



NEWS BULLETIN

The Institution of Engineers (India)

Meerut Local Centre

"100 Years of Relentless journey Towards Engineering Advancement for nation Building"

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Vol.9

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March 2021

From Chairman's Desk



Greetings to all the Honorable Members of IEI and their families for the year 2021!

During last few months, the Government slowly but steadily have withdrawn the restriction on Covid. In the changed circumstances, after about a year, we could have physical Family Holi meet and 'World Water Day' on 22-03-2021. Earlier the circumstances compelled us to hold the meetings and technical activities only in online mode. This trend is, however, likely to continue particularly for Webinars which have wider reach in Online mode.

During last few months our centre has been able to organize two all India technical webinars. Both of them were under the aegis of Civil Engineering Division. Now we are planning one more such webinar in Electrical Engineering Division on 18th April 2021. Our efforts found wide acclaim from all corners, particularly from the IEI President and IEI headquarters. Council Member, Er. V B Singh has been instrumental to achieve these milestones. His inspiration and guidance encouraged us to organize these activities.

The Annual General Meeting of the Centre for the Year-2020, which was postponed by headquarter due to COVID-19, is now scheduled to be held on 24-04-2021.

The correction and updating of personal profile of corporate members in IEI records is very essential for proper communication with members. It is also important in view of elections for sessions 2021-2023, particularly for voting in electronic mode. Members are, therefore, once again requested to come forward this important requirement.

With Best Wishes to all

Notice for 9th AGM of

The Institution of Engineers (India) Meerut Local Centre

In Pursuance of Regulation-6 of the "Bye Laws & Regulation of Council" and in compliance of IEI HQ letter dated 23-09-2020 about the postponement of AGM and letter dated 01-03-2021 about holding the AGM, it is hereby notified that 9th AGM of The Institution of Engineers (India), Meerut Local Centre will be held as per following programme:

Venue:- TimBukToo Restaurant, Garh Road, Meerut

Date:- 24-04-2021 (Saturday)

Time:- 18.30 Hrs- Registration & Fellowship

: - 19.00 Hrs - Business Session (for Corporate Members only)

-To Confirm minutes of 8th AGM

-To deliberate on annual activity report of FY 2019-20

-Presentation of Audited Report of FY 2019-20

-To approve the appointment of Auditor for FY 2020-21 and fix remuneration

Minutes of 8th AGM held on 19-10-2019

Venue- Chamber Bhawan, Bombay Bazar, Meerut

Statutory Compliance of Notice :

The notice was sent by E mail on 30-09-2019. The news bulletins issue -3 vol. 7 containing notice for AGM were dispatched by 04-10-2019.

1. The AGM started with the welcome of Corporate Members by the Chairman. In all 43 corporate members attended the AGM.
2. The Hony. Secretary read out the minutes of 7th AGM held on 29-10-2018. The house unanimously approved these minutes of meeting without any change.

The Hony-Secretary explained the activities carried out during FY 2018-19. The members appreciated that all the seven statutory days as well as many more activities were performed during the year.

The Hony. Secretary presented audited report of FY 2018-19. All queries raised by members were

clarified. The members in general felt satisfied of the financial position of the Centre.

3. The Hon- Secretary read out the offer of Agarwal Alok & Associates Chartered Accountant, 435/1 Mangal Pandey Nagar, Meerut-250004 for auditing the accounts of Meerut Local Centre @Rs.7,000/- for FY 2019-20. The house found the above offer as reasonable and approved it.
4. The following Corporate Members who attained the age of 75 were felicitated as Platinum Members:
 - (i) Er. S C Govil, F-100668-8/EL
 - (ii) Er. M L Jain, F-117745-8/EL
 - (iii) Dr. M K Sharma, F-102218-7/MC
 - (iv) Er. V C Gupta, F-1188212/EL
 - (v) Er. C J Mittal, M-0388007-5/EL
 - (vi) Vinay Kumar Gupta, F-123616-0/CV

