Odisha
- RGOC II Project 1, 2 and 3. Ramagundam, TG

Ramagundam Open Cast Mine project of Singareni Collieries

RG OC-II Project of RG-III Area is a one of the prestigious projects of the Singareni Collieries company Limited (SCCL) having a Power grade Quality of Coal. The mine is located in the Peddapalli district of Telangana State, and the coal is supplied to the NTPC of Ramagundam power plant by SCCL. NCC Limited got the opportunity for execution of Over Burden Removal (OBR) works along with extraction of Coal in

this project for three continuous contracts through competitive bidding process. NCC Limited deployed modern equipment for execution of OBR Works and successfully completed it within the stipulated period set out in the Contracts. It has achieved the Overburden Removal of 1014.299 LBCM. In doing so, NCC executed highest excavation works in the history of the Company.

Details of the Three Contracts Executed by NCC

SI No	Period of Work Execution			OBR Quantity along with	Value of work (Rs. in Crores)
	Date of Commencement	Scheduled date of Completion	Date of Completion	Coal Seams	
1. 2. 3.	05-06-2017 20-02-2019 01-08-2021	23-08-2018 08-03-2022 24-04-2023	23-08-2018 08-03-2022 24-04-2023	114.906 LBCM 578.520 LBCM 320.873 LBCM	114.87 753.81 376.46



PROJECTS UNDER EXECUTION





Makardhokra Opencast Coal Mine

Makardhokra Opencast Coal Mine (MKD OCM) is located in Umred area of Western Coal Fields Limited (WCL), a subsidiary of Coal India Limited. The mine is about 40 kms from Nagpur district headquarters. WCL has awarded a mining contract to NCC Limited in Dec 2020 for the removal of 948.75 Lakh cubic meters of Overburden and extraction and transportation of 210.76 Lakh tonnes of coal. NCC is performing 107% of its targets.

New Majri UG to Open Cast Mine

This is an overburden contract awarded by WCL in Apr 2023 for a quantity of 244.11 Lakh cubic meters. Contract period is 21 months and value is Rs 319.87 Crore.

Panchwara North Opencast Coal (PNOC) Mine

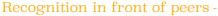
This is a MDO project awarded in 2016 for a contract period of 29 years to the consortium of NCC Limited and BGR Mining & Infra Limited. PNOC mine belongs to West Bengal Power Development Corporation Limited, located in Pakur, Jharkhand. Coal production started in Nov 2019 and after obtaining all clearances, it reached the rated production capacity of 15 million tonnes in 2022-23. The total project value, awarded in 2016, was Rs 30,405.80 Crore. At the current price in 2023, it is estimated to be Rs 50,000 Crore.



Employee Recognition

How leaders at offices and sites can implement employee recognition in the organisation

As a leader, you could take the following initiatives apart from regular appraisals:



Take the initiative to regularly recognise employees in front of their peers. Besides increasing employee satisfaction, it will also act as a motivating factor for other employees.

Lunch with the boss initiative—it

will help both the boss and employees understand areas of interest, hobbies, and opinions about life. This informal discussion helps the employees open up and bring alignment among all members of the team.

Wall of Fame – Achievers in your team can be recognised by displaying the gallery of star performers at the offices/sites. This wall of fame not only helps employees work hard when they are at their peak but also when their performance is going down.

Make them feel like leaders -

Recognise outstanding achievers by giving them special facilities. Let them lead the meetings or have a separate cabin. It will help staff understand the perspective of the boss and make them ready for challenges when they move up the career ladder.

Distribute non-cash rewards -

Want to thank someone for putting in a few extra hours on a tight deadline? Instead of monetary incentives, give



Sudhakara Moorthy Sr VP - HR

Employee recognition identifies and appreciates employees for their exemplary performance. It shows gratitude towards employees for their contributions and makes employees feel valued and worthy in the organisation, which motivates them to take ownership of their work.

them something else, such as vouchers, passes to a movie or art show, or other universally appreciated gifts that will let them know you appreciate them.

Reward at the right time – When an employee completes the task within time and efficiently, then appreciate their work immediately.

Internal Team Award – Introduce an internal team award. It can be a fun way for team members to recognise one another on a regular basis. You can even order a customised memento for the winner to display proudly.

Just say thank you - It's a simple gesture but a powerful one. A simple "thank you" for good work done will increase their morale and make them feel more motivated.

"Clients do not come first. Employees come first.

If you take care of your employees, they will take care of the clients."

Quality Without Compromi



Durgaiah Maddala Dy Manager Materials

Durgaiah Maddala is an invaluable member of NCC's Supply Chain team. His journey of 30 years has added immense value to the management of materials at the right time, at the right price and from the right sources. Quality without compromise is his mantra.

> Durgaiah Maddala, Dv Manager Materials, working at Corporate Office shares with Samashti a slice of his life.

