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25th Annual Convention
Proceedings

BUILT ENVIRONMENT

BI-MONTHLY PUBLICATION OF INDIAN BUILDINGS CONGRESS



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From President's Desk



It is my proud privilege and honour to take over as President, IBC, a prestigious professional body which has immensely contributed towards efficient, economical and competitive technology driven sustainable built environment during the last 28 years. At the outset, I would like to thank all the members in reposing confidence in me.

Due to large scale construction across the Globe and particularly in our country which, in recent past, has witnessed a scenario of speedy and unplanned urbanisation and industrialisation much ahead of planned guidelines/directives from statutory and governing local bodies, world and India in particular, is facing extinction of natural resources of construction materials in one hand and environmental pollution and unplanned growth of built environment in other hand and thereby challenge to sustainability of the built environment is felt all over.

IBC has just held its 25th Annual Convention and National Seminar on 'Sustainable Built Environment for Future' on April 28-29, 2022. Protection and conservation of the environment is best achieved by minimising land use by giving incentives, preference to vertical construction and preventing environmental harm rather than attempting to remedy or compensate for such harm. Activities which are likely to cause potential or actual harm to the environment should be identified in advance thorough environmental impact assessment and public consultation.

The traditional buildings of the past had in-built thermal comfort property and were based on climate responsive integrated passive design approach. It would still be possible for modern designers, architects and engineers to incorporate these design principles in the high rise buildings having lesser foot print by good foresight in space planning, use of recycled construction materials, use of non-conventional energy resources, minimise solid and liquid discharge, ensuring adequate public spaces in vicinity and optimum use of locally available building materials.

Creating a built environment that responds to nature full of land, water features and bio-diversity with all the flora and fauna is the way to keep a balance within the ecosystem. We need to develop a holistic approach in all our developmental projects.

In today's circumstances when the buildings consists of multiple and multi-dimensional services including onsite energy generation and processing of the waste, integrated planning and designing approach should be adopted by involving architects, structural engineers, recycled construction material experts, service engineers of all disciplines of MEP such as fire, plumbing, HVAC, IT, acoustics, interior, security, automation etc. on a single platform.

I eagerly look forward to your support and cooperation in sailing the IBC to a greater height of success and glory and seek valuable suggestions from IBC Members and fraternities of construction industry on newer topics for deliberation and recommendation in various IBC forums so as to increase contribution of IBC towards better built environment.

(Vijay Singh Verma)

IBC NEWS

Proceedings of the 25th Annual Convention and National Seminar on “Sustainable Built Environment for Future” Inaugural Session



Shri Kaushal Kishore, Union Hon'ble Minister of State, Ministry of Housing & Urban Affairs, Lighting the Ceremonial Lamp

The 25th Annual Convention and National Seminar on the theme “Sustainable Built Environment for Future” was held in NDMC Convention Centre, Sansad Marg, New Delhi, on April 28-29, 2022. The Inaugural Function was held on April 28, 2022 which

was attended by several high ranking dignitaries. Shri Kaushal Kishore, Hon'ble Union Minister of State, Ministry of Housing and Urban Affairs, Government of India was the Chief Guest of the Inaugural function.



Dignitaries on Dais

The Inaugural Function started with lighting of ceremonial lamp by the Chief Guest, who was joined by Shri Pradeep Mittal, President IBC; Shri Anoop Kumar Mittal, Immediate Past President; Shri O.P. Goel, Founder President; Shri Anant Kumar, Vice President; Shri C. Debnath, Vice President; Shri R.N. Gupta, Vice

President; Shri V.S. Verma, Vice President and Shri H.P. Gupta, Honorary Secretary, IBC.

The Chief Guest and the dignitaries on the dais were welcomed with Tulsi plant sapling which is a symbol of green as well as symbol of life and is considered the most sacred plant.



The Chief Guest welcomed by President with Tulsi plant sapling

The Proceedings started with the welcome address by the President, IBC. In his welcome address, Shri Pradeep Mittal, President, IBC, thanked the Chief Guest Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Government of India for sparing his valuable time for inaugurating the convention despite his busy schedule. He also thanked all the delegates and participants who had come from across the country to attend the Annual Convention and National Seminar.



Shri Pradeep Mittal, President, IBC delivering the Welcome Address

Shri Pradeep Mittal, President, IBC, briefly highlighted the factors which are adversely affecting our built environment and underlined the necessity of sustainable built environment for survival of life on this planet earth. He requested all the delegates to actively participate in the deliberations on the theme of the seminar where presentations are planned by the galaxy of renowned speakers in the two days long seminar. He also informed the gathering that the useful recommendations for construction of built environment which is sustainable in long run for 75-100 years, emerging out of the deliberations at the end of technical sessions shall be sent to the Central and state Government authorities including prominent builders for their consideration to implement.

Shri O.P. Goel, Founder President, IBC while addressing the gathering, informed about the successful journey of IBC during last more than 28 years and expressed his happiness over IBC maturing from its birth in 1993 into a professional body having participants from all disciplines in the built environment from all over the country. Since holding its first convention in January, 1994, the annual conventions have been held successively every year associated with a seminar on an emerging topic. He underlined the importance of sustainability which has even overshadowed the other concepts of planning, execution and structural safety etc. He expressed his concern about the reckless actions of development agencies causing environmental degradation of the planet earth. To conserve the natural resources, he suggested that waste materials from agriculture and industry should find place suitably in construction industry to avoid environmental degradation. He also expressed that in the construction, it is not the initial cost which is important but the life cycle cost has to be considered.



Shri O.P. Goel addressing the gathering

IBC Life Time Achievement Awards

IBC has constituted Life Time Achievement Award which is given every year to persons who have given outstanding contribution in the field of Built Environment. The awards were given to following well known personalities by Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Government of India.

Shri Mangu Singh: Life Time Achievement Award-2020-21 was given to Shri Mangu Singh, Former Managing Director, Delhi Metro Rail Corporation. Graduated in Civil Engineering from University of Roorkee (1979), he joined the elite Indian Railways Services of Engineers (IRSE). He is an eminent personality in promoting, development and growth of DMRC net work since its inception stage in November,

1997. Under his leadership, DMRC has grown in Network length from 190 Km to 390 Km. He is also instrumental in planning and creating Metro Rail Projects in various cities like Mumbai, Hyderabad, Bangalore, Chennai, Kolkata, Lucknow, Kochi, Jaipur, and Ahmadabad.



Shri Mangu Singh receiving Award

Shri B Majumdar: Life Time Achievement Award-2020-21 was given to Shri B. Majumdar, Former, Director General Works, CPWD. Shri B. Majumdar did B.E. in 1966 from Bengal Engineering College, Shibpur and M.Tech in Structural Engineering in 1968 from I.I.T. Kharagpur. He was actively involved in various projects like stadiums for Commonwealth Games Project, Videsh Bhavan for MEA, SEBI building in Mumbai and many more projects in South India. He also served as member in the PMU of projects of national importance. He has been active in the Indian Buildings Congress from its early days and served in various capacities as Hony. Secretary, Hony. Treasurer and finally as the President of IBC during 2005. He also worked in IBC's technical committees and contributed to several IBC publications.



Shri B Majumdar receiving Award

Prof. (Er.) O.P. Gupta: Life Time Achievement Award-2020-21 was given to Prof.(Er.) O.P.Gupta,VSM, Former Chief Engineer, MCD. Born on 2nd May, 1934, has a distinguished service record in the field of civil

engineering with an overall experience of 63 years. Shri Gupta has been decorated four times with the President of India's Medal, which includes Sangram Medal 1971; 25th Independence Anniversary Medal 1972; Meritorious Services-Medal 1979 and Vishist Sewa Medal (VSM), 1989. Prof. Gupta, VSM has Published & presented 169 Technical/ Arbitration Papers at International / National Level including 40 papers in various technical seminars of Indian Buildings Congress.



Prof. (Er.) O.P. Gupta VSM, receiving Award

Outstanding Contribution to IBC Award

Dr. Mahesh Kumar: Outstanding Contribution to IBC Award-2020-21 was given to Dr. Mahesh Kumar. He is former Engineer in Chief of Haryana Public Works Department (Building and Roads) and Engineer Member, Delhi Development Authority. He has been involved in multifarious Civil Engineering Infrastructure projects, published more than 36 technical papers in various journals. He is also associated with Indian Buildings Congress which deals with built environment. He had also been President, Indian Roads Congress and Indian Buildings Congress.



Dr. Mahesh Kumar receiving Award

Dr. Anoop Kumar Mittal: Outstanding Contribution to IBC Award-2020-21 was given to Dr. Anoop Kumar Mittal, Former Chairman cum Managing Director of NBCC (India) Limited, a Government of India Navratna Enterprise. In recognition of his work, Dr.

Mittal has been conferred with Doctor of Philosophy (Honoris Causa) by University of Rajasthan. He immensely contributed in drive of the flagship schemes like Smart Cities Mission, Housing for All, Skill India Mission, Swachh Bharat Abhiyan, and Namami Gange.



Dr. Anoop Kumar Mittal receiving Award

Shri Gian P. Mathur: Outstanding Contribution to IBC Award-2020-21 was given to Shri Gian P. Mathur, Managing Director, Gian P. Mathur Associates. With over 40 years of experience, he is a leading consultant in the architecture and design industry and one of the few Indian architects who have expertise in designing various large-scale projects, be it multi land use projects, housing, commercials, institutional, industries, Metro & Railway station development. Shri Mathur has immensely contributed in activities of Indian Buildings Congress.



Shri Gian P. Mathur receiving Award

Shri Parimal Rai, IAS (Retd.): Outstanding Contribution to IBC Award-2020-21 was conferred upon Shri Parimal Rai, a retired IAS officer of the 1985 batch and Former Chief Secretary of Government of Goa, in his absence. In his about 37 year career in the IAS he combined his professional qualifications in engineering and management with out-of-box thinking and emphatic approach to create the legacy of people centric achievement. Shri Rai was Vice President of Indian Buildings Congress during 2010 to 2015, Senior Vice President from 2015 to 2016 and President during 2016-17. He has contributed immensely in the activities of Indian Buildings Congress.

Shri Vijay Singh Verma: Outstanding Contribution to IBC Award-2020-21 was given to Shri Vijay Singh Verma, Former Engineer-in-Chief, MP PWD and Vice President, IBC. Shri Verma has varied experience in planning, designing, managing construction, administering contracts for construction. He completed about 400 km. new road network in Chhindwara district, two major bridges on Narmada River, four new medical colleges and major upgradation of existing five medical colleges in Madhya Pradesh. Shri Verma has immensely contributed in activities of Indian Buildings Congress.



Shri Vijay Singh Verma receiving Award

Smt. Satya Goel Memorial Award

Prof. (Dr.) Madhura Yadav : IBC has also constituted Smt. Satya Goel Memorial Award which is given every year to outstanding woman professionals and is instituted in memory of Smt. Satya Goel wife of Shri O.P. Goel, Founder President, IBC. Smt. Satya Goel Award-2021 was given by Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Government of India to Prof. (Dr.) Madhura Yadav.

Dr. Madhura Yadav is an Architect-Planner with over two-and-a-half-decade experience in academics, administration, and research. She has served as a Team Leader for City Development Plans of various towns of Maharashtra, Heritage Conservation of various Forts



Prof. (Dr.) Madhura Yadav receiving Award

and Slum Rehabilitation Projects. She is a recipient of several awards like Asia Pacific Global Award 2017, Education Leadership Award 2019, and Indo Pacific Architecture Excellence Award 2021 in recognition of the Sustained Commitment in Architecture Education. She is on several Committees/Expert Groups set up by the Government of India, serving as a Jury of various Architectural competitions, as a member on Editorial Board architecture, Urban Design and Urban Planning India Journals. Her current research interests are Sustainable Architecture in cities with inclusive approaches and Community-Based Participatory Research. She is currently the Dean, Faculty of Design at Manipal University, Jaipur.

Excellence in Built Environment Awards of IBC

IBC has constituted awards for Excellence in Built Environment. The following award winning projects were awarded trophies for the year 2021 by Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Government of India.



Trophy being awarded to High Rise Residential Complex on RCM 13, 14 "Anandvan-2" at IDA Scheme no.140, Indore

High Rise Residential Complex on RCM 13, 14 "Anandvan-2" at IDA Scheme no.140, Indore: On behalf of Mehta and Associates LLP, Indore, Shri Hitendra Mehta, Managing Director, Mehta & Associates, received the trophy for the Project.



Trophy being awarded to Construction of HIG 104 Nos. Flats (B+S+13), Jaipur

Construction of HIG 104 Nos., Flats (B+S+13), Jaipur: On behalf of Rajasthan Housing Board, Jaipur, Shri K.C. Meena, Chief Engineer received the Trophy for the Project.



Trophy being awarded to Construction of New Building for Rajasthan High Court at Jodhpur

Construction of New Building for Rajasthan High Court at Jodhpur: On behalf of Rajasthan State Road Development & Construction Ltd., Jaipur, Shri Suresh Sharma, Superintending Engineer, Shri Jitendra Sharma, Project Officer, Shri Subhash Arya, Dy. G.M. and Shri A.K. Mutha, Former Project Director, RSRDC Ltd., received the trophy for the project.



Trophy being awarded to C/o Deficient OTM Complex and Office of ADG for Indian Coast Guard, Coast Guard Enclave, Malkapuram

C/o Deficient OTM Complex and Office of ADG for Indian Coast Guard, Coast Guard Enclave, Malkapuram: On behalf of Central Public Works Department, Visakhapatnam, Shri P.Kanaka Raju, Chief Engineer Vijayawada, Shri K.C. Nayak, Executive Engineer (C), Shri Jacob Chacko, Executive Engineer (E), Shri M.S.N.L Sreenivas, AE (C), Shri B. Hemasundar, AE (E), Shri K. Mohan Krishna, JE (C), Shri M.V. Shivanand, JE (E), Shri Pradeep Kumar, Sr. Architect, Shri K. Sreedhar, Architect received the trophy for the project.



Trophy being awarded to Defence Office Complex at Africa Avenue New Delhi

Defence Office Complex at Africa Avenue, New Delhi: On behalf of Gian P. Mathur & Associates Pvt. Ltd., New Delhi, Shri Gian P. Mathur, Managing Director, Ms. Mitu Mathur, Director, Shri Pawan Rai, Sr. Architect and Ms. Mahima Surya received the trophy for the Project.



Trophy being awarded to Construction of Command Hospital Southern Command, Pune

Construction of Command Hospital Southern Command, Pune: On behalf of HQ Chief Engineer Pune Zone, MES, Lt. Col. Kumar Nagendra, SO-I (Wks), HQ CE Pune Zone and Shri Ghanshyam Meena, AGE B/R, received the trophy for the Project.