Sd/- Er. Rajneesh Kumar Sd/- Er. M L Jain
Chairman Hon. Secretary

Annual Activity Report (2019-20)

(A) Statutory Days: Eight out of nine statutory days were celebrated. The details are:-

1. World Telecommunication Day at Conference hall of BSNL, Tejgarhi, Meerut on 17-05-2019.
2. World Environment Day at SD College of Engg. & Technology, Muzaffarnagar on 05-06-2019.
3. Royal Charter Day at TimbukToo Restaurant, Meerut on 09-09-2019.
4. Engineers' Day in Chamber Bhawan, Delhi Road, Meerut on 15-09-2019.
5. World Habitat Day at SCRIET, Meerut on 05-10-2019.
6. World Standards Day at JPIET, Meerut on 14-10-2019.
7. Energy Conservation Day by organizing painting/poster making competition at three different schools of Meerut in December 2019.
8. World Engineering Day for sustainable Development in Meerut Local Centre office on 04-03-2020
9. World Water Day could not be celebrated due to Janta Curfew/Lockdown.

(B) Lecture Meetings

- (1) By Er. C.P. Gupta, FIE on Power System Management on 12-05-2019 at Muzaffarnagar.
- (2) By Dr. S.A. Rizvi, MIE on Supply Chain Management

on 30-06-2019 at Local Centre office.

- (3) By Er. B.D. Sharma, MIE on Environment and Health on 11-08-2019 at TimbukToo Restaurant.
- (4) By Er. C.P. Gupta, FIE on Power System Management on 24-09-2019 at Saharanpur.
- (5) By Er. Atar Singh, FIE on Sustainable Development Goals and their achievement on 15-12-2019 at Local Centre office
- (6) By Er. S.K. Kumar, FIE on Article 21 and our Gas Chamber on 01-02-2020 at Local Centre office.
- (7) By Er. V.K. Agarwal, FIE on Personality Development and Meditation on 15-03-2020 at Local Centre office.

(C) Other Technical Activities

1. MIET, Meerut (An Institutional Member of IEI) celebrated Engineers' Day on 13-09-2019 in which local centre chairman Er. Rajneesh Kumar was present as Chief Guest.
2. An Interactive meeting with Professor Incharge of Paper Institute, Saharanpur (Campus of IIT Roorkee) was held on 24-09-2019 in which Chairman and Hon. Secretary of Meerut Local Centre and Er. C.P. Gupta took part.
3. Er. Rajneesh Kumar gave a presentation on Students' Chapter at MIET, Meerut on 24-01-2020.

(D) Miscellaneous Activities

1. Independence Day was celebrated on 15-08-2019 at IEI office.
2. A meeting of Corporate Members of Saharanpur was held in Saharnpur on 24-09-2019.
3. 8th AGM of the centre was held on 19-10-2019. Besides statutory requirements, 6 platinum corporate members were felicitated.
4. A family get together was arranged on the occasion of Diwali on 19-10-2019 in Chamber Bhawan Bombay Bazar, Meerut.
5. Republic Day was celebrated on 26-01-2020 at IEI office.
6. A family get together was organized on the occasion of Holi on 08-03-2020 at Abha Manav Mandir, Mawana Road Meerut.
7. 3 Issues of News Bulletin of the Centre were published.

The detailed report of statutory days, lecture meetings, other technical activities and miscellaneous activities has already been circulated earlier through News Bulletin of the Local Centre.

Auditor's Report

1. Report on the Financial Statements

We have audited the accompanying financial statements of the Institution of Engineers (India), Meerut ("the Institution"), which comprises of the Balance Sheet as at March 31st, 2020, signed by us under reference to this report and related Income and Expenditure Account and the Cash Flow Statement for the year then ended and schedules forming part of the accounts and a summary of significant accounting policies and other explanatory information, in which have been incorporated the returns/ accounts received from the Institution of Engineers, Meerut Local Centre for the year ended 31st March, 2020 as audited by other auditors.

2. Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flow of the Institution in accordance with the applicable Accounting Standards issued by The Institute of Chartered Accountants of India and generally accepted accounting practices. This responsibility also includes maintenance of adequate accounting records and safeguarding the assets of the Institution and for preventing and detecting frauds and other irregularities, selection and application of appropriate accounting policies, making judgments and estimates that are reasonable and prudent and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

3. Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards on auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidences about the

amounts and disclosures in these financial statements.

The procedure selected depends on the auditor's judgement, including the assessment of the risk of materials misstatement of the financial statements, whether due to fraud or error. In making those risk assessments; the auditor considers internal financial control relevant to the Institution's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by the Management, as well as evaluating the overall preparation of the financial statements. We believe that the audit evidence we have obtained and the audit evidence obtained by the other center auditor's in the terms of their reports is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

4. Opinion

In our opinion and to the best of our information and according to the explanation given to us, the financial statements give the information in the manner so required and subject to the comments annexed in Annexure-III give a true and fair view in conformity with Accounting Standards generally accepted in India;

- 4.1) In the case of the balance sheet, of the state of affairs of the Institution as at 31st March, 2020;
- 4.2) In the case of the Income and Expenditure Account, of the deficit for the year ended on the date; and
- 4.3) In the case of the Cash Flow Statement, of the cash flows of the year ended on that date.

5. Report on Other Legal and Regulatory Requirements

This report does not contain a statement on the matters specified by the Companies Auditor's Report) order 2016 ("the order) issued by the Central Government of India in terms of sub section (11) of the section 143 of the Companies Act 2013 as the said Order is not applicable to the Institution.

6. We further Report that

- (i). subject to the comments in annexed in Annexure-III, we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose on the audit;
- (ii). In our opinion proper books of accounts as required by law have been kept by the institution

- so far as appears from our examination of those books;
- (iii). The Balance Sheet, The Statement of Income and Expenditure, and the Cash Flow Statement dealt with this report are in agreement with the books of accounts and with the returns received from the centers not visited by us;
- (iv). The aforesaid Financial Statements comply with the Accounting Standards issued by the Institute of Chartered Accountants of India;
- (v). The reports on the accounts of the centers audited by the center auditors have been sent to us and have been properly dealt with us in preparing this report;
- (vi). We further report that according to the

information and explanation given to us:

"The Institution has disclosed the impact of pending litigations on its financial position in its Financial Statements.

"The Institution did not have any long - term contracts including derivative contracts in which there may be any material foreseeable losses.

For and on behalf of
Sd/- Agarwal Alok & Associates, Chartered Accountants
Firm Registration No. 004364C
Alok Kumar Agarwal, Proprietor
Membership No. 072505
Date: 17-06-2020
Place: Meerut

Balance Sheet as on 31st March-2020

LIABILITIES	Schedules	31st March 2019	31st March 2020	ASSETS	Schedules	31st March 2019	31st March 2020
		Rs.	Rs			Rs	Rs
Reserve & Surplus	7	9,59,702.64	8,17,949.64	Fixed Assets	1	132,589.77	1,41,513.77
Capital Reserve	8		-	<u>Investments- Long Term</u>			
Earmarked Funds	9		-	Fixed Deposits with Banks		1,40,000.00	140,000.00
Current Liabilities & Provisions	10	7,670.00	8,260.00	<u>Current Assets</u>			
				Stock	3		-
				Sundry Receivables	4		-
				Cash & Cash Balances and short term Fixed Deposits with Banks	5	6,93,575.37	5,43,490.37
				Other Advances	6	500.00	500.00
				Interest Outstanding & Accrued	2	707.5	705.50
TOTAL		9,67,372.64	8,26,209.64	TOTAL		9,67,372.64	8,26,209.64