How long have you been working with NCC

It has been a long, long time. 30 years to be precise. I remember, when I first joined NCC, I was a complete novice. Thanks to my mentors, who trained me and made me learn the tricks of the trade.

What is your unforgettable moment at NCC

For an important assignment at IISCO Steel Plant, Burnpur project, I had to take up a challenge in clearing an import consignment. Although I did not have prior experience in the same, I successfully cleared the consignment with the support of my superiors and delivered the goods on time. This gesture was very much appreciated by my reporting boss, Mr Shamuganathan, DGM (Materials).

What gives you that happiness and thrill while working at NCC.

The thing I like about NCC is its good work atmosphere, the support and mentoring I receive from Mr Jayachandra, VP (Materials), and the helpful colleagues in my team. I just love to work here.

What makes your daily routine in office.

My typical day involves looking after the project procurements. I also have to follow up and expedite supplies, generate payment requests and reconcile materials and payments.

My Strength

I am a good team worker. I get along well with other team members and go out of the way to help them whenever there is a sudden requirement.

My Weakness

Sometimes I have to talk to vendors who speak a different language that I am not able to understand. I intend to work on it and learn to communicate effectively in different languages.

Your concept of Happiness

Spending quality time with family makes me happy.

Please share a few experiences and memories in NCC.

When I joined as a fresher in 1993, our Director, Mr AVN Raju gave me the opportunity. I fondly remember my initial day at NCC and the bonding with the team members who taught

me how to achieve my targets. I share a close bond with them even today.

Success means

Surpassing the expectations of my superiors could be one measure of success. If I can deliver more value to a given situation, I would consider that to be a successful effort. I firmly believe that successful effort brings successful results.

Please share your family details

My Wife's name is Naga Lakshmi. She is Home Maker. I have two daughters: my elder one MNS Sirisha has completed B Tech CSE and is working in HCL, Banglore and the younger one, MNS Sailaja is pursuing MBA HR.

What are your hobbies. How do you spend your leisure time. I watch TV & MOVIES. The reel life is

my escape from real life.



SIXER

In this page, six middle level management employees share thier brief insights on common workplace topics



R S Raju, Director (Projects)



C. Prem Reddy, **Executive Vice President** - Tech



G Sri Rama Krishna G. **Executive Vice President** (Finance and Accounts)

One cost cutting measure you suggest at the workplace

One Tip for Time Management

How do you handle pressure

One good thing about the new generation

Important Aspects of a Team

Your Hero in the business world (outside of NCC)

Advance planning, ascertainment of cost estimated to incur for each and every activity and checking whether activity is completed within the estimated cost.

Ascertain time required to compete each and every activity in advance and compare the actual time taken to complete the activity, find-out the reasons and initiate corrective measures.

It is my belief that every problem has a solution and I draw a plan to handle such pressures with proper directions to the team explaining the timeline and techniques to adopt.

The new generation has much more soft skills and are adept at using the latest technology, tools and techniques.

Proper direction, orientation, motivation, clarity in the tasks to be accomplished, reviewing and correcting wherever required.

Narayana Murthy of Infosys.

Cost cutting is the simpler name for cost optimization, which is an output of adept planning and stringent implementation of the plan.

Self Discipline is of paramount importance for Time Management. With the discipline first approach, one will never struggle to manage time.

With a good work-life balance. I ensure that I am apportioning adequate time for work, exercise and family with 100% focus on what I am doing.

Their strong embrace of diversity and inclusivity, promoting acceptance and equality for all individuals regardless of their background, ethnicity, gender, or orientation.

The most vital aspect of a team Listen without defending and lies in the ideology of working progressively towards one common goal.

Late Shri. Rakesh Jhunjhunwala.

Meticulous matching of mobilization/ demobilization of resources with work schedules.

Identify the critical activities which may impact/ hamper the work schedules and tackle the bottlenecks.

Taking things to the mind and not to the heart and learning to love what we do.

Open minded approach and willingness to explore new horizons.

speak without offending. Don't tell your team to get over the problems, instead help them get through them.

Steve Jobs

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B Sankararaman, Senior Vice President



Arindam Das Purkayastha, Vice President, IT



R V S N Raju (Chinna Babu), Project Executive

Avoid hard copies. Use electronic medium with failsafe backup. This saves time and costs associated with stationery storage, retrieval and physical protective measures.

Professional approach, Comprehensive pre-planning and Regular follow-up will ensure that one has more time on hand to enhance productivity.

Change in attitude, taking a deep breath and counting 10 before proceeding further and not hesitating to seek help if needed.

New generation has exposure to vast database / software tools and are hence more confident in their approach. They need to stop looking at only the materialistic part in all their dealings.

Team is a group of people with matching frequencies and open to twoway communication. Both positive and negative comments need to be given and taken professionally, for the team to be effective.

Ratan Tata.

Productivity and efficiency improvement is the only way of ensuring sustainable reduction of operations cost.

Do not leave for tomorrow what can be done today.

I try to deal with the root cause that is creating the pressure directly.