Trophy being awarded to Max House, New Delhi

Max House, New Delhi: On behalf of Studio Lotus, New Delhi, Shri Harshvardhan Kumawat received the trophy for the Project.



Trophy being awarded to Atal Tunnel Rohtang

Atal Tunnel Rohtang: On behalf of Border Roads Organisation, New Delhi, Lt. Gen. Rajeev Chaudhry, VSM, DGBR, Brig. C.S. Baswana, VSM, DDG, Shri George P. Cherian, Chief Engineer, DDG, Lt. Col. Aditya Puri, JD (PP), Lt. Col. Deepak Badoni, JD (HSPR) and Shri Ram Mehar received the trophy for the Project.



Trophy being awarded to Construction of Skill Development Centre and Hostel Block for IISC, Challakere Karnataka

Construction of Skill Development Centre and Hostel Block for IISC, Challakere Karnataka: On behalf of Central Public Works Department, Bangalore, Shri J.S. Behra, Executive Engineer, received the trophy for the Project.



Trophy being awarded to Redevelopment of Gandhinagar Capital Station along with Development of 5-Star Hotel at the Airspace Right above Railway Station at Gandhinagar

Redevelopment of Gandhinagar Capital Station along with Development of 5-Star Hotel at the Airspace Right above Railway Station at Gandhinagar: On behalf of Gandhinagar Railway & Urban Development Corporation Ltd, Gandhinagar, Shri V.B. Sood, CEO, IRSDC and Shri P.K. Pawan received the trophy for the Project.

IBC Commendation Certificates for Excellence in Built Environment

IBC has also constituted Commendation Certificate for Excellence in Built Environment. Commendation certificate for Excellence in Built Environment for the year 2021 were given to the following projects:

SARE Jubilee Dewy Terraces Township, Chennai: On behalf of Oscar & Ponni Architects, Chennai, Dr. Ponni Concessao and Dr. Oscar Concessao received the Commendation Certificate for the Project.

Construction of Pandit Deen Dayal Upadhyaya Institute of Archaeology : On behalf of Ramacivil India Construction Pvt. Ltd., New Delhi. Shri R.N. Gupta, CMD, Ramacivil India Construction Pvt. Ltd., received the Commendation Certificate for the Project.

Arogya Soudha: On behalf of BSR Infratech India Ltd., Bangaluru Shri S.Y. Shashi Kumar, GM Projects received the Commendation Certificate for the Project.

Citilights Information Technology Park, Navallur, Chennai: On behalf of Oscar & Ponni Architects, Chennai Dr. Ponni Concessao and Dr. Oscar Concessao received the Commendation Certificate for the Project.

Habibganj Railway Station Redevelopment Project at Bhopal: On behalf of Indian Railway Stations Development Corp. Ltd., Bhopal, Shri Ved Prakash Dudeja, Vice Chairman and Shri V.B Sood, CEO, IRSDC, received the Commendation Certificate for the Project.

Construction of Flyover at Shastri Park Intersection (6 Lane) and Seelampur (2Lane) at Delhi. SH. Ramps, Footpath, Road Work including Road Signage, Street Light Works, Drainage & allied works: On behalf of PWD, Govt. of NCT of Delhi, Shri Pradeep Kumar Parmar, Chief Engineer, Flyover Zone, Shri Iqbal Singh, Executive Engineer, Shri Dhiraj Agarwal, Assistant Executive Engineer, Shri Kumar Gaurav, Assistant Executive Engineer, Shri Shiv Kumar Meena and Shri Gaurav Ahlawat received the Commendation Certificate for the Project.

Mohalla Clinics, New Delhi: On behalf of Architecture Discipline, New Delhi Ms. Diksha Gulati received the Commendation Certificate for the Project.

Development of Indore Zoo including preparation of complete Master Plan as per norms of CZA, Delhi: On behalf of Mehta and Associates LLP, Indore Shri Hitendra Mehta, Managing Director, Mehta & Associates received the Commendation Certificate for the Project.

Construction of 100 Bedded PICU at SKMCH, Muzaffarpur, Bihar: Ahluwalia Contracts (India) Limited, New Delhi were awarded the Commendation Certificate for the Project. However, no official from them was available in the convention to receive the Commendation Certificate.

IBC Congratulates

IBC congratulates General Manoj Chandrashekhar Pande, PVSM, AVSM, VSM, ADC on his appointment as the Chief of the Indian Army. Before his appointment as Army Chief, Shri Pande, was Vice Chief of the Army. Prior to that, he was in charge of the Eastern Command—one of the six operational commands of the Indian Army, headquartered in Kolkata. Before that, he was in charge of the Andaman and Nicobar Command (ANC)—a special tri-service command that safeguards India's strategic interests in Southeast Asia.



Gallery of Awardees receiving Commendation Certificate



Dr. Ponni Concessao & Dr. Oscar Concessao receiving the Certificate



Shri R.N. Gupta receiving the Certificate



Shri S.Y. Shashi Kumar receiving the Certificate



Shri V. P. Dudeja and Shri V.B Sood receiving the Certificate



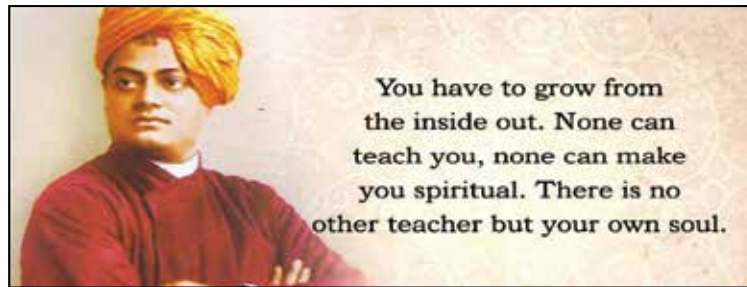
Shri P. K. Parmar, CE, Flyover Zone alongwith his team receiving the Certificate



Ms. Diksha Gulati receiving the Certificate



Shri Hitendra Mehta receiving the Commendation Certificate



IBC Presidential Awards

For contribution to Indian Buildings Congress, the Presidential awards were also given by Shri Pradeep Mittal, President, IBC to Shri Dinesh Kumar, Former, E-in-C, Delhi, PWD; Shri Jatan S. Sharma, Former Special DG, CPWD; Shri V.R.Bansal, Former Chief Engineer, North Delhi Municipal Corporation; Shri Gian P. Mathur, M/s Gian P. Mathur & Associates; Shri R.N. Gupta, Vice President, IBC; Shri Sajal Mitra, Former Executive Engineer, CPWD; Shri V.K.Sharma, Consultant; Shri N.K. Singh, Dy. Secy. (Tech.), IBC; Shri Chinmay Debnath, Vice President,

IBC and Former SE, Tripura, PWD; Shri Kashyap Kumar Gupta, Former E-in-C cum Addl. Secretary, BCD & EC Member, IBC; Shri C.L. Verma, Former Chief Engineer & Addl. Secretary, Rajasthan PWD & EC Member, IBC; Shri S.K. Agrawal, Proprietor, S.K. Agrawal & Associates & EC Member IBC; Shri Hitendra Mehta, Managing Director, Mehta & Associates & EC Member; Shri K.C. Meena, Chief Engineer, Rajasthan Housing Board and Shri P.K. Jain, Chairman, IBC Kota Centre.

Gallery of Presidential Awardees



Shri V.R. Bansal



Shri .G.P. Mathur



Shri R.N.Gupta



Shri Sajal Mitra



Shri V.K.Sharma



Shri N.K. Singh



Shri C. Debnath



Shri Kashyap Kumar Gupta



Shri C.L.Verma



Shri S.K.Agrawal



Shri Hitendra Mehta



Shri K.C.Meena



Shri P.K.Jain

Release of Technical Publications:



IBC Journal being released by Hon'ble Union Minister of State, MoHUA



Preliminary Publication being released by Hon'ble Union Minister of State, MoHUA



Special Edition of Built Environment of IBC being released by Hon'ble Union Minister of State, MoHUA

The following Technical Publications prepared by Indian Buildings Congress were released by Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Government of India.

The Sixth issue of IBC Journal, Preliminary Publication containing technical papers and Special Edition of Built Environment of IBC were released during seminar by Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA.

The Chief Guest; Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, delivered his address. In his address, Shri Kaushal Kishore expressed his concern with all the stake holders about the degradation of environment. He also expressed his concern about the rise in respiratory diseases among citizens due to degradation of atmosphere on account of the factors like pollution of water, smoke and dust which are major contributor in raising the atmospheric temperature and spoiling the quality of air. By quoting



Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA, Chief Guest, addressing the gathering

the old construction of 'Bhool Bhulaiya' at Lucknow he lauded the old architecture and construction technology used therein to build the roof constructed without use of any steel. He expressed the need of pushing further the "Make in India" campaign in achieving self-reliant India. He also advised the stake holders in the construction industry to maximise use of recycled construction materials, generate minimum C&D waste, maximise onsite solar energy generation and natural ventilation in buildings in achieving sustainable built environment and finally in reduction of Global warming. He stressed the need for adopting 'Make in India' policy and 'Vocal for Local' in creation of built environment for making 'Atam Nirbhar Bharat' and 'Local for Global'.



View of Audience



Memento being presented to Hon'ble Minister

To mark the occasion, IBC Memento was presented to the Chief Guest, Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA.

Shri H.P.Gupta, Honorary Secretary, IBC while proposing the Vote of Thanks, thanked Shri Kaushal Kishore, Hon'ble Union Minister of State, MoHUA., for



Shri H.P. Gupta, Honorary Secretary, IBC Presenting the Vote of Thanks

inaugurating the 25th Annual convention and National Seminar of IBC by sparing his valuable time despite his busy schedule. He also thanked the President, IBC in taking pains in organising the Convention and National Seminar, Media for covering the inaugural Session and to all the delegates and participants in the function as well as staff of IBC Sectt. to make the function a success.

The Inaugural Session concluded by recital of National Anthem.



Technical Session I



D.S.Sachdev, Chairman and Shri Jagdeep Singh, Co-Chairman on dais

General

The Technical Session I was held on April 28, 2022 at NDMC Convention Centre, Sansad Marg, New Delhi. The session was chaired by Shri D.S. Sachdev, Former, D.G., CPWD as Chairman. Shri Jagdeep Singh, Superintending Engineer, CPWD was the Co-Chairman of the Session. At the outset, the Chairman and the Co-Chairman of the session were welcomed by presenting Tulsi Sapling plant to them.

Opening remarks of the Chairman

The Chairman of the session in his opening remarks, while welcoming the authors, delegates and other invitees present in the session, underlined the importance of the theme of the Seminar which will remain relevant in creation of built environment for the civilization.

Papers Presented

First speaker was Shri Jit Kumar Gupta, Former Advisor (Town Planning), PUDA & Founder Director, College of Architecture, IET Bhaddal, on the topic “Decarbonising Cities through Green and Energy Efficient Buildings”. In his presentation he informed that irrational manner in creation of built environment and transportation of people, goods and services are 2 major factors for climate change and have stressed the need of more rational & thoughtful designing and construction of building and reducing the transportation distances. Buildings provide the opportunities to reduce energy consumption by simply changing the options used for planning, designing, construction and operation. Green buildings are the best option. In his presentation he discussed the distinct features, benefits of green buildings including different design strategies like designing with climate, adopting integrated approach, designing with orientation, nature, space planning, energy efficiency,

water efficiency, design efficiency, promoting high indoor quality, using materials, Retro-fitting of existing buildings etc.

Second paper was jointly presented by Shri P.S.Saini, Suptdg. Hospital Engineer, PGIMER, Chandigarh, Dr. Parampreet Kaur Ahuja, Civil Engineer, PGIMER, Chandigarh and Ar. Shivank Sharma, Consultant Arch., PGIMER, Chandigarh on the topic “Evaluation of Sustainability Development of a Tertiary Care”. In respect of the PGMIER campus at Chandigarh the authors have brought out the case study regarding sustainable green architecture Building design, Energy sustainability, water management, waste management, measures provided in the campus open areas, greenery, various green services, transportation etc. for implementing the frame work for Eco- friendly and sustainable campus development in higher Educational Institute as per the UGC guidelines.

Next speaker was Shri J.K. Choudhury, Former Chief Engineer Electrical, CPWD, who made a presentation on the topic “Towards a Net Zero Building Complex- Based on minimisation of energy consumption and maximisation of renewable energy generation”. In this paper for reduction of the energy load and to make the building Net-Zero, the author has explained the details of measures to reduce energy load through passive Architecture, providing modern energy saving glazing, roof insulation, central AC Plant, IBMS, onsite solar energy generation more than requirement, etc.

Next speaker was Sh. Rajat Chowdhury, Sr. Executive (Business Development), Electrosteel Castings Limited, Kolkata who presented his paper on the topic “Life Cycle Cost Analysis of Pipe Materials used in Water Supply”. In his presentation, the author while bringing out the importance of life cycle cost in creation of sustainable built environment, he compared the life cycle cost of the various types of pipe materials used in water supply and has concluded that life cycle cost of DI pipes (K9) is lowest.

Next speaker was Sh. Saurabh Gupta, Research Scholar, Department of Civil Engineering, Indian Institute of Technology Kanpur. He made his presentation on the topic “Circular Economy for Sustainable Construction Industry: An Indian Perspective”. In his presentation he discussed the circular economy of recycling and reuse for the Construction and Demolition Waste for sustainable construction. He has given the literature review of reuse and recycling of CDW of different countries in new construction application.

Summing up

The session was summed up by Shri D.S.Sachdev, Chairman. He briefly gave a gist of all papers presented in the session and highlighted the importance of Sustainable Built Environment. Distinctive and attractive design having minimum foot print area coupled with use of greener construction recycled materials made of waste in buildings, Energy efficiency are the key to making our building a sustainable, finely tuned, lean and green machine. Therefore, the Designers should use energy modelling software early in the design process to take advantage of the sun and wind to heat, light, and cool our building affordably. The session I ended with closing remarks from the chairman, thanking the authors for their detailed informative presentation of papers and the audience for patience hearing.

Distribution of certificates to the authors of papers

The Certificate of participation to the authors of technical papers were distributed jointly by the Chairman and Co-Chairman of the technical Session.

Kavi Sammelan-Evening

A Hasya Kavi Sammelan program in the evening was held on 28th April, 2022 in the auditorium of NDMC Convention centre at Sansad Marg, New Delhi, followed by dinner which was enjoyed by large number of participants of the Convention and Seminar.