Income and Expenditure Account for the Year ended on 31st March 2020

	Income		Expenditure		
	2018-2019	2019-2020	2018-2019	2019-2020	
	Rs.	Rs	Rs.	Rs	
1 Grant Received From Head			Salaries and Allowances, etc. to temporary Staff	220,024.00	2,25,125.00
Quarter			Technical Publication	2,466.00	
(i) For Annual Recurring Grant	328,716.00	2,61,021.00	Expenses for Seminars and Symposia	60,740.00	
(ii) For Manpower Grant	432,636.00	4,32,636.00	Statutory Events and Memorial Lectures		1,34,779.00
For Incentives	5,994.00	6,000.00	Annual General Meeting Expenses	31,000.00	49,460.00
For Election Grant	17,535.00		General Meeting Expenses	46,028.00	
For Reimbursement of TA/DA	5,088.00		Engineers' Day Celebration		28,534.00
For Technician/students chapter		50.00	Committee Meeting Expenses		52,889.00
2 Interest From Investment and Banks Fixed Diposit	7,488.00	9,959.00	Other Lectures & Meetings		5,390.00
3 Interest From Savings Bank	38,444.00	34,452.00	Data Processing Expenses	26,550.00	31,860.00
			Printing and Stationery	10,804.00	25,928.00
			Postage and Courier	13,556.00	17,973.00
			Telephone Expenses	15,564.00	14,027.00
			Electricity Charges	22,390.00	9,670.00
			Bank Charges	59.00	
			General Charges	13,479.00	
			Rent, Rates and Taxes	147,192.00	1,58,604.00
			Refreshment Expenses	20,703.00	1,410.00
			Statutory Audit Fees	7,670.00	9,440.00
			Building/Library Repair and maintenance		3,170.00
			Computer & Peripherals Repair and maintenance		2,650.00
			Furniture & Equipments Repair and maintenance	15,234.00	1,380.00
			Travelling & Conveyance	72,090.00	46,362.00
			TA/DA to Committee Members		63,004.00
			Upkeep of office & guest house		2,691.00
			others (If any)		1,525.00
Grand Total	8,35,901.00	744,118.00		7,25,549.00	8,85,871.00

Schedule of Fixed Assets Annexed to and forming part of Balance Sheet as at 31st March 2020

ASSETS	Cost of Assets			
	Cost as at 1st April, 2019	Additions	Sales/Disposal or Adjustment	Cost as at 31st March, 2020
1 Computer System				
Laptop	250.88			250.88
Printer	122.88			122.88
2 Furnitue & Equipmentetc.				
Furniture	72,173.36			72,173.36
Acqua Guard	10,727.59			10,727.59
Motor	2671.64			2,671.64
Fans	3438.71			3,438.71
Inverter	5457.58			5,457.58
Refrigerator	7685.59			7,685.59
cooler		8,924.00		8,924.00
3 Electric Installation				
4 CCTV Camera	21,192.03			21,192.03
Books	8869.51			8,869.51
Total	132,589.77	8,924.00		141513.77

Schedule of Cash & Bank Balances and short term Fixed Deposits with Banks annexed to and forming part of Balance Sheet as at 31st March, 2020

31st March, 2019		Particulars	31st March, 2020	
Amount	Amount		Amount	Amount
7,552.00		Cash in Hand	8,194.00	
686,023.37	693,575.37	Cash at Bank	5,35,296.37	5,43,490.37
	693,575.37	TOTAL		5,43,490.37

Date : 17-06-2020

Place : Meerut

Sd/- Alok Kumar Agarwal Proprietor
For and on behalf of Agarwal Alok & Associates
Chartered Accountant Reg. No. 004364C

Sd/- Er. Rajneesh Kumar
Chairman
Meerut Local Centre

Sd/- Er. ML jain
Hony. Secretary
Meerut Local Centre

Technical Activities carried out by the Centre

1. Statutory Activities :

(a) World Habitat Day

Date : 05-10-2020

It was celebrated by organizing a webinar on Google meet. Er. Rajneesh Kumar, Chairman, Meerut Local Centre welcomed the participants and highlighted the importance of World Habitat Day. The theme for this year was '**Housing for all: A Better Urban Future.**'

Er. Ishtiyak Ahmed, Chief Town Planner, MDA, Meerut was the keynote speaker. He opined that having an adequate home was more important now than ever. As COVID-19 continues to spread, people have been told to stay at home. But this simple measure is impossible for people who do not have adequate housing.