Generally, it is a good thing when a new generation challenges the status quo - this is what drives improvement.

Empowerment to share perspectives and take different positions on any topic without worrying about any other consequences.

I do not believe in hero worship

Selecting the right man for the right job and developing second line agencies for specialized jobs.

Tackle the most difficult task first.

Visualize the worst-case scenario and take a deep breath.

They have made it entirely on their own.

Communication is the foundation of effective teamwork.

Dhirubhai Ambani.

NCC Family

A warm welcome and lots of good wishes on becoming part of our growing team. Congratulations and on behalf of team NCC, we welcome you aboard and wish you a fruitful career. Your contributions and inputs will go a long way in keeping the flag of NCC flying high.



Ramakrishna Raju N

Executive Vice President-(Tech.)

Buildings Division, Corporate Office.

Ramakrishna Raju joined NCC as Executive Vice President - Tech and is reporting to the Director, Buildings Division. He obtained Master's in Geotechnical Engineering from Anna University, Chennai, and B. Tech in Civil Engineering from Sri Venkateswara University, Tirupati. Prior to joining us he was associated with Tata Projects Limited, Hyderabad as Executive Vice President (Head – Engineering), Larsen & Toubro Limited, Chennai as Head EDRC (Hydrogen & Nuclear) and NCC Limited, Hyderabad as Chief General Manager – Designs (2006 to 2015). He has an overall experience of 33 Years in Engineering Domain of Various Infra & Power Projects.

Sanjay Pusarla
Executive Vice President (F&A) and CFO
Corporate Office.

Sanjay Pusarla joined NCC as Executive Vice President (F&A) and CFO and is reporting to AGK Raju, Executive Director. He obtained Bachelor of Commerce from Andhra University and is a qualified Chartered Accountant (1988). Prior to Joining us, he was associated with Shapoorji Pallonji and company, Mumbai as Senior Vice President - Finance & Accounts (Head F&A - Engineering and Construction Business), Lanco Infratech Limited, Hyderabad as Vice President - Finance & Accounts and Rastriya Ispat Nigam Limited, Visakhapatnam as Deputy Chief Finance Manager. He has an overall experience of 33 Years in Finance & Accounts, Audit and Taxation.





Senior General Manager (Tech.) Electrical Division, SWSM Raebareli Project.

Rajesh Kumar Kalra joined NCC as Senior General Manager - Tech and is reporting to SS Sarma, EVP - Tech. He obtained B.E. Civil Engineering from Amravati University. He was previously associated with Veolia India Private Limited, Noida as Director-O&M, Orange City Water Private Limited, Nagpur as Deputy Director-O&M, Saisudhir Infrastructures Ltd., Hyderabad as General Manager-Water & Environmental Projects, IVRCL Ltd., Hyderabad, as Sr AGM-Projects, Asian Techs Limited, Jodhpur as Project Manager and Vijay Engineering Enterprises, Nagpur as Project Manager. He has an overall 30 Years of experience in Execution of Water, Highway and Urban Infrastructure Development Projects.





Kanumuri Srinivas Raju General Manager (Admin.) PEMI Division, Corporate Office.

Kanumuri Srinivas Raju joined NCC as General Manager (Admin) and is reporting to the Director, PEMI. He obtained Bachelor of Commerce from University of Delhi, New Delhi. He was previously associated with Sankaran & Krishnan Chartered Accounts, Visakhapatnam, as Executive Director and P.L. Raju Constructions Ltd., Hyderabad as Senior General Manager. He has an overall 30 Years of experience in Liaisoning and Vendor Management.

Mandavilli Venkata Ravi Kumar

Joint General Manager (Tech.) Water & Environment Division, Corporate Office.

Mandavilli Venkata Ravi Kumar joined NCC as Joint General Manager - Tech and is reporting to the Director Projects, W&E Division. He obtained B.E. - Civil Engineering from Shivaji University, Kolhapur and MBA in Marketing Management from Andhra University. He was previously associated with Larsen & Toubro Construction Ltd., Hyderabad as Deputy General Manager, Ramky Infrastructure Ltd., Hyderabad as Assistant General Manager and Gannon Dunkerley & Co Ltd., Hyderabad as Project Engineer. He has an overall 26 Years of experience in Project Execution & Management.



Devendra Singh

Deputy General Manager (Tech.)
Electrical Division, SWSM Raebareli Project.

Devendra Singh joined NCC as Deputy General Manager - Tech and is reporting to ASRKV Raju, Senior VP - Tech. He obtained B.Tech. - Civil Engineering from UP Technical University, Lucknow. MBA - Construction Management & Project Management from Asian Institute of Management & Technology, Delhi. He was previously associated with Shalimar Crop Limited, Mumbai as General Manager (Civil), Larsen & Toubro Limited, Mumbai as Construction Manager -Civil, IL&FS Engineering and Construction Company Limited, Hyderabad as Assistant General Manager - Execution, Tamta Construction Co. Pvt. Ltd., New-Delhi as Project Manager -Execution, Unity Infraprojects Limited, New Delhi as Assistant Project Manager-Civil and JMC Projects (India) Ltd., Noida as Project Engineer -Civil. He has an overall 22 Years of experience in Construction & Execution.