View of Kavi Sammelan

Technical Session II



Shri Atul Kumar Garg, Chairman and Shri Jagdeep Singh, Co-Chairman on dais

General

The Technical Session II was held on April 29, 2022 at NDMC Convention Centre, Sansad Marg, New Delhi. The sessions were chaired by Shri Atul Kumar Garg, Former Chief Engineer, CPWD as Chairman. Shri Jagdeep Singh, Superintending Engineer, CPWD, was the Co-Chairman of the Session. At the outset, the Chairman and the Co-Chairman of the session were welcomed by presenting Tulsi Sapling plant to them.

Opening remarks of the Chairman

The Chairman Shri Atul Kumar Garg, Former, Chief Engineer, CPWD in his opening remarks welcomed the authors, delegates and other invitees present in the session.

Papers Presented

First speaker was Shri A.K. Jain, Former Commissioner (Planning), Delhi Development Authority, who made his presentation on the topic "7Cs of Sustainable Built Environment". In his paper he brought out that paradigm of development has not to be just economic but it should align with humane, environmental, cultural and socio-economic inclusion which means that the city provides housing, water, sanitation, electricity, and jobs to all in a sustainable environment that resonates with the local culture, climate and ecology. For achieving the sustainable overall development, he conceptualized in seven terms of Cs Circular metabolism, Climate and disaster resilience, clean air, clean water, clean transport and connectivity, clean energy, clean and natural Heritage conservation. Process of urban planning and development should shift to circular system and recycling so as to conserve the natural resources. He emphasized the need of adopting minimum mechanical systems with carbon neutral services by adoption of passive design with the sun, wind, water, earth and space. Roof top solar panels, roof top vegetation, insulation and super insulated glazing to quadruple the building performance.

Second speaker was Shri Gaurishankar Dubey, Former ED, SAIL who made his presentation on the topic “Life Cycle Costing: A Question of Value”. In his paper, he discussed the need for good decision making by the decision makers for life cycle cost analysis by including purchase cost, operating, maintenance cost, disposal cost at the end of life of product along-with longevity and warranty time frame of the asset etc. besides, factoring into various benefits that may accrue to the society. He stressed that solely relying on L-1 system in public procurement does not work well. He has also discussed the need of incorporating performance rating system in the bid evaluation process by setting a threshold value. The criteria could be product related or performance related whereas the procurers have avoided creating appropriate and more tools for analyzing LCC. The author also suggested to include few tools in LCC.

Next speaker was Prof. B.P. Suneja, Vice- Chairman, IBC Chapter Kota (Rajasthan), Former Dean (Faculty of Engineering & Architecture); Head (Civil), Rajasthan Technical University, Kota who made presentation on the topic “Role of Professional Ethics & Human Values in Sustainable Development”. His paper dealt the need of character building for society to have sustainable development. In his paper he has discussed the role of ethics, professional ethics and human values in achieving sustainable built environment/ sustainable development and efforts needed to inculcate such values through education and various healthy practices. For sustainable development he has stressed the need of overall development of people (human development) and not the development of things which should provide secure future, full of opportunities, a pleasant world and a healthy planet to live on. He has stressed the need to shift our attention and resource allocation more towards inculcating human values and professional ethics which can be achieved by emphasizing Universal Human Values in our education system like Self reliance, Character Building, Values, harmony with existence of all etc.

Next speaker was Dr. Sunil Kumar Chaudhary, Executive Engineer, Road Construction Department, Bihar, who made his presentation on the topic “Challenges in sustainable design and construction”. In his presentation he briefly touched advances in the design, construction and maintenances, current challenges and discussed in detail a case study of disaster resistant, cost effective and eco-friendly single storied 52 nos- rural houses where structure is built up of fly ash concrete in PCC of foundation, FaL-G block for foundation, bamboo column& beams, roof cladding made up of banana fibre- reinforced fly ash cement mortar composite sheets along-with internal layer of straw for better insulation, walling system of bamboo frame with 3 inches thick mud mortar duly finished with a cement mortar on external face and mud plaster on inner side and CFLs for lighting.

Next speaker was Dr. K.M. Soni, Former ADG, CPWD who made his presentation on the topic “Drainage to be infrastructure of infrastructures for Sustainable Development”. In his presentation he discussed the urban drainage system, problem of flooding in many cities due to inadequate drainage system, factors responsible for inadequate drainage system, importance of drainage infrastructure as the Infrastructures for sustainable development and has given many recommendations for the stake holders including the Governments to take up the drainage system in mission mode through special purpose vehicle.

Next speaker was Dr. Pardeep Kumar Gupta, Professor Civil Engg. Deptt., PEC, Chandigarh who presented the paper in absence of author of paper Prof.(Dr.). R.K. Khitoliya, Former Professor and Head, Civil Engineering Department, PEC, Chandigarh and Co-author Ms. Tulsi Puri, Auditor, PCDA. The speaker made presentation on the topic “Climate Change: Net Zero Demand And Sustainable Habitat”. In this presentation while quoting the National Action Plan on Climate Change with eight national missions he discussed the necessity of combating climate change. He discussed the scenario of the energy efficiency and microclimatic control Architecture in heritage buildings for review of the present day’s Architecture. He also discussed the concept of sustainable habitat by way of proper site selection, proper orientation, efficiency in design, energy, water, material, indoor environment quality, operation and maintenance optimization, waste reduction, green building materials etc. passive solar energy utilization, thermal storage, cooling strategies and high performance insulation in the direction of net zero demand buildings.

Summing up

The session was summed up by the Chairman of the session. He briefly gave a gist of all papers presented in the session and highlighted the importance of ‘Sustainable Built Environment’ in creation of built environment which is applicable not only to our day to day life but for our future generations who will be dwelling in the existing built environment. The Session II ended with closing remarks from the chairman, thanking the authors for nicely presenting the papers and the audience for patience hearing.

Distribution of Certificates to the Authors of Papers

The Certificate of participation to the authors of technical papers were distributed jointly by the Chairman and Co-Chairman of the technical session.

Author's Gallery



Jit Kumar Gupta



Dr. Parampreet Ahuja



P.S.Saini



J.K.Choudhury



Rajat Chowdhury



Saurabh Gupta



A.K.Jain



Gaurishankar Dubey



B.P.Suneja



Dr. Sunil Kumar Chaudhary



Dr. K.M.Soni



Dr. Pradeep Kr. Gupta

Valedictory Session- April 29, 2022



Dignitaries on the Dais

The Valedictory Function of 25th Annual Convention and National Seminar on “Sustainable Built Environment for Future” was held on April 29, 2022 at NDMC Convention Centre, Sansad Marg, New Delhi. Shri K. K. Kapila, CMD, ICT Pvt. Ltd and Past President, IBC, was the Chief Guest of the Valedictory Function. Chief Guest was also joined on dais by Shri Pradeep Mittal, President, IBC; Shri O.P. Goel, Founder President, IBC; Shri H.P. Gupta, Honorary Secretary, IBC and Shri M.C. Bansal, Advisor (Tech.), IBC & Chief Rapporteur. The Chief Guest was welcomed with Tulsi sapling plant which is a symbol of green as well as symbol of life and has complete health package in itself.



Chief Guest Shri K.K. Kapila being welcomed

The Valedictory function started with the Welcome Address by Shri Pradeep Mittal, President, IBC. He thanked Shri K.K. Kapila, CMD, ICT Pvt. Ltd. and Past President, IBC for having agreed to become Chief Guest and sparing his valuable time for this Valedictory session.



Shri Pradeep Mittal, President, IBC delivering the Welcome Address

The President stated that the development takes place at the cost of environment. It takes place on land which may be either forest or agricultural thereby reducing the forest or agricultural land cover. For development we need stone, sand, cement, lime, steel, bricks, timber, tiles, paints, other building materials, fuel, electricity, transport etc. Due to mining of the natural building

materials like stone and sand, the natural sources of raw materials are depleting fast. Therefore, it is the most appropriate time to take the corrective action for change of our mindset in sustainable balanced development to ensure conserving the nature. In the last two days, there have been lot of deliberations by the experts and authors of various papers in the field of sustainable built environment. He expressed his strong belief that the seminar has strengthened our vision of built environment and was of immense use to all the stake holders in enhancing their professional skills in 'Sustainable Built Environment for Future'. He further informed that technical documents which have been published by IBC are of significant use for all technocrats and other stake holders and expressed his hope that IBC will continue to scale to newer heights in future.



Shri O.P. Goel addressing the gathering

Shri O.P. Goel, Founder President, IBC in his address while welcoming the Chief Guest, Shri K.K. Kapila, CMD, ICT Pvt Ltd and past president, IBC, informed that Shri Kapila has vast knowledge of the international frame work of the tender documents as his company is working in more than 40 countries across the globe. He thanked Shri Kapila for his unflinching support and contribution to the Building industry and especially to Builders, Contractors and IBC. He further mentioned that the presentation in the last two days on various aspects of creation of Sustainable Built Environment for Future has been very interesting, informative and useful to the stakeholders. To conclude, he wished IBC to contribute its bit in the development of infrastructure in creation of sustainable built environment.

Recommendations



Shri M.C. Bansal, Chief Rapporteur presenting the Recommendations

Shri M.C. Bansal, Advisor (Technical), IBC and Chief Rapporteur briefed the gathering about the important issues brought out by the learned presenters in the Technical Sessions on 'Sustainable Built Environment for Future' and presented the Recommendations of the Seminar for consideration of all stake holders and implementation by the Central and State Governments besides various housing boards, development authorities, Municipal Corporations and prominent Builders. The recommendations are as under:

1. To prevent environmental damage during construction, environmental impact assessment should be done in initial stage rather than attempting to restore degraded environmental resources subsequently.
2. Delay in permission to start infrastructure projects under the disguise of environmental clearances should be avoided and efforts should be made to give single window clearance.
3. Building projects should be planned within easy access of public transport, medical facilities, shopping and recreational facilities resulting in saving of energy and reduction of pollution. Walking and Bicycling should be encouraged by providing pedestrian friendly paths.
4. To provide sustainable eco-friendly landscape, attempt should be made to use existing land profile/ site features by avoiding excessive cutting & filling and using site depressions for creating water bodies coupled with rainwater harvesting.
5. Keeping in view the requirements for a minimum next 50 years, all public buildings including housing projects in Government as well as in Private sector, should be mandatorily planned as

- distantly placed high rise energy efficient buildings with lesser foot print area by using the principles of solar passive architectures, having few lower floors dedicated for marketing facilities, health centre, Gym, Spa, duly provided with parking and services below Ground and large open spaces around for landscaping, to function as small township itself and to achieve comfort of users.
6. Resource conservation and waste management of materials which are important component of environment protection, should be implemented under the principle of 'Reduce', 'Recycle' and 'Reuse' by adopting an integrated systematic approach.
 7. While selecting materials for buildings, the aspects of embodied energy, associated health hazards, life cycle cost and its potential for reuse or future recycling should be mandatorily considered.
 8. Due to large deficit in demand and supply of coarse and fine aggregate, steel slag aggregate and recycled aggregate (RCA) from C&D waste (coarse as well as fine) which meets all important physical characteristics of aggregates having higher potential to reduce impact on the environment due to its resource-conservation and energy saving effects, should be encouraged.
 9. Use of self compacting concrete by optimized use of OPC by replacing up to 50% of the OPC content by ground granulated blast furnace slag should be encouraged resulting in reduction of carbon footprint due to less use of natural resources.
 10. Use of construction materials compatible with green buildings such as carbon negative cement, nano materials, autoclave aerated concrete blocks, low VOC paints, green concrete made by partial replacement of OPC with fly ash and ground granulated blast furnace slag and construction products manufactured out of industrial waste etc. should be made mandatory in all public buildings and should be encouraged by the Government.
 11. For construction in adverse atmospheric conditions like air containing salts/ near sea shore, in decomposed filled up soils, in extremely cold and hot climates, suitability of type of cement and reinforcing bars shall be got tested before use. The Special Purpose Cement and reinforcement compatible with such adverse conditions shall be used instead of normal OPC/PPC and normal TMT bars. In areas having salt in air/ near sea shores and in filled up decomposed soil, High Alumina, Blast furnace Slag cement and fibre reinforced polymer (FRP) bars have been found compatible and sustainable.
 12. The plastic recovered from non biodegradable domestic waste can be gainfully used either in hot mix plant for construction of flexible pavements or for generation of fuel oil in pyrolysis plants.
 13. Waste material like coalmine overburden and flyash mixed with 4 to 7% of cement can be utilized gainfully as a stabilised pavement material for construction of embankments.
 14. For effective water management, use of dual plumbing to utilise gray water, water efficient low flow or dual flush toilets, waterless urinals, low flow shower heads / faucet aerators and integrated installations to check leakage should be made mandatory in all public buildings.
 15. In all public building complexes, segregation of waste at source into biodegradable, hazardous, e-waste etc. along with scope of recycling should be made mandatory so as to reduce landfill area requirement.
 16. Recycled plastic could replace traditional building material as 'Polli Bricks' as used in a green building 'ECOPARK' at Taiwan.
 17. A building's heating; cooling, lighting and equipment system all interact with each other and also with building envelope and building site in complex ways. All these variables must be integrated with computer modelling and simulation tools to produce a sustainable energy efficient building.
 18. While planning and designing of high rise energy efficient buildings sited distant apart, the target should be construction of net zero or energy positive building for its complete life cycle through conservation and generation of energy by way of non-conventional sources. Facade of buildings shall be finished with solar panels for generation of energy.
 19. Government should support research, education at university level and awareness campaign through press and audio-visuals media to enable the masses about environment protection during building construction as well as during maintenance.
 20. Environment protection during construction

and maintenance should be encouraged by Government by giving suitable tax benefits to owners as well as developers.

21. Appropriate pricing mechanism should be aimed at, so as to encourage reduction in waste generation by households. Tax exemption should be given for products made of recycled waste so as to encourage recycling.

After the reading out of the technical recommendations, awards were presented as below to the authors of the best papers out of the papers presented, as have been selected by the jury:

S.P. Jakhanwal Best Paper Award:



Shri Shashi Kant receiving S.P. Jakhanwal Best Paper Award on behalf of Shri Ram Babu Prasad

Paper on “Construction of Buddha Samyak Darshan Sangrahalaya and Smriti Stupa at Vaishali, using Green & Sustainable Construction Techniques” presented during Mid Term Session & Seminar on “Green and Energy Efficient Buildings” held on 18th August, 2021 at New Delhi, by Shri Ram Babu Prasad, Executive Engineer, Building Construction Department, Govt. of Bihar, was awarded S.P. Jakhanwal best paper Award for the year 2021. On behalf of Shri Ram Babu Prasad, the award was received by Sh Shashi Kant.