United Nations has enunciated 17 Sustainable Development Goals to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by year 2030. One of these goals; sustainable cities and communities'

was theme for World Habitat Day. Presently more than half of world's population lives in cities. By 2050, two third of all humanity(6.5 billion people) will be urban. Sustainable development cannot be achieved without significantly transforming the way we build and manage our urban space. Affordable housing can accelerate economic growth through its linkage with the other sectors of the economy.

The program concluded with the presentation of vote of thanks by the Hony. Secretary Er. M.L. Jain.

(b) World Standards Day

Date : 14-10-2020

It was celebrated by organizing a webinar on Google Meet. Er. Rajneesh Kumar, Chairman, Meerut Local Centre welcomed the guests and members of IEI and highlighted the importance of World Standards Day. The theme of this year's WSD was '**protecting the Planet with Standards.**'

At the outset, Er. Pawan Kumar Scientist 'C' in the Deptt. of F&A, BIS, New Delhi read out the messages from heads of three international organizations responsible for celebrating World Standards Day. Er. P. Rajesh, Head, Food and Agriculture

Deptt, BIS, New Delhi was the Chief Guest and Keynote speaker on the occasion. He informed of 17 sustainable Development Goals adopted by UN to save the nature and protect the planet. He emphasized that standards are important in almost every aspect of human activity. He informed that BIS was working on SDG-6 on Water and Sanitation, SDG-7 on Affordable and clean Energy, SDG-11 on sustainable cities and Communities and SDG-13 on Climate Change. Efficient, sustainable, affordable and cleaner energy to the people is the top priority area. High levels of wind and solar energies can reduce the net carbon emissions to a great extent. Er. Rajesh discussed various standards being developed by BIS in these areas. Several participants raised the queries and gave useful suggestions.

The event was concluded with the vote of thanks by Er.M.L.Jain, Hony. Secretary.

(C) Energy Conservation Day **Date: 14-12-2020**

It was celebrated by organizing a webinar on Google Meet. Er. Rajneesh Kumar, Chairman, Meerut Local Centre welcomed the guests and members of IEI and highlighted the importance of Energy Conservation Day.

Er. V C Gupta, FIE, Retd. Supt. Engineer, UP Power Corporation was the keynote speaker on the occasion. He suggested several energy conservation measures. Energy can be conserved by reducing wastage and losses, improving efficiency through technological upgrades and improved operation & maintenance.. Energy or Carbon Tax can be employed to reduce the energy consumption. Energy conservation measures should be applied in buildings such as occupancy sensors, conducting energy audit and passive solar design of buildings etc. Er. Gupta explained ten ways to conserve energy - 1. Adjust day to day behavior 2. Replace light bulbs 3. Reduce phantom loads 4. Install a programmable or smart thermostat 5. Purchase energy efficient appliances 6. Reduce water heating expenses 7. Install energy efficient windows 8. Upgrade heating, ventilation and air conditioning equipments 9. Weatherize home and 10. Insulate home.

Er. V C Gupta gave some examples of energy conservation in hydro and thermal power plants which had been his field of specialization and activity. Enhancement of clean renewable energy is important. Solar power and hydrogen fuel can be great sources of energy for future.

The event was concluded with the vote of thanks by Er. M L Jain, Hony. Secretary, Meerut Local Centre.