Atanu Mitra

Deputy General Manager (Tech.) Buildings Division, SWSM – Gorakhpur (South).

Atanu Mitra joined NCC as Deputy General Manager - Tech and is reporting to RVSN Raju, Project Executive (Monitoring). He obtained a B.E. -Civil Engineering from Solapur University. Diploma in Civil Engineering from West Bengal Council of Technical Education. He was previously associated with Sterlite Technologies Limited., Pune as Zonal Civil Head (Technical), Larsen & Toubro Limited, Kolkata as Manager, TUV India Private Limited, Chennai as Manager, Towell Infrastructure Projects Co. LLC., Oman as Assistant Manager, Nass Contracting, Bahrain as Senior Engineer, and ACC India Private Limited, Kolkata as Assistant Manager. He has an overall 22 Years of experience in Tunneling, Materials, Production and Marketing.

Naiyar Kamal Siddiqui Deputy General Manager (Electrical) Electrical Division, Kadandale Project, Karnataka.

Naiyar Kamal Siddiqui joined NCC as Deputy General Manager (Electrical) and is reporting to Manoj Raj Penmetcha, Director Projects. He obtained B.Tech. -Electrical Engineering from Aligarh Muslim University, Aligarh. He was previously associated with Tata Projects Limited, India as Assistant General Manager (Projects), Larsen & Toubro Limited, Kuwait as Manager-Electrical, Siemens Limited, Gurgaon as Manager, Almasharaiq Contracting & Trading Ltd., Dammam as Electrical Project Engineer, Parsons Brinckerhoff Limited., Dubai as Electrical Engineer, ABB Limited, India as Assistant Manager (Projects) and Crompton Greaves Limited, India as Project Executive. He has an overall 21 Years of experience in Project Management & Execution.



Susarla Saikondala Rao Deputy General Manager (Tenders) W & E Division, Corporate Office.

Susarla Saikondala Rao joined NCC as Deputy General Manager (Tenders) and is reporting to DV Tata Rao, SGM (Tenders). He obtained B.Tech.- Civil Engineering from V.R Siddhartha Engineering College, Vijayawada. M. Tech - Civil Structural from Gandhi Vidya Mandir, Saradarshahr, Rajasthan and PG Diploma in Environmental Studies from Andhra University. He was previously associated with Limited, Hyderabad as Assistant General Manager - Tendering, B. Seenaiah & Company (Projects) Limited, Hyderabad as Site Engineer, National Consultancy for Planning and Engineering, Hyderabad as Project Engineer and Aster Teleservices Private Limited, Hyderabad as Senior Engineer. He has an overall 24 Years of experience in Tendering, Contract Management, Costing, Budgeting and Execution.





Subburaj Veerasamy Assistant General Manager (Tech.) Buildings Division.

Subburaj Veerasamy joined NCC as Assistant General Manager - Tech and is reporting to MSANB Srinivas, VP Projects. He obtained Diploma in Civil Engineering from Chennai. He was previously associated with URC Construction (P) Ltd., Tamil Nadu as Deputy General Manager, VGN Infra India Private Ltd., Chennai as Deputy General Manager, CG Lifespace LLP Engineers & Contractors, Chennai as Senior Project Manager, Eversendai Construction Pvt Ltd., Mumbai, as Project Manager, MARG Limited., Bangalore, as Manager -Projects and Consolidated Construction Consortium Ltd., Bangalore as Manager (Projects). He has an overall 17 Years of experience in Project & Construction Management.



M Durgaiah, Dy Manager (Materials) being felicitated by U Jayachandra, VP (Materials)

Humble, Soft-Spoken and Dedicated to Work

M Durgaiah, Dy Manager (Materials) is a humble, down-to-earth person working at Corporate Office in Hyderabad and reporting to U Jayachandra, Vice President (Materials).

At NCC, he has put in over 30 years of long and distinguished service. The good atmosphere, support and mentoring of his seniors have made his stint in NCC very memorable. He fondly remembers his joining day in 1993, when he first met the Director, AVN Raju, who gave him the opportunity of joining NCC.

Speaking on Durgaiah's completion of 30 years of long service, U Jayachandra says: "He has been a dedicated employee, delivering efficiently on what is allocated to him and expected from him. Kudos to him for his relentless service of 30 years to the Organisation. We are proud of him to be a part of our team."