IBC Awards for Best Paper

The IBC Awards for best papers presented during 24th Annual Convention and National Seminar on “Development of New Greenfield Townships” held on 06-08 January 2020 at New Delhi were given to following authors:

Shri Jit Kumar Gupta, Former Advisor (Town Planning), PUDA & Founder Director, College of Architecture, IET Bhaddal, was awarded IBC Medal for his Paper on “Planning for Sustainable New Cities in India”.

Dr. K. M. Soni, Former Additional Director General, CPWD was awarded IBC Medal for his Paper on

“Greenfield and Brownfield Township Development”.

Sh Anish Kundu, Assistant General Manager (Architecture), Dr. Gursharan Jeet Kaur, Senior Manager (Architecture) and Sh Anish Mahala, Manager (Architecture), Structural Division, Engineers India Limited, were jointly awarded IBC Medal for their Paper on “Sustainability and Urbanization in Ecologically Sensitive Region – Case study LEH”. Shri Ashish Kundu and Dr. Gursharan Jeet Kaur received the medal for all the three authors of their award winning paper.

Ms. Usha Batra, Former Special Director General, CPWD, was awarded IBC Commendation Certificate for her Paper on “Eco-Friendly Greenfield Development”.

Dr. Sunil Kumar Chaudhary, Executive Engineer, Road Construction Department, National Highway (North), Bihar, was awarded IBC Commendation Certificate for his Paper on “Environmental Sustainability for Green field Township”.

Shri Saurabh Gupta, Research Scholar, Department of Civil Engineering, IIT Kanpur, was awarded IBC Commendation Certificate for his Paper on “A Comparative Study of Global & Indian Parameters Used in Planning of Greenfield Townships”.

Ms. Vennamaneni Sruthi, Faculty, National Academy of Construction, Hyderabad, was awarded IBC Commendation Certificate for her Paper on “Sustainable Parking Space in Built environment”.

The IBC Awards for best papers presented during Mid-Term Session and Seminar on “Green and Energy Efficient Buildings” held on 18th August, 2022 at New Delhi were given to following authors:

Shri A.K. Jain, Former Commissioner (Planning), Delhi Development Authority, was awarded IBC Medal for his Paper on “Covid-19 and the Concepts of Green and Hygienic Buildings”.

Prof. (Dr.) R.K. Khitoliya, Prof. (Dr.) Pardeep Kumar Gupta, Civil Engg. Deptt., Punjab Engg. College Chandigarh and Shri Harpuneet Singh Raina, Former P.G.Student, were jointly awarded IBC Medal for their Paper on “Study of Future Prospects of Net Zero Energy Building- A case Study”. Prof. (Dr.) R.K.Khitoliya and Prof.(Dr.) Pardeep Kumar Gupta received the medal for all the three authors of their award winning paper.

Dr. Deepak Sundrani, Sr. Associate Professor, NICMAR, Pune was awarded IBC Commendation Certificate for his Paper on “Green & Energy Efficient Buildings: A Case Study of Suzlon One Earth, Pune”.

Gallery of Best Paper Awardees

Awardees for best papers presented during 24th Annual Convention and National Seminar on “Development of New Greenfield Townships” held on 06-08 January 2020 at New Delhi



Shri Jit Kumar Gupta receiving Medal



Dr. K.M.Soni receiving Medal



Shri Anish Kundu & Dr. Gursharan Jeet Kaurreceiving Medal



Dr. Sunil Kumar Chaudhary receiving Commendation Certificate



Shri Saurabh Gupta receiving Commendation Certificate

Awardees for best papers presented during Mid-Term Session and Seminar on “Green and Energy Efficient Buildings” held on 18th August, 2022 at New Delhi



Shri A.K.Jain receiving Medal



Prof. (Dr.) R.K.Khitoliya receiving Medal



Prof. (Dr.) Pardeep Kumar Gupta receiving Medal

IBC Award for Best Paper Presented in Webinars

To keep the technical activities of IBC alive during the pandemic of COVID-19, when physical meetings were prohibited, the IBC held number of Webinars as per the list given in this issue. The IBC Medals for best papers presented in webinars during April 2020 to October-2021 were given to following authors by the President, IBC.

Shri Vishal Kapur, Chief Technical Committee ISHRAE, for his Technical talk / lecture on the topic “How to Use Air-Conditioners in Covid - 19 Times” delivered in the Webinar held online through virtual platform on April 29, 2020.

Prof. B. P. Suneja, Dean (FOEA), Raj. Tech. Univ. Kota, for his lecture on the topic “Role of Professionals in New Education Policy” delivered in the Webinar held online through virtual platform on May 7, 2021.

Prof. Raj Nehru, Hon. Vice Chancellor, Skill Univ. Gurugram for his lecture on the topic “Role of Professionals in New Education Policy” delivered in the Webinar held online through virtual platform on May 7, 2021.

Shri Salil Rai Shrivastava, Addl, CEO, Nava Raipur, Atal Nagar Smart City Corporation Ltd & E-in-C Nava Raipur Atal Nagar Vikas Pradhikaran, for his Technical talk / lecture on the topic “COVID 19 and revisions necessary for Planning of Smart Cities” delivered in the

Webinar held online through virtual platform on May 19, 2020.

Shri Hitesh Vaidya, Director, NIUA, for his Technical talk / lecture on the topic “COVID 19 and revisions necessary for Planning of Smart Cities” delivered in the Webinar held online through virtual platform on May 19, 2020.

Ms. E. Jayashree Kurup, Editor in Chief, MBTV, for her Technical talk / lecture on the topic “Exodus of Migrant Workers from Construction Industry-Effects & Various Mitigation measures including Housing for Construction Workers” delivered in the Webinar held online through virtual platform on June 9, 2020.

Dr. Sanjay Kumar Tomar, Divisional Officer, Fire Prevention Wing, Delhi Fire Service, for his technical presentation on the topic “Fire Safety In High Rise Buildings” delivered in the Webinar held online through virtual platform on July 30, 2020.

Shri R.K. Kakar, Former Chief Architect, CPWD, for his Technical presentation/ lecture on the topic “Sustainable Architecture Strategies- Earth provides enough to satisfy everyman’s needs but not anyone’s

greed” delivered in the Webinar held online through virtual platform on August 01, 2020.

Smt. Pratibha Pal, IAS, Commissioner, Indore Municipal Corporation, for her Technical talk / lecture on the topic “Making of Clean Indore” delivered in the Seminar held at Indore on the topic “Making of Clean Indore & Making of Statue of Unity” on September 04, 2021. On behalf of Smt. Pratibha Pal, IAS, Commissioner, Indore Municipal Corporation, Shri Anoop Goyal, Executive Engineer received the IBC Medal.

Major Edmund Keen, Project Manager, Turner International, for his Technical talk / lecture on the topic “Making of Statue of Unity” delivered in the Seminar held at Indore on the topic “Making of Clean Indore & Making of Statue of Unity” on September 04, 2021.

Shri V. Gopi Nath, Head, BIS, Raipur, for his Technical talk / lecture on the topic “Sustainable Development Goals through Shared Vision for Better World” delivered in the Webinar held online through virtual platform on Oct. 20, 2021.

NOTICE

Complaints are regularly received from the members, both individuals as well as Institutional, about the non-receipt of the IBC publications and other correspondence, even though the HQ takes every precaution to send IBC publications to each and every member. It is, however, seen that a large number of IBC publications sent to the members by registered post are returned undelivered to IBC HQ. Similarly, it is believed that an even more number of Built-environment and other correspondence, which are sent through ordinary post, do not reach the intended recipient because of the change in address due to shifting or transfer etc.


Similarly, a large number of information about the IBC activities is sent to the members through e-mail. In this case also, a number of e-mails get bounced due to some reason or the other due to which members are deprived of some important and useful information.

It has, therefore, been decided to update the data base of all such members at the IBC Headquarters.

All such members, who are not receiving the IBC publications or e-mails from the IBC HQ, are, therefore, requested to fill in the following proforma and send it to IBC HQ through e-mail at membership.ibc2022@gmail.com or by post to the Indian Buildings Congress, Kama Koti Marg, Sector-VI, R K Puram, Delhi-110022.

All the Chapter President and Secretaries are also requested to ensure that the form is got filled up by all such members of their chapter.

Regards


(VR BANSAL)
Hon Sec., IBC

INDIAN BUILDINGS CONGRESS MEMBERSHIP DATA BASE UPDATION FORM (Membership no...) PLEASE FILL THE FORM IN BLOCK LETTERS

Full Name: Mr./Ms.....

*Date of Birth.....

Address :.....

City.....Pin.....State.....

Occupation:.....

*Phones:(Office).....(Residence).....

Mobile:

*Email:.....

*PAN Card No.:.....

*Mandatory fields

Kindly fill the IBC Membership Database Up-dation Form and send the same at membership.ibc2022@gmail.com or to the Indian Buildings Congress, Kama Koti Marg, Sector-VI, RK Puram, Delhi-110022.

Gallery of Awardees who presented best paper in Webinars



Prof. B.P.Suneja receiving Medal



Prof. Raj Nehru receiving Medal



Shri Salil Rai Shrivastava receiving Medal



Dr. Sanjay Kumar Tomar receiving Medal



Shri R.K.Kakar receiving Medal



Shri Anoop Goyal receiving Medal on behalf of Smt. Pratibha Pal



Major Edmund Keen receiving Medal



Chief Guest Shri K.K. Kapila, delivering his Valedictory Address

Shri K.K.Kapila, CMD, M/s ICT Pvt. Ltd., & Past President, IBC, the Chief Guest of the Valedictory session, in his address echoed the need of ensuring Sustainability in long run in creation of Built Environment for urbanisation especially for the upcoming townships/cities. He gave an account of how he could arrange to convince the authorities during the period of 2008 when he was holding rein of IBC as President, in creation of frame work to compensate the builders and contractors in reimbursement of additional financial burden due to exponential rise in prices of Steel and Cement. He also briefed the gathering as to how he has been instrumental and could finally succeed recently on 29th October, 2021 in getting the GFR amended in bringing requisite changes. Now, it is no longer necessary to award work at least cost and dispensing with the necessity of minimum two quotes to compare the rates, in the interest of getting good quality work. The works of all the three mode of procurements i.e. Consultants, Contractors and Goods can be awarded at lowest workable rates and not at the least rates. He also expressed the necessity of Electrical, Air-conditioning, Elevator & Escalator groups, Manufacturers of Cranes, Backhoe, Loaders, Lifts and all other construction machineries of Ready Mix Concrete to get integrated in the building industry so that everyone is part of IBC to make it a robust and strong organisation. He emphasised the need of getting outstanding professionals into IBC's fold.

IBC memento was presented to Shri K.K.Kapila, the Chief Guest and Shri Pradeep Mittal, President, IBC

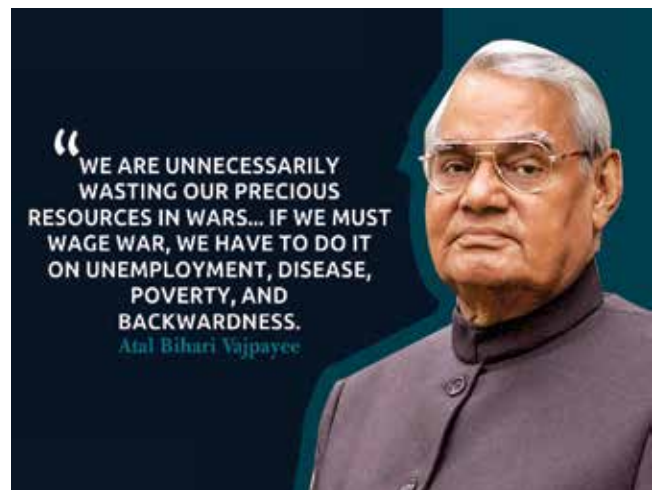


Shri H.P.Gupta, Honorary Secretary, IBC proposed the Vote of thanks. He thanked the Chief Guest of Valedictory Session Shri K.K.Kapila, CMD, ICT Pvt. Ltd. and Past President, IBC, for sparing their valuable time to grace the occasion despite his busy schedule. He also thanked him for his unflinching support to the IBC. He mentioned that 25th Annual convention and National seminar on 'Sustainable Built Environment for Future' held for 2 days was wonderful. He thanked Shri Pradeep Mittal, President, IBC in taking pains in organising the convention and Seminar. He also conveyed his thanks to NDMC staff for making all the arrangements to make the seminar successful. He also thanked Co-Sponsors, delegates, authors, media persons, Founder President, all the office bearers and members of GC who have helped immensely in organizing the 2 day event and making it successful. He also thanked the IBC Secretariat staff for their untiring efforts and continued support in making the event successful. He also expressed to get similar support from everybody in future.



Shri H.P.Gupta, Hony. Secy., IBC proposing Vote of Thanks

The Vote of thanks was followed by playing of IBC song. The Valedictory Session concluded by recitation of National Anthem.