A detail oriented professional with strong work ethic

MVS Sundar, DGM (Accounts), working at corporate office of NCC looking after the commercial aspects, joined the organization in October 1997 as Sr Assistant (Accounts). Reporting to ASN Raju, Director, AVVK Reddy, Technical Coordinator & G Sri Rama Krishna, Accounts Head EVP (F&A), he has risen the ranks to the present position on the strength, patronage, and guidance of his superiors such as ASN Raju, GSRK, AVVK Reddy and RS Raju. During his early days, P Narasimhan, was very supportive and laid the foundation of his successful career in Accounts. A detail oriented professional with strong work ethic, Sundar has proven to be reliable and trustworthy in getting the job done.



MVS Sundar, DGM (Accounts) being felicitated by ASN Raju, Director



T Phani Kumar, Chief Manager (Contracts), Corporate Office being felicitated by V Radhakrishna, Director (Projects)



ISR Chandra Raju, DM (Stores), GMC-Vizianagaram being felicitated by M Chandra Mouli, GM (P&M)



Anoop Kumar, General Manager (Tech), UP Mahadev WSS being felicitated by BK Mishra, SPM and Pramod G, Chief Manager (Accounts)



G Ananta Ramam, Chief Manager (Accounts), W&E division Corporate Office being felicitated by V Radhakrishna Director (Projects)



KT Sudhakar Varma, Dy Project Manager BMRCL Project, Bengaluru being felicitated by Prabhuswamy C, Jayachandra, Vice President DGM (Tech), BMRCL Project.



P Satish Bapu, Chief Manager (materials), Corporate Office being felicitated by U



D Murali Mohan Raju, AGM, HMWSSB ORR WSP Pkg-1, being felicitated by TV Parameswara Rao, Project Co-ordinator

And there's more

D Srinivasa Rao, Senior Project Manager, Chandni Chowk, Pune

Ramula Hari Krishna, Senior Project Manager (Electrical) ADB-Moradabad



E Ramesh, Chief Manager (Accounts), APMSIDC-GMC-Vizianagaram being felicitated by SRK Surya Sri Krishna Raju, Director (Projects)



A Sridhar Rao, SE (Civil), APMSIDC Upgradation Works being felicitated by D Vijaya Ramaraju, PM (QS) & PNS Kumar, AGM (P&A), Site & HR Incharge



DV Krishnam Raju, Sr Manager (Stores), BESCOM Kengeri being felicitated by Rayudu Ramakrishna, Senior Project Manager



G Arjun, Dy Project Manager, UP-Burpura WSS being felicitated by RVV Ramesh Kumar (SPM)



G Shyam Prasad, AGM-QS MRTS Patna being felicitated by G R K Reddy, Sr VP



K Rama Krishna, Senior Manager (Electro Mech) W&E division



K V Siva Rama Raju, Manager (Accounts), RO Bhubaneshwar being felicitated by SSRM Naidu, DGM (Tech)



KVVSP Ranga Rao, SPM, TSGENCO-YTPS Project, Miryalaguda being felicitated by Rajesh R Khandekar, JGM (Tech)



Ch Seshu Kumar, Manager(EDP) being felicitated by Pradeep Kumar Singh - Project Manager



K Malini, Sr Executive Secretary, Power division, Corporate Office being felicitated by Shrivastav, Consultant



Ajeet Kumar Joshi, Chief Manager (Strategic Planning) being felicitated by Neerad Sharma, Sr General Manager



Nimmala Ranga Rao, AGM Taxation, A Pandi, Officer (Stores), MES, Corporate Office being felicitated by PSR Balaji, VP



Insrajali, Arakkonam being felicitated by NV Dorayya Naidu, DGM (Tech)



Pratap Chandra Pradhan, Manager QC, RWSS-Odisha-Jajpur



Rajana Satyam, Senior Foreman (Pilling), SCB MCH Cuttack project being felicitated by Dillip Kumar Das, JGM (Tech)



Sanjeev Kumar Sharma, Foreman, Adani International Airport Lucknow being felicitated by S K Mahadevan, GM (Tech)



K Srinu, Senior Electrician, UPHB Bhagirathi being felicitated by Regional Coordinator M Satish Kumar, SGM & RO-Lucknow



B Madhusudhan Rao, Dy Manager, C Varadaraj, Sr GM (Contracts), W & E division being felicitated by V Radhakrishna, Director Projects



Corporate Office being felicitated by G Vasudeva Rao, CGM



Pramod Sharma, Operator (Mech) being felicitated by GRK Reddy, Sr Vice President



S Pradeep Kumar, Sr.Manager, Materials, Electrical Division being felicitated by U Jayachandra Vice President



Sreeramula Ramesh, Junior Foreman (Mech), DLIS-III, Pkg-4 Project, Warangal, being felicitated by SSVV Gopal Raju, DGM (Tech)



Tangeti Ramana, Manager EDTD, Corp. Office being felicitated by Surya Srinivas Nistala, Sr. VP (Engineering)





Tariq Mahamood, Asst.Manager, QA &QC, ITC- Nauroji Nagar, New Delhi, being felicitated by Kota Rajasekhar, GM (F&A) & U M K Varma, AGM (Project Co-Ordinator)



J Veera Brahmam, Deputy Manager (C&C) being felicitated by M Bhanu Prakash, SGM.



Boddu Rajashekar, Asst Engineer, HMWSSB ORR project being felicitated by D Murali Mohan Raju AGM (Projects)



Bapi Raju Nadimpalli, Asst Manager (Admin) being felicitated by Ramesh Babu, EVP (Tech)



D Shaik Fakruddin, Deputy Project Manager, TDWSP Warangal being felicitated by SSVV Gopal Raju, DGM (Tech)



Digbijay Jena, Assistant Engineer (Projects), RWSS-Khordha Project, being felicitated by Ramesh Kumar Singh, AGM (Tech)



Soutan Maity, Assistant Engineer, WBPWSP Purulia Project being felicitated by Raghu Ramaiah, Sr G M (Tech) & K Annadorai, AGM (Tech)



N Nagesh, Asst Engineer, HMDA, Kokapet being felicitated by N Venkateswarlu, JGM (Tech)



Satish Durga Babu B, Senior Engineer (Electrical), Ramsar Sheo WSP being felicitated by S P Singh, General Manager (Tech)



Gautam Patel, Asst Manager (IS) RO Ahmedabad being felicitated by SK Afzal, V.P (Tech)



Md. Azad Khan. Asst Manager (Admin), SWSMUP-Mainpuri (U.P.) site being felicitated by Neeraj Kumar Sr GM (Tech)



Sukhdew Mahto, TSE Operator. TS Transco -Yellaipally being felicitated by GM Rao, GM Projects



Tahiruddin Shekh, TSE Operator, TS Transco, Yellaipally being felicitated by GM Rao, **GM** Projects

And there's more

Shuvayu Majumdar, Project Manager, WBP-Purulia Pkg-1 P Suneel, Senior Engineer, SWSMUP, Bareilly-EW Mahendra Halder, Deputy Project Manager, RO Kolkata Priyabrata Majee, Senior. Engineer (Electrical), West Bengal O&M Penumotha J Rama Raju, Deputy Project Manager (Mech), GVMC, ADB-24X7 WSP Satyajit Bera., Assistant Engineer, RWSS, Odisha, Sundargarh Saradinu Gain, Assistant Engineer (Safety) WBDWSIP_HOROA,Block Lakshmi Kanta Mainan, Senior

Engineer (Electrical), RWSS-Odisha, Chendipada

Biphal Baruli, Assistant Engineer (Electrical), RWSS, Odisha, Sundargarh

Ravi Kumar Singh, Sr Engineer (Mech), UP-Amlikaur WSS Sumit Kumar Sharma, Asst. Engineer, Ramsar-Sheo Water project

Golla Survanarayana, Asst. Engineer, Ramsar-Sheo Water project

Ajay Jena, Asst.Engineer, RWSS-Balasore-Khaira

Leetesh Kumar Sain, Asst. Engineer, UP-Amlikaur WSS Sanjay Mal, Asst. Engineer, RWSS-Odisha-Chendipada

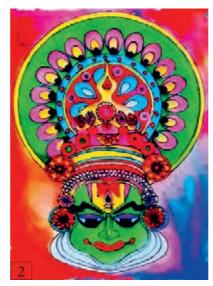
Souvik Sarkar, Asst.Engineer, WBP WSP-Purulia

Sourav Sardar, Asst.Manager (Stores), WBPWSP-Purulia Vijay Kumar, Operator (TSE) (G-4),SWSM-Kushinagar Dipankar Ghose, Asst.Manager (Stores), WBPWSP-Purulia K Prabhu, Foreman, TANGEDCO-

Ravat Ranjit Kumar Gandabhai, JE (Mech), Gujarat O&M Site Dileep Badugu, Officer (Admin), AllB-VSKP Phasell

FAMILY CORNER



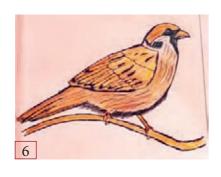












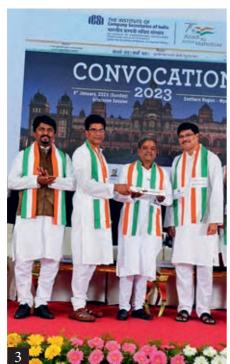


- 1. Christiano Ronaldo by Anjali, d/o Chandana Suram, AGM, Internal Audit 2. Glass Painting by Chinmayee Behera d/o, Raghunath Behera, Deputy Project Manager (Electrical), AIIMS - Guwahati 3. Painting by S Nishika, d/o S Ravi Prakash, Dy Manager (IS)
- 4. Painting by Sandhya Mishra s/o Gaurav Mishra, Asst Manager (IS), SCB Medical College Project, Cuttack Orissa.
- 5. Pen Art of Dr A V S Raju by Gorla Hanumantha Rao, Dy. Project Manager, Nalanda Project, Rajgir. 6. Painting by Sai Teja Surathu, s/o S Hema Sankar Officer(Accounts), SWSM - Sitapur, Uttar Pradesh 7. Art by **B Aruna w/o BVR Murthy**, AGM - HR, Corp.Office
- 8. Swati Rani Sahoo d/o Sisir Kumar Sahoo, Officer (Stores), SWSMUP, Lucknow project was awarded Second Prize in District level Dance Competition, organised by Maa Saraswati Puja committee Kaipara, Jajpur Odisha.