“ WE ARE UNNECESSARILY WASTING OUR PRECIOUS RESOURCES IN WARS... IF WE MUST WAGE WAR, WE HAVE TO DO IT ON UNEMPLOYMENT, DISEASE, POVERTY, AND BACKWARDNESS. Atal Bihari Vajpayee

List of Webinars

S. No.	Date	Name
1.	April, 29, 2020	Webinar on How to Use Air-Conditioners in Covid - 19 Times (Jointly IBC and ISHRAE)
2.	May 3, 2020	Webinar on Impact of COVID-19 on Construction Industry
3.	May 19, 2020	Webinar on COVID 19 and revisions necessary for Planning of Smart Cities
4.	June 9, 2020	Webinar on Exodus of Migrant Workers from Construction Industry-Effects & Various Mitigation measures including Housing for Construction Workers
5.	June 26, 2020	Webinar on Mechanization of construction sector in India to Make it globally competitive
6.	July 20, 2020	Webinar on Sewage Treatment plant (Johkasou) in water management and Pollution abatement
7.	July 21, 2020	Webinar on A Holistic Approach to Waterproofing and Thermal Insulation of Buildings
8.	July 30, 2020	Webinar on Fire Safety in High Rise Buildings
9.	Aug. 1, 2020	Webinar on Sustainable Architecture Strategies
10.	Aug.6, 2020	Webinar on Importance of Quality Based Selection of Consultant for Quality Control and Supervision
11.	Aug. 22, 2020	Webinar on Development Vis-à-vis Conservation
12.	Sept. 15, 2020	Webinar on Role of Engineers for Development of Country
13.	Sept. 23, 2020	Webinar on Artificial Intelligence in Construction Management
14.	Oct. 6, 2020	Webinar on Simple & Comprehensive Building Estimating
15.	Nov. 2, 2020	Webinar on Innovation and Patent
16.	Dec. 16, 2020	Webinar on ENTRAPPED DAMPNESS - The CANCER of RCC Structures: its causes, impacts & Management to increase their AUL (ACTUAL USABLE LIFE)
17.	April 20, 2021	Webinar on Reimagining Indian Urbanism and Design
18.	April 28, 2021	Webinar on Fire Safety in Buildings
19.	May 7, 2021	Webinar on Role of Professionals In New Education Policy
List of Webinars of Local Centres		
20.	May 17, 2020	Webinar on Future Trends of Building Construction Industry - Role of PMC (Jointly IBC and Mumbai Chapter)
21.	May 17, 2020	Webinar on 'Testing and Purification of Drinking Water (Jointly IBC and Bihar Chapter)
22.	May 31, 2020	Webinar on Challenges for Building Repair Industry due to Covid-19 (Jointly IBC and Mumbai Chapter)
23.	Feb. 27, 2021	Webinar on Challenges before Building Industry due to Covid-19 (Jointly IBC, Kota and Raj. Housing Board)
24.	Sept. 4, 2021	Making of Clean Indore & making of Statue of Unity
25.	Oct. 20, 2021	Sustainable Development Goals through shared vision for a better world

IBC GOVERNING COUNCIL MEETINGS

99th Governing Council



99th Governing Council Meeting in Progress

The 99th meeting of Governing Council of IBC was held on April 27, 2022 in Conference Hall of IBC, Sector-6, R.K. Puram, New Delhi. About 50 Governing Council Members including permanent and Special Invitees were present. The following important decisions were arrived at during the Council Meeting.

- The minutes of 98th Governing Council meeting were confirmed unanimously.
- Hony. Secretary requested the GC members to make personal efforts to pursue the members whom they could approach for payment of arrears.
- GC ratified the enrolment of 59 Individual Members (M.No ML 9350-9407), 2 Institutional Members (IM 90209 -90210) and 44 Student Members (SM 80296 to 80338) enrolled after 98th GC meeting.
- GC approved the Annual Report of IBC for 2020-2022 unanimously.
- GC approved the Audited Accounts of IBC for F.Y. 2019-20 & F.Y. 2020-2021 unanimously.

100th Governing Council



100th Governing Council Meeting in Progress

The 100th meeting of Governing Council of IBC was held on April 29, 2022 in NDMC Convention Centre,

New Delhi. About 68 Governing Council Members including Special, Permanent Invitees and staff of IBC

Sectt. were present. The following important decisions were arrived at during the Council Meeting.

- Shri V.R. Bansal was co-opted to the new Governing Council under Rule 9.4.2 of Rules and Regulations of IBC.
- Maj. Gen. Ashok Kumar, Director General (W), E-in-C Branch; Shri K.C. Meena, Chief Engineer, Rajasthan Housing Board; Shri Rakesh Kumar, Engineer-in-Chief, BCD; Shri Chinmay Debnath, Fmr SE (Bldg), Tripura PWD and Shri S.K. Agrawal, Proprietor, S.K. Agrawal & Associates were declared as Vice Presidents for the year 2022-23.
- Shri Vijay Singh Verma was elected as President of IBC for the year 2022-23
- Shri V.R. Bansal, Former Chief Engineer, North MCD was appointed as Hony. Secretary for the year 2022-23.
- Shri Achal Jain, Chief Project Director (L&A), Indian Railways was appointed as Hony. Treasurer for the year 2022-23
- Under Rule 9.4.2 of IBC, Governing Council authorized the new Executive Committee to co-opt the remaining Governing Council members. Members were requested to send their suggestions regarding nominations, if any, positively within 7 days so that suggested names could be considered for co-option by Executive Committee.
- The Governing Council authorized the new President to fill up the vacancies that have remained vacant under Rule no. 9.1.3.1 to 9.1.3.10 of the Rules & Regulations of IBC.

25th Annual General Meeting



Dignitaries on Dais

25th Annual General Meeting was held on April 28, 2022 in NDMC, New Delhi. Besides the normal business, the following members of IBC were elected/ nominated to serve on Governing Council for the year 2022-23, under various clauses of IBC Rules.

9.1.1. Designated Members –

- | | |
|---|--|
| 9.1.1.1. Director General, CPWD | Shri Shailendra Sharma |
| 9.1.1.2. Engineer-in-Chief, IHQ | Lt. Gen. Harpal Singh, PVSM, AVSM, VSM |
| 9.1.1.3. Member Engg., Railway Board | Shri O.P.Singh |
| 9.1.1.4. CMD, HUDCO | Shri Kamran Rizvi, IAS, |
| 9.1.1.5. Vice Chairman, DDA | Shri Manish Kumar Gupta, IAS |
| 9.1.1.6. Director C.B.R.I., Rookee | Dr. N. Gopalkrishnan |
| 9.1.1.7. Founder President IBC for Life | Shri O.P. Goel Former DG (W), CPWD |

- 9.1.1.8 Immediate Past President, IBC for a period of three years
- i) Shri Pradeep Mittal
- ii) Dr. A.K. Mittal
Former CMD, NBCC (India) Limited
- iii) Shri Abhai Sinha Fmr. Director General, CPWD
Shri H.P. Gupta
- 9.1.1.9 Immediate Past Secretary, IBC for a period of three years
- 9.1.1.10 Chairmen of Local Chapters of IBC which have more than 100 Members.
- i) Chairman, IBC Bihar Centre
Shri Rakesh Kumar
E-in-C-cum-Addl Commissioner-cum Spl Secretary, BCD
- ii) Chairman, IBC Chandigarh Centre
Shri Mukesh Anand, Fmr. CE
- iii) Chairman, IBC Chhattisgarh Centre
Shri Shailendra Sharma
- iv) Chairman, IBC Gujarat Centre
Shri S.B. Vasava E-in-C & Secretary (BR)
- v) Chairman, IBC Jaipur Centre
C.L. Verma Fmr. CE & Addl Secy., PWD
- vi) Chairman, IBC Jharkhand Centre
Shri Lalit Kumar Tibrewal Fmr. ED, JSBCCM
- vii) Chairman, IBC Jodhpur Centre
Shri Jitendra Mal Mehta, M.D. RSRDC, Ltd.
- viii) Chairman, IBC Kota Centre
Shri P.K. Jain Fmr. CE(Bldgs.)
- ix) Chairman, IBC Madhya Pradesh Centre
Shri V.S. Verma, E-in-C, MP, PWD
- x) Chairman, IBC Odisha Centre
Er. Jibana Nanda Nayak, C E (Bldgs)
- ix) Chairman, IBC Telangana Centre
Shri I. Ganapathi Reddy, E-in-C (R&B) Bldg
- x) Chairman, IBC Tripura Centre
Shri S.K. Nandi Dy. Secretary, PWD
- xi) Chairman, IBC West Bengal Centre
Shri B.K. Dam Retd. Chief Engineer
- 9.1.1.11 Heads of Pillar Member
Shri P.K. Gupta, CMD, NBCC (India) Limited

9.1.2 - Nominated Members

9.1.2.2. Representatives from Participating Administrations:-

- i) Bihar
Shri Sunil Choudhary, CE, BCD
- ii) UT Chandigarh
Shri C.B. Ojha, CE cum Spl. Secretary (Engg)
- iii) Delhi
Shri Sanjeev Rastogi, CE, Delhi PWD
- iv) Gujarat
Shr H.C. Modi, MD, GSRDCL
- v) Himachal Pradesh
Shri Pawan Kumar Sharma, CE cum Project Director, SRP, HPRIDC
- vi) Jammu & Kashmir
Shri Shaukat Jeelani Pandit, CE, PW(R&B Deptt.
- vii) Kerala
Smt. Beena. L., Chief Engineer (Bldgs)
- viii) Madhya Pradesh
A.R. Singh, Chief Architect, MP PWD
- ix) Maharashtra
Shri Rajendra Krishna Rao Jawanjal,
Sr. SE, Maharashtra PWD
- x) Odisha
Shri Bijoy Chandra Tripathy, E-in-C(Bldg) Works Deptt.
- xi) Tamil Nadu
Shri M. Raja Mohan, E-in-C (Bldgs)
- xii) Uttarakhand
Shri Ashok Kumar, CE (Level-II) PWD, Utharakhand

9.1.2.3 Representatives of:

- i) Bureau of Indian Standards
Shri Sanjay Pant, DDG
- ii) B.M.T.P.C.
Dr. Shailesh Kumar Agarwal, ED

9.1.2.4 Representatives of -

- i) Institution of Engineers (I) Shri Dinesh Kumar, Fmr. E-in-C, Delhi PWD
- ii) Institution of Town Planners Shri Shireesh Balwant Khodankar, Secy. Gen., ITPI

9.1.2.7 Representatives of NHB, LIC & GIC

- i) Life Insurance Corp. of India Shri P.K. Sangam, Executive Director

9.1.2.8 Addl. Representatives of Founder Members

- i) E-in-C's Branch, IHQ Maj. Gen. Ashok Kumar, DG Works
- ii) CBRI Dr. Ashok Kumar, Chief Scientist
- iii) Railways Shri Achal Jain, Chief Project Director
- iv) DDA Shri D.C. Goel, Engineer Member

9.1.2.9 Addl. Representatives of Pillar Members

- i) NBCC (India) Limited Shri Pradeep Sharma, General Manager (Engg.)

9.1.3. Elected members (under Rules 9.1.3.1 to 9.1.3.10)

9.1.3.1 (i) Representatives of State Housing Boards

- (a) Shri Rajeev Singla from Chandigarh Housing Board
- (b) Shri K.C. Meena, Chief Engineer, Rajasthan Housing Board.

9.1.3.1 (ii) Representative of Private Sector Organisations, Institutional members of IBC

- (a) Sh. Sudhanshu Shekhar Rai.,CGM, BSBCCL, Patna

9.1.3.2 Representative of Educational/ Research Institutions, IITs, Universities, Engineering Colleges.

- (a) Dr. Prashant Mukherjee from Engineering Colleges.

9.1.3.5 Representatives of Builders Associations (other than the Builders Association of India and Builders Federation of India).

- (a) Shri Rajesh Bahl from MES Builders Association
- (b) Shri Parduman Ahuja from DDA Builders Association

9.1.3.6 Representatives of Architects

- (a) Shri Jit Kumar Gupta
- (b) Shri Devendra Kumar Mangal

9.1.3.7 Representatives of Consulting Engineers

- (a) Shri P.S. Chadha
- (b) Shri Vasu Dev

9.1.3.8 Representatives of Public health, Electrical and Mechanical Engineers

- (a) Shri Avadhesh Kumar from Public Health Engineering.
- (b) Shri Sudhir Kumar from Electrical Engineering.
- (c) Lt. Col Onkar C. Bhandurje from Mechanical Engineering.

9.1.3.9 Representatives of Town planners

- (a) Ar. Purushottam P Doijode from Town Planners.

9.1.3.10 Ordinary members of IBC and representatives of Institutional Members of IBC from representative States -

- | | |
|---|---|
| <p>1. Bihar
(i) Shri Binod Kumar Jha
(ii) Shri Deepak Kumar Baxi</p> <p>2. Chhattisgarh
(i) Shri Alok Mahawar and
(ii) Shri S.K. Agrawal</p> <p>3. Delhi
(i) Shri Sanjeev Bansal
(ii) Shri Atul Garg
(iii) Shri Sanjeev Kumar</p> <p>4. Gujarat
(i) Shri Ashok Moitra</p> <p>5. Haryana
(i) Shri Balbir Singh Sheokand</p> <p>6. J & K
(i) Shri Rabinder Shekhar</p> <p>7. Karnataka
(i) Shri K.L. Mohan Rao</p> <p>8. Madhya Pradesh
(i) Shri Surendra Rao Gourkhede</p> | <p>9. Maharashtra
(i) Shri Shamu S. Tapre</p> <p>10. Punjab
(i) Shri Mukul Aggarwal</p> <p>11. Rajasthan
(i) Shri Nagesh Chand Sharma
(ii) Shri Chandra Lal Verma
(iii) Shri G.P. Sharma</p> <p>12. Telangana
(i) Shri S.V. Satyanarayana Rao</p> <p>13. Tripura
(i) Shri C. Debnath</p> <p>14. Uttar Pradesh
(i) Shri Pratap Singh</p> <p>15. Uttarakhand
(i) Shri Kewal Krishan Verma</p> <p>16. West Bengal
(i) Shri Kalyanmoy Mitra
(ii) Ms. Nupur Banerjee</p> |
|---|---|

AGM approved the Annual Report of the IBC for the year 2020-21 and Audited Statement of Accounts for the year 2020-21 along with Balance Sheet.

M/s N.K. Goel & Bros., Chartered Accountants were re-appointed as Auditors of IBC for the next term.

NOTICE

In order to keep the data related to centers updated, it is requested to each of the chapter president/secretary to visit the web-site under the heading 'State/local Chapters' and check the details provided therein. In case of any change is required to be made in the data provided therein, the President/Secretary of the Chapter Concerned are requested to fill in the following proforma and send it to IBC HQ through e-mail at e-mail ID "indianbldgscongress@gmail.com".

Also, the correspondence address of the state/local center be provided for up-dation in our records as well as on the web-site of IBC.

This may please be treated as MOST URGENT.



(VR Bansal)
Hon. Sec, IBC

**INDIAN BUILDINGS CONGRESS
CHAPTER DATA BASE UPDATION FORM
(Chapter.....)
PLEASE FILL THE FORM IN BLOCK LETTERS**

Full Name: Mr./Ms.....
Position held in Chapter: President/ Secretary.....
Membership no......
***Date of Birth**.....
Address:.....

City.....**Pin**.....**State**.....
Occupation:.....
***Phone/s:(Office)**.....**(Residence)**.....
Mobile:
***Email:**.....
***PAN Card No.:**.....

Signatures of President/Secretary

***Mandatory fields**
 Kindly fill the IBC Chapters Database Up-dation Form and send the same at indianbldgscongress@gmail.com or to the Indian Buildings Congress, Kama Koti Marg, Sector-VI, RK Puram, Delhi-110022.