Appreciations











- 1. Bharat Shetty (SPM) and members of the erection team were appreciated for their good performance on achieving 77% of the monthly target in January 2023 at MMRDA Project, Mumbai.
- 2. Sridhar (PM) and members of the Civil Department team were appreciated for their good performance on achieving 77% of the monthly target in February 2023 at MMRDA Project, Mumbai.
- 3. M Venu Gopal, AGM (Secretarial), Corporate Office seen receiving the Certificate of Membership relating to Company Secretary Course during the Convocation held on 8 January 2023 at Vignan Bhavan, University of Mysore.
- 4. Palla S S V N E Asrita, D/o P Ramakrishnaiah, JGM (Tech), CTC Project-Chennai, scored 645 out of 720 in NEET Exam securing Telangana State Rank of 117.
- 5. Varshini N, d/o S Nagaprakash, DM, Materials Department, Chennai Trade Centre Project secured first prize in colouring of pictures.

KNOW YOUR ENGLISH

WORD POWER

At first glance, studying words and their meanings (and their correct spellings) may not appear to be a fun activity, but few areas of study can bring you more rewards in the long run. Some important reasons to increase your word power could be: you'll do better on tests, your thought process will improve, you'll better understand the things you read, and you'll impress people with your word power.

Match the word to its correct definition to test your Word Power.

1. Edifice n. ('eh-duh-fiss)

- A-) Steep Cliff
- B-) Inspiration
- C-) Large Building

2. Malleable adj. ('mal-ee-uh-bull)

- A-) Cruel

- B-) Sickly

- C-) Pliable

- 3. Fallible adj. ('fal-uh-bull) A-) Autumnal
- B-) Fertile
- C-) Imperfect

4. Babel n. ('bab-uhl)

- A-) Noisy Confusion
- B-) Skyscraper
- C-) Naughty Child

5. Addled adj. ('ad-uhld)

- A-) Egg-Shaped
- B-) Confused
- C-) Extra

Shubh Vivah

Congratulations!

Samashti wishes all young couples a long, happy married life.



Debojoti Ghosh, Intl Airport, Lucknow, married Mousumi Ghosh on 17 January 2023



Ravi Shankar Singh, TMCH Assam, married Amrita Singh on 22 February 2023



Y Sai Krishna, HMDA Kokapet, married Godha Rajashree on 01 Mar 2023



Shashikant Vishwakarma, SCB Medical College, married Pushpa on 30 March 2023.



Buchi Babu Gokapai, RO Kolkata, married SaiPriya, on 01 February 2023



Palanil Kaveri, APTIDCO Kadapa, married Priya on 26 January 2023



Panga Venkataramana, APMSIDC, Vizag, married Revathi on 24 February.2023.



Tattikota Benerjee, APMSIDC, Vizag, married Gnana Sagarika on 10 February 2023.



Prasanth Umapathy, TMCH Assam, married Ranjani Prasanth on 03 February 2023



Shyam Prasad, TMCH Assam, married Shilpi Aditya on 09 March 2023



Gaurav Dutta s/o Anima Dutta, Admn, married Manasvini Vaidyula on 10 February 2023



Devansh Sri & Mokshith Kalyan sons of Srinivasa Rao Bhogi, FRRD Gaya, birthday on 20. March 2023

Birthdays

Samashti wishes all tiny tots a very happy birthday! May you have many many more little cutie pies!



D Behazad, s/o D Baji, GVMC-ADB, Vizag, birthday on 2 January 2023



K Yashmitha d/o K Vani, HO, birthday on 25 February 2023



Suraj Kumar s/o Rajeev Kumar, Pune Metro, birthday on 09 Feb 23



G Gathvika Sai Ishani d/o G N A Ramjee, GVMC-ADB, Vizag, birthday on 1 March 2023



Gracey Aaradhya d/o K Bhimaiah, APMSIDC, celebrating her birthday



Diyanashi d/o Badukonda Durga Rao, Patna Airport, birthday on 30 March 2023



Anshika d/o Shyambihari, RWS&S, birthday on 09 March 2023



Maanvi Pal d/o Sujit Kumar, RWS&S, birthday on 09 March 2023



CLICK CLICK



Dear NCCians,

The editorial committee will select one click which is the best among the lot and a prize will be given. So, keep sending in your best clicks.

Winner of Best Click

P Surender, Chief Manager Finance receiving an award from P Vijay Kumar, VIce President Finance for the photograph of 'Clouds at Katra', which was adjudged the best click submitted to Samashti. He was presented a book as a prize.







- 1. Deybag Beach clicked by Ramdas Achari, Dy Manager Admin, Project Seabird, Karwar
- 2. Waterfall at Western Ghats clicked by Manjunath, Sr Asst Accounts, RO Bangalore
- 3. Lion in Kabini Forest clicked by Vinay Kumar, Quality Surveyor, BMRCL

Letters to the Editor

This section invites your suggestions and comments about the issue and/or about any article or news item published in it. The most meaningful letters gets highlighted in this page.

Dear Editor.

March edition looks very elegant and very good. Your editorial especially on challenges to face is appreciated.

Congratulations to you and the team.

Regards,

A S Durga Prasad Independent Director

Dear Editor.

I'm glad that Samashti is a platform to communicate and share the achievements etc of NCCians. It's always important to have a platform to showcase one's accomplishments and inspire others. Additionally, having access to knowledge about NCC can broaden our horizons and help us understand different perspectives and ideas.

Regards, Nimmagadda Rajesh Kumar Officer (EDP) Bangalore Your voice matters. It is your voice that keeps us on our toes and helps us improve. Don't let others' opinion drown your voice. Samashti is your magazine. Express yourselves freely and mail us your letters at: samashti@nccltd.in



Dear Editor.

There is no doubt that Samashti is an important communications tool that shares information about our company as well as employees, which establishes a connection between the employee and the company, resulting in fostering team spirit.

We appreciate the efforts you put to release every issue without delay. From the management writings (message), employee recognition such as birthdays or marriages, etc. to interesting stories about the people of long service in the company, Samashti is quite informative. The photos taken by staff are also showcased well in the Click Click Section.

I would request you to add a puzzle section if possible. Finally, I am very thankful to our Management and our CC team, which comes out with such a wonderful in-house magazine without any hassle or delay.

Thanks & Regards
Prasanna Kumar Donkada
Assistant Manager - EDP
Bangalore

They Said It





Prime Minister, Narendra Modi Ji has set a target before us: 'Sampurna Yiksit Bharat' Under Modi ji's leadership, it is time for the Indian industry to change size and scale. Be bold, move ahead and take India forward. Modi ji has set the year 2047 as the target (to make India a developed nation) for us, and we should all achieve this.

Minister of Home Affairs, Amit Shah while speaking as the Chief Guest at ASSOCHAM Annual Session in New Delhi



"The concept of "Seva" or service in Indian culture is much older than the idea of Corporate Social Responsibility. What we call 'Seva' (service) is deeply rooted in our society, compared to the recent concept of Corporate Social Responsibility. Our outlook towards Seva is that we do not expect anything in return for it,"

Rashtriya Swayamsevak Sangh (RSS) chief Mohan Bhagwat while speaking after the inauguration of Seva Bhavan, an institute set up to offer health services at subsidised rates. *Indian exports will be able to wither the global headwinds and will surpass growth in exports by a big margin. By 2047, the country will become a USD 30 trillion economy with 25 per cent share in exports. By the year 2030, exports from India will be USD 2 trillion.*

Union Minister of Commerce & Industry, Piyush Goyal, while speaking at the Exporters Conclave held in Chennai organised by FIEO & DGFT.

We can transfer 112,000 megawatts from one corner of the country to another. We've unified the whole country into one market. Now you can generate power in Guwahati and sell it in Tiruchirappalli or vice versa. We sanctioned distribution schemes worth Rs 2.04 lakh crore. All of this was possible through the state governments, whom we gave money. We added more than 2,900 new sub-stations and upgraded 4,000 more. We increased the availability of power in rural areas from about 12 hours in 2015 to almost 22.5 hours. We have transformed the power sector.

Minister for Power, New and Renewable Energy R K Singh while speaking on meeting global targets for climate action, streamlining power distribution and efficient harnessing of renewable energy.

ENGINEERING

MARVELS

Chenab Rail Bridge, J&K, India

The 1.315 km long Chenab Rail Bridge is a steel and concrete arch bridge between Bakkal and Kauri in the Reasi district of Jammu and Kashmir, India. The bridge spans the Chenab River at a height of 359 m (1,178 ft) above the river, making it the world's highest rail bridge.

The safety checks that have been carried out successfully include high-velocity winds test, extreme temperatures test, earthquake-prone test, and hydrological impacts due to rise in water level.

Constructed in a highly seismic prone area, the foundation of the bridge has been built to sustain an earthquake [measuring] up to eight on the Richter scale. The deck of the bridge can withstand heavy TNT blast. Even if one of the 17 piers supporting it is blown away, the bridge will not collapse.

About 28,000 tonnes of steel has been used to construct the arch bridge, which will be the final, and most crucial component of the 111-km rail line connecting Katra and Banihal. Truly an engineering marvel, the Chenab railway bridge is designed to withstand winds with speeds up to 260 kmph, and a minus 20-degree centigrade temperature.