MEET THE NEW EXECUTIVE COMMITTEE OF IBC



Vijay Singh Verma, President

Shri Vijay Singh Verma Former Engineer-in-Chief, MP, PWD did his graduation in Civil Engineering; Post graduation in Foundation, Comprehensive Project Management, Material Design and Structural Design from Toronto University Canada. He has 38 years of work experience in planning, designing, managing construction, administering contracts for construction of roads/bridges/buildings. He completed about 400 km new road network in Chhindwara district, two major bridges on Narmada River, four new medical colleges and major upgradation of existing five medical colleges in Madhya Pradesh. At present, he is working as Director (Tech.) MP State Tourism Development Corporation.



Pradeep Mittal, Immediate Past President

Shri Pradeep Mittal, is MBA and a Builder by profession. He has attended Technology Exchange Programme on “Energy Efficient Building Materials” held in Germany. Apart from his involvement in the built environment, he is an active member of many social and philanthropic societies. He is holding the prestigious post of National Chairman of Akhil Bhartiya Aggarwal Sangathan. He is President of ‘Snehi Path’, an organization working for handicapped and old age people, He is Vice President, GIEO GITA, an organization spreading the message of GITA all around the world. He is General Secretary of Shri Annshetra Ashram Trust which is constructing Gyan Mandir, a Rs 100 crore project at Kurukshetra which will be highest temple in world. He is also the Chairman of Sri Ram

Technical Educational Society. His association with the Indian Buildings Congress is from the very inception of IBC. He actively contributes to the technical and other activities of the IBC. He earlier served as Vice President for three years and Honorary Secretary for eight years.



O.P. Goel, Founder President

Former Director General, CPWD, Shri Goel was the prime force in establishing IBC, brick by brick as Founder President and has vast experience in all facets of Building Engineering which include besides various types of buildings viz. residential, Institutional and Infrastructural and highways, intricate projects like chimneys, towers, dams, barrages, bridges, water supply and sewerage plants in India, Nepal and Iraq. He was President of the Institution of Engineers (India), Indian Institution of Technical Arbitrators and International Council of Consultants. He was Vice-President of Indian Council of Arbitration and Indian Roads Congress. He has been conferred Lifetime Achievement Award by CPWD, IBC and Institution of Engineers (India). He continues to be a guiding

force for IBC, giving valuable suggestions.



Maj. Gen. Ashok Kumar, Vice President

Maj. Gen. Ashok Kumar is an alumnus of IMA Dehradun and was commissioned on 19th Dec. 1987. His academic qualification includes B.Sc (Physics) from Bombay University, B.Tech. (Civil) & M. Tech. (Structures) from Jawaharlal Nehru University, M. Phil from Madras University and MMS degree from Osmania University. He has attended many a prestigious courses in the Army including the course at National Defence College, New Delhi. The General officer is presently tenanted the appointment of Director General Works at the E-in-C's Branch.



K.C. Meena, Vice President

Shri Kailash Chand Meena born on 30th June, 1963, did Bachelor of Engineering (Civil) from M.B.M Engineering College, Jodhpur in the year of 1985 and M. Tech. from Jagannath University, Jaipur, Rajasthan. He joined Rajasthan Housing Board in the year 1989 as Assistant Engineer. He is member of IBC, IRC, IGBC and RAJREDCO and Governing Council members of IBC since last five years. At present he is working as Chief Engineer in Rajasthan Housing Board since Oct. 2011.



Rakesh Kumar, Vice President

Shri Rakesh Kumar born on 16th Jan., 1963 is a Civil Engineering Graduate. He is working as Engineer-in-Chief in Building Construction Department Patna, Bihar. He has worked in various capacities and has varied experience in planning, design, construction and maintenance of infrastructure. He has also worked as Chief General Manager in BSBCCL. Presently, he is also Chairman of IBC Bihar Chapter.



Chinmay Debnath, Vice President

Shri Chinmay Debnath, graduate in Civil Engineering is Former Superintending Engineer, PWD (Bldg.) Tripura. Important jobs executed by him during his 35 years of experience include high rise buildings of Agartala Govt. Medical College, Tripura Medical College, IGM Hospital and Water Treatment Plants in various places in Tripura. Shri Debnath was Secretary of IBC State Centre since its inception in 2005 and currently is Vice President (North East) of Indian Buildings Congress. He received IBC Outstanding Contribution Award in 2009 and IBC Presidential Award in 2013. He was Executive Member, IBC in 2007-09 and Governing Council Member since 2002. Presently, he is also Chairman of Indian Engineers Federation (INDEF), Chairman of Institute of Engineers (India), Tripura Centre and National Council Member of IEI during 2019-21. He was Vice President and General Secretary of State Engineers Association, Tripura. He was also Honorary Secretary of Institution of Engineers (India), Tripura State Centre earlier.



S.K. Agrawal, Vice President

Shri S.K. Agrawal is a Civil Engineering graduate and proprietor of M/s S.K. Agrawal & Associates with 43 years of construction experience. Apart from IBC, he actively works in various other organizations such as Institution of Engineers, Institution of Valuers, Indian Concrete Institute and Rotary International. Presently, he is chairman of Institution of Valuers, Raipur and National Council Member of Indian Concrete Institute. He is past president of Rotary International and deeply involved in social activities. He is recipient of Life Time Achievement Award of Rotary International and Presidential Award of Indian Buildings Congress. He is Chairman of Low Cost Housing Project at Raipur and Cath Lab project at Sathya Sai Hospital, Naya Raipur.



V.R. Bansal, Hony. Secretary

Shri Vishv Ratan Bansal is a former Chief Engineer from erstwhile North Delhi Municipal Corporation. He has 40 years of experience in the field and has handled various building and road projects including multi-level Car Parking, Road-under-Bridges, and Road-over-Bridges; besides having experience in structural design of multi-storied buildings and maintenance works and implementation of Building bye-laws. He is associated with many technical organizations and is a Fellow Member, Institution of Engineers (India), Indian Institute of Technical Arbitrators (India); and Life Member of Indian Buildings Congress, Indian Roads Congress, Indian Chapter of American Concrete Institute, Institution of Valuers, Indian Council of Arbitrators, INTACH. He is actively associated with the activities of IBC since long and has been a member of Governing Council since 2007.



Achal Jain, Hony. Treasurer

Shri Achal Jain graduated in Civil Engineering and ME (Structural) from Delhi College of Engineering. He joined Indian Railways in the year 1990. He has vast experience of work in every field of work under Railways like policy issues related to Railway land, planning, inspection and execution of bridges, planning and monitoring of execution work of Pirpanjal Tunnel, Chenab. At present he is Chief Project Director /TMS Northern Railway Baroda House, New Delhi.



Anant Kumar, Executive Member

Shri Anant Kumar graduated in 1984 from University of Roorkee and joined Central Engineering Services in CPWD in 1986. During his service carrier he worked in Delhi, Madhya Pradesh, West Bengal, J&K and held various positions. During his vast experience of 33 years, he got various prestigious projects completed. He also worked in NDMC as Chief Engineer for six long years and got executed number of projects. Presently, Shri Anant Kumar is working as E-in-C, Delhi, PWD and also as Special Director General in CPWD at New Delhi.



Manoranjan Mishra, Executive Member

Shri Manoranjan Mishra did BE (Hons.) in Civil Engineering in 1985 from BITS, Pilani and Post Graduate Diploma from XIM, Bhubaneswar, 2011 (Executive Bath). He is also a law graduate from Utkal University and Post Graduate Diploma in Urban Environment Management & Law from National Law University. He has vast experience of execution of roads buildings and bridges while working for IDCO, Odisha, PWD Roads in Odisha. At present he is E-in-C-cum-Special Secy., Works Deptt., Govt. of Odisha.



Sanjeev Jindal, Executive Member

Shri Sanjeev Jindal, is a graduate in Civil Engineering in 1985 from Delhi School of Engineering, postgraduate from Delhi College of Planning and Architecture and Masters in Science of Living, Yoga and Meditation. He has worked on various Engineering Projects in Private Sectors, NGOs as well as AAI and is having more than 28 years of experience. He is also visiting faculty for various Post Graduate Students in School of Planning and Architecture (SPA) and other institutions. Currently, he is working as Executive Director (Engineering) in Airports Authority of India.



Gian P. Mathur, Executive Member

Born on 15th May 1955, Shri Gian P. Mathur, Managing Director, Gian P. Mathur & Associates Pvt. Ltd, graduated as a Gold medallist from the School of Planning and Architecture, Delhi University. With over 40 years of experience, he is a leading consultant in the architecture and design industry and one of the few Indian architects who have expertise in designing various large-scale projects, be it multi-land use projects, housing, commercials, Institutional, industries, Metro & Railway station development. Shri Mathur is actively involved in design process and continuously re-evaluates the approach, primarily towards designing recognizable and engaging architecture, promoting community living, and ensuring an environmental friendly & sustainable approach in his projects. Shri

Mathur has immensely contributed in activities of Indian Buildings Congress.



K.L. Mohan Rao, Executive Member

Shri K.L. Mohan Rao born on 1st March, 1951 in Bangalore is a Mechanical Engineering Graduate from BMS college of engineering and Post graduate diploma in Human resources from Bangalore University. He is a successful entrepreneur having 35 years of experience in his own Small Scale Industry. He is working in the field of training since 2002. He established the first training centre for Builders Association of India in the year 2003 and has successfully conducted 23 training programmes for final year students of Civil and Mechanical Engineering of VTU.

He has passion working with downtrodden in the villages. He is visiting faculty in many training centres for imparting training to engineers and executives. He was conferred with Bharat Ratna Sir M Vishweshraiah award on 24th Dec., 2020 for his dedication and continued services in the field of training of artisans, supervisors and engineers.



Hitendra Mehta, Executive Member

Shri Hitendra Mehta is a civil engineering graduate from SGSITS, promoter of Mehta and Associates LLP and one of the leading Architecture, Urban Planning and Project Management Consultancy firm. As promoter of Mehta and Associates, LLP, Hitendra Mehta has been involved in conceiving, designing and execution of many real estate and public private partnership projects since last 29 Years. Mehta and Associates LLP is also serving as Project Management Consultants for various organisations. As promoter of Mehta and Associates LLP, Shri Hitendra Mehta has been involved in conceiving, designing and execution of many award winning and Internationally acclaimed projects.

1st Executive Committee Meeting of IBC at New Delhi

The 1st meeting of the Executive Committee for session 2022-23 was held on Saturday, 14th May 2022 in Conference Hall, IBC HQ, New Delhi. The following important decisions were taken:

- 1) It was suggested by Mr OP Goel that the delegation while going to have meeting of the seven pillars of IBC should necessarily be accompanied by the President of IBC.
- 2) It was decided that the EC and GC members should be requested for follow-up of realization of annual subscription with the respective institutional member in their respective jurisdiction or sphere of influence.
- 3) During the meeting, all members were requested to continue efforts for enhancing the membership base of IBC.
- 4) Sh. SK Vij emphasised the need to enhance the prestige of IBC by way of enhancing the standard of the technical activities being conducted by it and further stressed the need to work unitedly and with renewed zeal.
- 5) 1st Report of the committee of Sh. SK Vij and Sh. KB Rajoria regarding quality audit of the construction projects was accepted and decided to give wide publicity for the benefit of all stakeholders.

- 6) Executive Committee authorized the president to decide the Venue and dates for GC meeting, preferably sometime in September- October.
- 7) It was decided to invite suggestions for the topic for the seminar during mid-term session which can then be discussed in the EC meeting.
- 8) The technical topics proposal of Sh. KB Rajoria were discussed at length and it was finally decided to refer the matter to Technical Committee which will deliberate on the same and come up with its suggestions in the next meeting of EC for taking final decision.
- 9) Executive Committee authorized the president to

consider and finalize the list of members for co-option to the Governing Council.

- 10) Executive Committee authorized the President to finalize the names of 6 members to be nominated to the executive committee.
- 11) Executive Committee authorized the president to fill vacancies under various Rules 9.1.3.1 to 9.1.3.10 which have been left vacant after the elections.
- 12) It was unanimously decided that the Executive Training Program, which was earlier being carried out by IBC but was discontinued due to Covid Pandemic, be restarted.

Action Taken on Technical Issues:

To give added impetus to the technical activities of IBC, the President IBC has constituted two committees; Publications Committee for IBC publications on new technical topics, and Technical Committee for other technical activities of IBC



A meeting was held by the President, IBC with the Chairman and members of publication committee on 31.05.2022 in his chamber at IBC HQ. The following major decisions were taken:-



Meeting with Publication Committee in Progress

- The list of topics suggested by Shri K.B. Rajoria and erstwhile Technical Committee was handed over to the Committee Members;
- Shri Krishan Kant suggested a document on “Model Agreement between Builders and Buyers”. It was decided that IBC can prepare and submit the document to Ministry for consideration and implementation;
- It was agreed to start initially with “Model Agreement for Residential Properties” and subsequently the “Model Agreement for Commercial Property” can be taken up;

- It was also agreed that when the document is at near completion stage, a Seminar will be held for Brain Storming & point emerging out of it can be used for refining the document;
- It was also decided to take up document on “Impact of RERA on Real Estate”;

Chairman Publication Committee was authorized to form the sub-committee for both of these documents in consultation with the President, IBC for approval of EC.

A meeting was held by the Hony. Secretary, IBC with Chairman Technical Committee, Dr. K.M. Soni on 10.06.2022 at IBC HQ.

The following points were discussed :

- It was decided that paper in various seminars must be reasonable of good standards & must not be selected just to make up the numbers;
- IBC Journal must be sufficiently of high standard so that the document can be referred as reference document by professionals;
- In the meeting the topic of journal was also discussed. Dr. Soni suggested the probable topic could be ‘ EPC Contract in Construction Industry’. It was agreed for placing the proposal before the competent authority for consideration and approval;

Meeting with Pillars of IBC

Meeting with Shri P.K. Gupta, CMD, NBCC (India) Limited



IBC delegates felicitating Shri P.K. Gupta CMD, NBCC

A delegation of Indian Building Congress (IBC) comprising of President, IBC Shri Vijay Singh Verma, and Shri V.R.Bansal, Honorary Secretary, IBC called upon Shri P.K. Gupta, Chairman & Managing Director, NBCC (India) Limited on 23rd May, 2022.

The meeting was courtesy call by the IBC team on assumption of office by the new Office Bearers of IBC.

Shri P.K. Gupta was felicitated by the President by presenting bouquet of flowers. Three IBC publications issued during the 25th Annual Convention and National Seminar on 27-29th April 2022 at New Delhi were also presented to him. The president solicited continued support of NBCC in all technical activities of IBC.

It was also requested that more NBCC professionals to associate with IBC by enrolling them as its members. President expressed that their association and participation in the activities of IBC could enhance the cause of Built Environment.

Shri P.K. Gupta, CMD, assured that NBCC will continue to extend its whole-hearted support to IBC in all its future activities.

Meeting with Shri Manish Kumar Gupta, IAS, Vice Chairman, DDA

A delegation of Indian Building Congress (IBC) comprising of Shri Vijay Singh Verma, President; Shri V.R.Bansal, Honorary Secretary; Shri Pradeep Mittal, Immediate Past President and Shri K.K Kapila, Past President met Shri Manish Kumar, IAS, Vice Chairman, DDA on 23rd May, 2022 in his chamber at Vikas Sadan, New Delhi.

Shri V.R. Bansal, Hony. Secretary, briefed the Vice Chairman about the IBC and also about various technical activities being undertaken by it.

Shri Vijay Singh Verma, President, IBC felicitated the Vice-Chairman by presenting him a floral bouquet and also with a set of three IBC publications released during the 25th Annual Convention and National Seminar on 27-29th April 2022 at New Delhi. He, then, solicited the support of DDA in :

- Active involvement of DDA Professionals / Officers in Technical Activities of IBC and help in mutual dissemination of knowledge by their active participation.

- ii. Advice for increase in enrolment as Members of IBC by DDA professionals.

Sh. Gupta, VC, assured the delegation of every possible help to IBC from DDA side in all its technical activities.

The meeting was very good and fruitful. At the end, Honorary Secretary, IBC thanked the VC, DDA for sparing their valuable time for IBC delegation and his assurance of DDA's support in various activities of IBC.

Meeting with Shri O.P. Singh, Member Engineer (Infrastructure), Railway Board

A delegation of Indian Building Congress (IBC) comprising of President, Shri Vijay Singh Verma; Immediate Past President, Shri Pradeep Mittal; Shri K.K. Kapila, Past President; Vice President, Maj. Gen. Ashok Kumar and Honorary Secretary, Shri V.R. Bansal met Shri O.P. Singh, Member (Infrastructure), Railway Board on 23rd May, 2022 in his office at Rail Bhawan, New Delhi. Shri Singh offered a very warm welcome to the IBC delegation.



Meeting in Progress

He was felicitated by presenting bouquet of flowers by the IBC delegation. During the meeting, a set of three IBC publications released during the 25th Annual Convention and National Seminar on 27-29th April 2022 at New Delhi was presented to Shri Singh. President requested him to advise Railways professionals to be associate with IBC by enrolling them as its members. Shri Singh assured to encourage Railways officials to enrol as members of IBC.

Shri Singh commented that he is very well aware about IBC and has also attended one of its Seminar in the past. He assured to extend full co-operation & all-round support in IBC activities from Railways.

Meeting with Shri Kamran Rizvi, IAS, Additional Secretary, MoHUA & Chairman & Managing Director, HUDCO

A delegation of Indian Building Congress (IBC) comprising of President, Shri Vijay Singh Verma and Honorary Secretary, Shri V.R. Bansal called upon Shri Kamran Rizvi, IAS, Additional Secretary, MoHUA, GoI, Chairman & Managing Director, HUDCO, in his office at Nirman Bhawan, New Delhi on 31st May, 2022.

Shri Rizvi was felicitated by President by offering him floral bouquet. He also offered warm welcome to the IBC delegation.



IBC delegates felicitating Shri Kamran Rizvi IAS, Additional Secretary, MoHUA & CMD, HUDCO

An introductory letter and set of three IBC publications released during the 25th Annual Convention and National Seminar on 27-29th April 2022 at New Delhi was presented to Sh. Rizvi by the President, Shri V.S. Verma and solicited support of HUDCO in all the technical activities of IBC.

Shri Rizvi recalled his interaction with the IBC Professionals as the Chief Guest in the Technical Seminar on "Contribution of Construction Industry in Building of Independent India" held on 30th March, 2022 in India Habitat Centre, Lodhi Road, New Delhi. He also liked the IBC Journal and commented that IBC has brought out this publication on very appropriate subject which is the need of the present scenario.

During the meeting, the issue of discontinuation of Institutional Membership of IBC by HUDCO was also brought to his knowledge by the delegation and requested him to review the same as HUDCO is one of founder member of IBC.

Shri Rizvi immediately agreed for resuming the Institutional Membership of IBC by HUDCO; and assured all support and participation in future activities of IBC from HUDCO.

Activities of State/Local Centres

Kota Local IBC Centre

Third Annual General Meeting

Third Annual General Meeting of IBC Local Centre Kota was held on 17.05.2022 at 4:00 PM at Institution of Engineer's (India) conference hall, Jhalawar road, Kota. Shri R.P. Sharma Secretary welcomed all distinguished guests and members for their participation in Annual General Meeting. The contribution of the full team of IBC Local Centre Kota in outstanding performance of the centre was appreciated.

It was emphasized to arrange seminar and Lectures on IBC platform regularly on various construction activities involving expert key personal of related fields. During the first session of the AGM, Shri. Piyush Goyal, Engineer delivered a presentation on topic “A Key to Sustainable Development”.

Wherein he outlined the relevant parameters in sustainable planning required for development of town considering all future requirements for better living.

Shri P.K. Jain, Chairman, IBC Local Centre Kota presented yearly activities and achievement of year 2021-22 and thanked the team for preparation of first “**Digital Souvenir**”.

During the AGM, elections to elect the Office Bearers for the year 2022-23 of IBC Local Kota Centre were held & were presided over by Shri B. L. Malav, Election officer.

As no nominations were received from any candidate, resolved to continue with the existing team of office bearers. Accordingly, Shri P.K. Jain and his existing team was re-elected for next tenure 2022-23 unanimously. All the members congratulated the newly elected chairman and executives.



Telangana State Centre- Hyderabad

A meeting of Telangana State Chapter was held on 8th June, 2022 in the Conference Room of E-in-C, PWD Hyderabad. The meeting was presided over by Shri I. Ganapathi Reddy, Engineer-in-Chief (R&B) Buildings & NH, Telangana and Chairman of the Telangana State Chapter of IBC. Shri Pradeep Mittal, Past President, IBC was the Chief Guest. The meeting was attended by large number of IBC members of Hyderabad. In the meeting, it was resolved to make concerted efforts to increase the membership base of IBC in Telangana and also organize more and more technical activities under the aegis of IBC for the general benefit of professionals and stakeholders.



Meeting in Progress

In the meeting, Shri I. Ganapathi Reddy, Engineer-in-Chief (R&B) Buildings & NH and Chairman of the State Chapter, IBC also made a presentation about the work being done in their department and innovation being made and utilized by them in building infrastructure. He also outlined major infrastructure project like secretariat, Martyr's memorial, super-specialty hospital and Ambedkar Statue Project.

Himachal Pradesh Local IBC Centre

A meeting with E-in-C, PWD, Er. Ajay Gupta was held by Shri C. Debnath Vice President, IBC on 19th June, 2020 in the Conference Hall of E-in-C, Himachal Pradesh, PWD. The meeting was attended by the 28



Meeting in Progress

Engineers. During the meeting, the activities of IBC were discussed and call was given to involve engineering fraternity of Himachal Pradesh in the technical activities of IBC. The meeting was also joined by Shri D. Basak, Fmr. Chief Engineer, West Bengal, PWD and Er. (Ms.) Kusum Sharma, Honorary Secretary IEL, Himachal Pradesh Centre. The officials present in the meeting took keen interest in the activities of IBC and expressed their willingness to enrol themselves as life member of IBC.

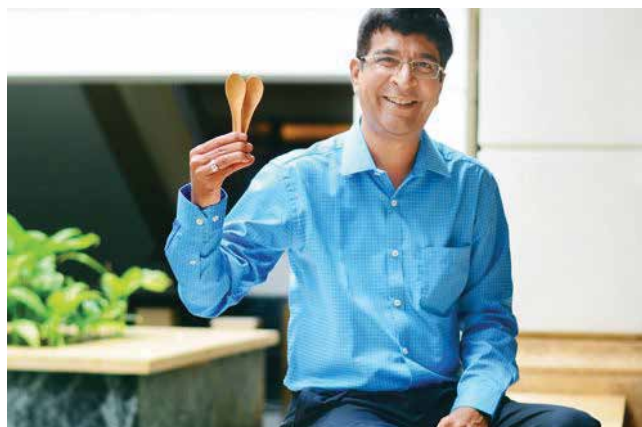
In the meeting, an Adhoc Committee comprising of Er. Ajay Gupta, E-in-C, Himachal Pradesh, PWD as Chairman; Er. Rajiv Sharma, Chief Architect, Himachal Pradesh, PWD and Er. Suresh Kapoor, Superintending Engineer, Himachal Pradesh, PWD as Vice President, Shri Ajay Kumar Soni, Superintending Engineer, Himachal Pradesh, PWD as Secretary and Er. Amit Sharma, Executive Engineer, (Mechanical), Himachal Pradesh, PWD as Treasurer along with others members was formed to take forward the work of formation of Himachal Pradesh State Chapter of IBC and enroll more and more professionals as life member of IBC.

National News

Bakeys Edible Cutlery - An Indian Innovation - Discover Food - Save Environment

When we hear edible, then something which we can eat comes to our mind. Usually, we mean something which we can eat and digest is edible. But here, there is another term cutlery attached to it. Now we wonder how a cutlery can be edible? How can we eat a cutlery? How will it feel like eating the spoon along with the dish?

Usually, we never think of the wastes we are making as a consequence of our daily life. We directly throw it away to our surrounding and most of them are non-degradable. Let us talk about very common things like cutleries. Mostly we use and throw the cutleries made of plastics say spoons, forks, chopsticks. Have we ever thought how they impact the environment we live in? So in search of the solution to these problems we need to think beyond the horizons. When we start thinking out of the box, there comes innovation and that's what the great minds do.



Narayana Peesapaty displaying Edible Cutlery

Currently, about 40 BILLION plastic utensils are used just within the United States within a year. Worldwide, this becomes a figure at 16 times this magnitude. We use many of disposable plastic utensils all over the world. We may think of using reusable cutleries instead of these. But in many cases by doing so may lead to infections and may cause health hazards.

By keeping in mind the negative effects of plastic on the environment and its impact on our lives, a researcher of ICRISAT, Narayana Peesapaty, BSc. (Hons.) in Chemistry from Osmania University and MBA from

IIFM- Bhopal, came up with this innovation of Edible cutlery. Later he worked as Senior Scientific Officer at International Water Management Institute (IWMI). He is the Founder and Managing Director of Bakey's Foods Private Limited. In order to give a complete meaning to edible, it should be eatable and nutritious. It should be eco-friendly and should not have any adverse effect on our body.

So it's time to go for cutleries which come from those biodegradable materials which can be either eaten or can be disposed of.

Edible Cutlery is made from most commonly used cereals such as rice, sorghum, wheat flour. Just add hot water to them and bake them at high temperature. As a result, we get a crunchy and strong edible cutlery. In addition to it, high temperature also helps in reducing the moisture content so that the shelf life of the product becomes of about 2 years. To make it sweeter add sugar to it. In order to make it more appealing, they use rock salt, black pepper, carom seeds and cumin seed.

These spoons are also available in different flavours like ginger-garlic, mint-ginger, carrot-beetroot and so on. It holds good as a nutritious product as they don't use anything that may cause harm to health. There is no preservatives and colorants. The product is free from artificial chemicals and trans fats and contains nothing of animal origin. It is a purely vegan product which adds one more benefit to it as everyone can use it.

Innovators are also looking to make the product gluten free. Mostly they use millet instead of rice. Rice cultivation in India requires more water when compared with millet cultivation. A research shows that rice requires 60% more water than millet. So when we will go for more and more use of millet than rice then it may contribute to the conservation of water. It is another perspective behind the innovation.

They use semi-automatic machines so that the hygiene can be maintained and the waste will be less. If we will look at the customer demand for the product then from data Bakeys has sold more than 1.5 million units. It is as cheap as plastic as they procure the raw materials directly from the farmers. They have made it so that everyone should have access to it. These products will not melt if kept in hot water which makes sense that we can use it in any type of food. Bakeys aim at expanding the trend by introducing more and more cutleries such as forks, chop sticks, dessert spoons. They are looking up to reach new heights by introducing cups, plates and many other table wares.

By looking deep into the idea we will find something which is solely made to save our mother nature by reducing the waste. We can make the surrounding a better place to live in and can ensure our sustainability. Now-a-days environment pollution is an emerging discussion and many of the scientists are trying their best to find the solution to it. Use of edible cutlery is an initiative and we can be a part of it. So it is time to say no to plastics.

मानव मिशन गगनयान अभियान पूरा करके अरब सागर में उतरेगा

भारतीय अंतरिक्ष अनुसंधान संगठन (इसरो) अंतरिक्ष में देश के पहले मानव मिशन गगनयान का अगले साल लांच करने की तैयारियों में पूरी शिदत से जुटा हुआ है। इस बीच मिशन से जुड़ी दिलचस्प जानकारी सामने आई है। इसके मुताबिक हफतेभर का अभियान पूरा करने के बाद गगनयान को अरब सागर में उतारा जाएगा।

इसरो के बंगलुरु स्थित ह्यूमन स्पेश फ्लाइट सेंटर (एच.एस.एफ.सी.) के निदेशक डा. उन्नीकृष्णन नायर ने मनोरमा ईयर बुक, 2022 में 'भारतीय मानव अंतरिक्ष अभियान' शीर्षक से एक लेख लिखा है। इसमें उन्होंने बताया है कि गगनयान आर्बिटल माड्यूल (ओएम) के दो हिस्से हैं। पहला क्रू माड्यूल (सी.एम. या अंतरिक्ष यात्रियों के रहने का स्थान) और दूसरा सर्विस माड्यूल (एस.एम.) और उनका वजन करीब 8,000 किलोग्राम है। पृथ्वी की कक्षा में परिक्रमा के दौरान ओ.एम. की गति करीब 7,800 मीटर प्रति सेकेंड होगी। अभियान पूरा करने के बाद क्रू माड्यूल को भारतीय तट के पास अरब सागर में उतारा जाएगा। क्योंकि यह अपेक्षाकृत शांत है इसीलिए यह इसके लिए पहली पसंद है। विकल्प के तौर पर बंगाल की खाड़ी पर भी विचार किया जा रहा है। मालूम हो कि इसरो ने सस्ते मानव अंतरिक्ष अभियानों के लिए 2019 में बंगलुरु में एच.एस.एफ.सी. की स्थापना की थी और गगनयान इसकी पहली परियोजना है।

गगनयान के अंतरिक्ष यात्रियों की बचाव प्रणाली के प्रदर्शन की जांच करने के लिए परीक्षण उड़ान और गगनयान का पहला मानवरहित अभियान इस साल की दूसरी छमाही की शुरुआत में निर्धारित है। डा. नायर ने बताया कि क्रू माड्यूल में दोहरी दीवार वाली प्रणाली होगी और उड़ान के दौरान तीव्र एरोडायनामिक हीटिंग से बचाने के लिए इसमें थर्मल प्रोटेक्शन सिस्टम लगा है।

आर्बिटल माड्यूल को ह्यूमन रेटेड लांच व्हीकल (एच.आर.एल.वी.) से लांच किया जाएगा जो जी.एस.एल.वी., एम.के.-3 व्हीकल का संशोधित संस्करण है। क्रू माड्यूल में छोटे-छोटे प्रणोदकों का समूह लगाया गया है जिसे वातावरण में फिर से प्रवेश के दौरान नियंत्रित तरीके से फायर किया जाएगा। लैंडिंग के बाद क्रू माड्यूल के को-आर्डिनेट्स (सटीक स्थिति) को विभिन्न पोटों पर प्रतीक्षा कर रही रिकवरी टीमों के साथ साझा किया जाएगा। क्रू माड्यूल में हर अंतरिक्ष यात्री के लिए जीवनरक्षक पैकेट होंगे जो

दो दिनों के लिए पर्याप्त होंगे। इसरो इस बात के प्रति आश्वस्त है कि क्रू माड्यूल को समुद्र में गिरने के दो घंटे के अंदर ही तलाश लिया जाएगा।

गगनयान के लिए चयनित चार अंतरिक्ष यात्रियों को रुस में 15 महीने का सामान्य अंतरिक्ष उड़ान प्रशिक्षण दिया गया है। उन्हें गगनयान के लिए विशेष प्रशिक्षण देने के लिए बेंगलुरु में अंतरिक्ष यात्रा प्रशिक्षण केंद्र स्थापित किया जा रहा है। इस दौरान उन्हें उन सभी परिस्थितियों से अवगत कराया जाएगा जो उड़ान के दौरान सामने आ सकती हैं, साथ ही उन्हें उनका सामना करने का प्रशिक्षण भी दिया जाएगा। प्रशिक्षण में अभियान के इंजीनियरिंग, मेडिकल और सुरक्षा के विभिन्न पहलुओं पर कक्षाएं भी शामिल हैं। अंतरिक्ष यात्रियों को पैराबोलिक पाथ व विशेष एयरक्राफ्ट में उड़ान के जरिये प्रशिक्षण भी दिया जाएगा।

International News

Airless - Bike Tyres : Made from NASA Rover Tech

Originally invented by NASA for use on lunar and Mars rover missions, there's a new kind of bicycle tyre that's elastic like rubber yet strong like titanium. It exhibits perfect shape memory without ever going flat. Essentially, it's the tyre of dreams. Made in gold, silver, and metallic blue, METL tyres are made from advanced, lightweight materials known as NiTiInol+. They're the first-ever consumer application of the alloy tyre technology NASA will use to get future rover missions out on rough terrain without a hiccup (or puncture) and they're being developed as a partnership with the startup SMART Tyre Company.

The unique combination of these advanced materials, coupled with a next generation, eco-friendly design make for a revolutionary product.

SMART was founded in 2020 by Cole and block chain engineer Brian Yennie. Together with former NASA engineering intern Calvin Young, the SMART team has consulted with inventors at NASA Glenn Research Center to bring the power of shape memory alloy tyre technology to the general public.

Thanks to their ability to undergo phase transitions at the molecular level under strain, these alloys are unlike any other material, exhibiting thirty times the recoverable strain of ordinary steel.

In other words, according to Darrell Etherington at Tech Crunch, NASA's key development has been in "creating an alloy that can return to their shape at the molecular level, meaning they can deform to adapt to uneven terrain, including obstacles like gravel and



Airless Bike Tyres

potholes, and return to their shape without losing structural integrity over time."

What's more, SMART's METL tyres are good for the planet, utilizing long-lasting materials that reduce rubber waste. The ultimate plan? For these tyres to become established as the premier high-tech component for the modern cyclist across road, gravel, mountain, and e-bike applications.

"Shape memory alloys look extremely promising in revolutionizing the entire terrestrial tyre industry," says Santo Padula, Materials Science Engineer at NASA, "and that's just the tip of the iceberg."

METL tyres will be available for the cycling community in 2022 before hopefully reaching the car industry and beyond. And SMART has also partnered with the leading micro-mobility provider, Spin, to develop SMA tyres for e-scooters.

The Interlace apartment complex in Singapore - Green apartments Design

The Interlace is located on an elevated eight-hectare site, bounded by Alexandra Road and the Ayer Rajah Expressway, amidst the verdant Southern Ridges of Singapore. With about 170,000m² of gross floor area, the development will provide 1,040 apartment units of varying sizes with extensive outdoor spaces and landscaping. The site completes a green belt that stretches between Kent Ridge, Telok Blangah Hill and Mount Faber Parks.

Designed by Ole Scheeren, partner of the Office for Metropolitan Architecture (OMA), The Interlace breaks away from Singapore's standard typology of isolated, vertical apartment towers and instead explores a dramatically different approach to tropical living: an expansive interconnected network of living

and communal spaces integrated with the natural environment. Thirty-one apartment blocks, each six-stories tall and identical in length, are stacked in a hexagonal arrangement to form eight large-scale open and permeable courtyards. The interlocking blocks form a vertical village with cascading sky gardens and both private and public roof terraces.

The design capitalizes on the generous size of the site and further maximizes the presence of nature by introducing extensive roof gardens, landscaped sky terraces and cascading balconies. Above ground vehicular circulation is minimized, liberating large green areas within the development. The Interlace incorporates sustainability features through careful environmental analysis of sun, wind, and micro-climate conditions on site and the integration of low-impact passive energy strategies.



The Interlace apartment Singapore

While maintaining the privacy of individual apartment units through the generous spacing of the building blocks and far-ranging views, the design also features communal spaces for shared activity. Extensive residential amenities and facilities are interwoven into the lush vegetation and offer opportunities for social interaction, leisure, and recreation.

Ole Scheeren said: “The design addresses concerns of shared space and social needs in a contemporary society and simultaneously responds to issues of shared living and individuality by offering a multiplicity of indoor/outdoor spaces specific to the tropical context.”

Patricia Chia, CEO of CapitaLand Residential Singapore, said: “This is a great opportunity to create and build a residential destination at the Gillman Heights site that will challenge the present architectural definition of

living spaces. While developing the dramatic external form, we have also given much attention to creating comfortable internal spaces. The name, The Interlace, reinforces the interconnectivity of the community with the surrounding natural environment.”

Wireless taxi charging in Gothenburg Green City Zone

A test and development project is now underway into wireless charging of electric taxis in service in central Gothenburg. A small fleet of electric taxis will operate for three years using inductive charging. The project is part of the Gothenburg Green City Zone initiative.

Drivers working for taxi operator Cabonline will provide normal taxi services using fully electric Volvo XC40s and wireless charging stations located in specially prepared parking spaces. The first test area will be Lindholmen. The charging technology has been developed by US company Momentum Dynamics and installed on behalf of municipally-owned energy company Göteborg Energi. The aim is to test and further develop this exciting new charging technology and to gain experience that allows all concerned parties to contribute to the large-scale introduction of zero emission taxis to urban environments.

A spokesperson explained that Gothenburg Green City Zone has been established for precisely this type of project, real-world practical testing through which we can all learn to accelerate the pace of innovation. Electric taxis can make an enormous difference, both for the climate and to reduce noise in cities. Other partners in the Wireless Charging project include Volvo Cars’ Swedish dealership groups Volvo Bil and Volvo Car Retail, and Vattenfall and its InCharge charging network.

The City of Gothenburg has adopted the goals of a fossil-free municipal vehicle fleet by 2023 and reducing CO2 emissions by 90% throughout the city’s transport system by 2030. Electrification is part of the solution. Business Region Göteborg is leading the transition to an electrified transport system. Large-scale penetration of electric vehicles demands a new kind of collaboration between stakeholders. The urban environment is greatly affected by the choice of fuels taxi companies make, as over time they cover very long distances in the city centre. The city is also a major purchaser of taxi services and transportation.



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From Editor-in-Chief Desk

Non Residential Buildings of Major Cities

In Urban areas of India, non-residential buildings are put to multiple uses. Factories with multiple activities also work in urban areas. Not only that these are put to multiple uses, most of the factories are over crowded. Besides, there are two to three shifts for working in factories. Moreover a number of workers are allowed to stay. For most of these buildings their owners do not follow any norms - municipal bye laws, industrial requirement electrical regulations, fire norm etc. There are rules and regulations for regular inspection of such buildings by the authorities. But unauthorized uses continue. There are reasons to believe that inspector of these organizations overlook the requirement's of rules and regulations. Whenever any unforeseen incident like fire, structural failure etc. take place, there is loss to structure, materials, machines etc. as also death and injury of occupants. Press and electronic media raises the issue and after sometimes everybody forgets. We Indian citizens pretend to live happily till another accident.

It does not happen in Western Countries. Once we were to inspect equipment and machinery related to transport sector and visited France. After reaching Paris, we were informed that there was no manufacturing activity in Paris and areas around. We had to visit far off places to visit factories of our sector. Of course these factories were properly planed and were having adequate open spaces. All the norms were followed and there was no possibility of any mishap.

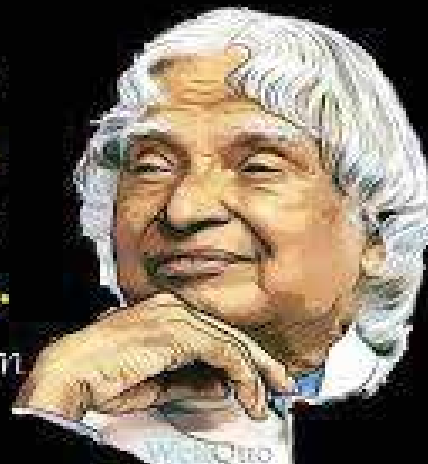
Most important issue to be considered by us is whether to exist with factories and commercial activities within the urban areas or not. It is a policy matter and Government, with the help of experts should find solutions. Secondly approving authorities should ensure that norms are followed. The third and most important issue is regular inspection by concerned authority. Their inspection reports should be monitored and corrective action should be taken. It is for top bosses to monitor the inspection and corrective action. Besides Govt. should also get report for ensuring adherence to rules and regulations by the occupants of such buildings and corrective action.

K B Rajoria

(K.B. Rajoria)

All Birds find shelter
during the rain.
But Eagle avoids rain by
flying above the Clouds.

-Abdul Kalam





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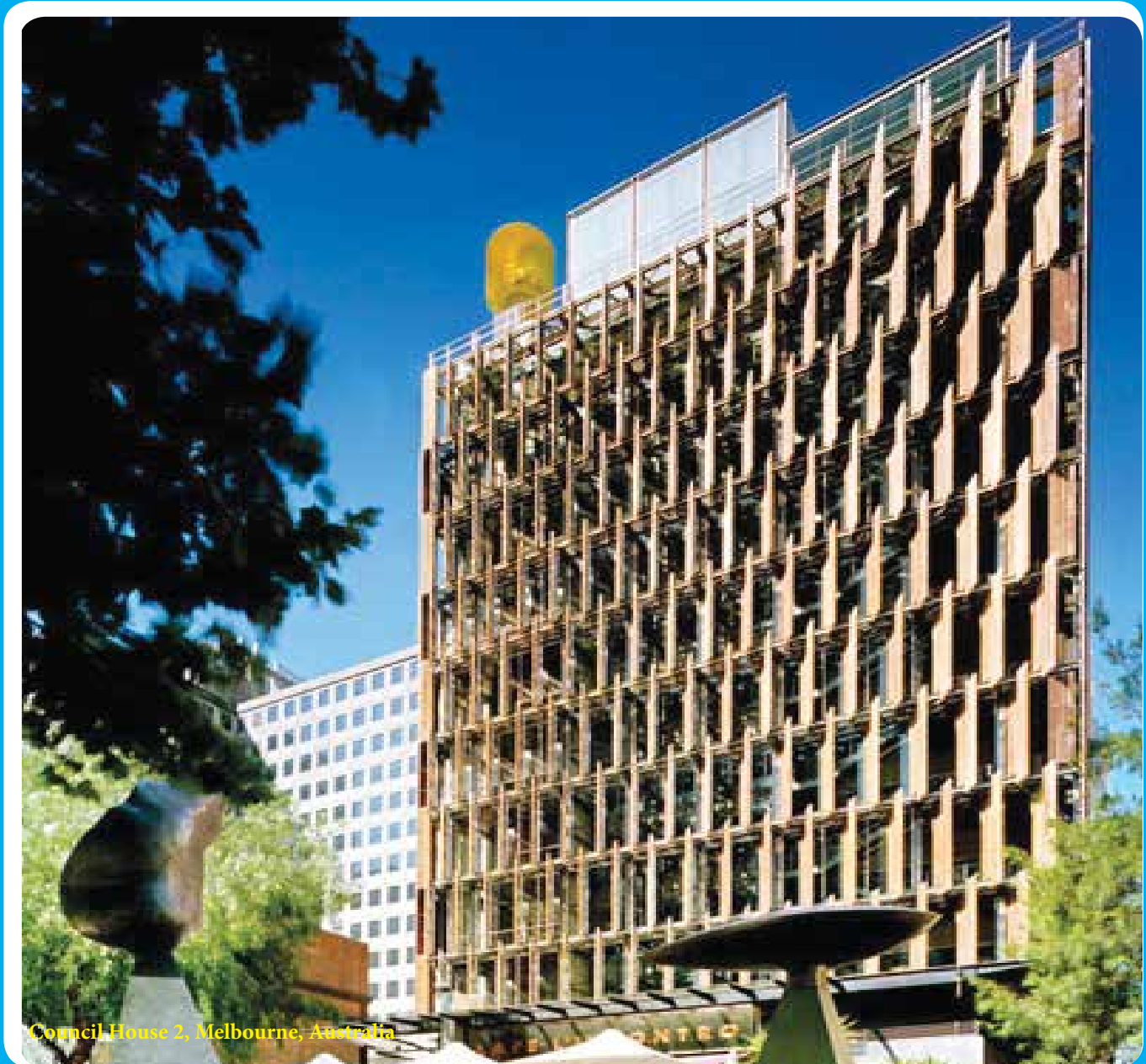
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