(d) World Engg. for Sustainable Development **04-03-2021**

It was celebrated by jointly organizing a Webinar (on Google Meet) with Jabalpur Local Centre. Theme was '**Engineering for Healthy Planet: Celebrating the UNESCO Engineering Report**'. Er. Rajneesh Kumar, Chairman, Meerut Local Centre welcomed the guests and members of IEI. Er. Tarun Anand, Chairman, Jabalpur Local Centre introduced the subject of the webinar. The Guest Speaker Er. V.K. Sahu, GM (Retd.) and Principal Estate Manager also expressed his views. The Keynote Speaker was Er. K.C. Jain, Chief Engineer (Retd.),

Govt. of Botswana, Zimbabwe. He concentrated his talk on engineering around the world with special reference to globalization of Indian construction industry. He discussed the dimension of globalization, the impact of globalization on architecture and architectural ethics. He informed how globalization has made possible the execution of mega Projects, networking beyond engineering, materials and equipment availability, new techniques and new market. He also told about the new challenges before engineers as the result of globalization.

The Chief Guest, Er. V.B. Singh, IEI Council Member explained the role of Institution of Engineers (India) in achieving sustainable development goals of UNO.

Er. Rakesh Rathore, Council Member also put forwarded his thought. The concluding remarks on the webinar were given by Er. P.C. Agarwal, Professor Mech. Engg., OIST Jabalpur. Er. M.L. Jain, Hony. Secretary, Meerut Local Centre presented vote of thanks. The moderator of the programme was Er. Vedant Shrivastav

(e) World Water Day **Date 22-03-2021**

After almost one year, this event was in celebrated in physical mode in IMA Hall Meerut. After the welcome address by the Chairman Meerut Local Centre, Er. S K Kumar, Chairman, Indian Water Resources Society, Meerut delivered a useful talk on the theme of '**Valuing Water**'. He stressed that the precious resource of water is nearing extinction and it is our bounden duty to save it, revive it and flourish it for our future generations. Ideal prerequisite of healthy, equitable and inclusive water use is to ensure access to it for all living beings on planet. Hence a realistic water pricing policy has been engaging attention of law makers, the world over. Water is a natural resource, used widely by all living beings since eternity and at least access to safe drinking water has come to be treated as human right. Social life also thrives on water- almost all tourism flourishes with different forms of water- snow, lakes, rivers and sea.

The vote of thank was presented by Er. M L Jain Hony. Secretary and Er. C P Gupta was the Master of Ceremony.

2. Technical Webinars

(a) Centenary Webinar **22-11-2020**

An All India Webinar on the subject of "Enhancing Skill and Employability of Civil Engineers" was organized by Meerut Local Centre under the aegis of Civil Engineering Division Board of IEI. The event was controlled by the IEI Headquarter and it was streamed live by National Skill Development Forum, Shimla. Er. Rajneesh Kumar, Chairman Meerut Local Centre welcomed the dignitaries and delegates attending the webinar. Er. V.B. Singh Chairman, Civil Engg. Division Board addressed the webinar and elucidated the theme. Er. Narendra Singh, President IEI also graced the occasion by his presence and delivered the presidential address. There were three panelists who delivered their talks on the subject.

1. Er. S.K. Kumar FIE, Retd. Chief Engineer, U.P. Irrigation
2. Dr. Gaurav Rastogi FIE, M.D., Etheral Engineers Pvt. Ltd. Meerut

3. Dr. D.K. Sharma FIE, Dean Academics, MIET, Meerut

Er. S.K. Kumar started his presentation with explaining the gap between academia and industry. Our curriculum imparts technical knowhow of all disciplines of Civil Engineering, but while seeking employment specific skills are also required which vary from job to job. Practical and job oriented professional development is required in this complicated era of professionalism and corporate work culture. Er. Kumar shared his experience of pre-job training at University of Roorkee 60 years ago. The students built an Olympic size swimming pool by Shramdan and were exposed to all types of processes in Civil Engg. design and construction.

Dr. Gaurav Rastogi mentioned that construction industry is the second largest industry in India after agriculture and contributes for 9% share in country's GDP. Construction industry consists of Real Estate, Infrastructure, Industrial construction and urban development. It provides



employment to large number of people. However currently, a big number of Civil Engineers are unemployed due to various factors. The institutions and students are not exposed the real time requirement to improve deficiency in employability. Dr. Rastogi put forwarded several suggestions to improve the employability Civil Engineering students. He suggested that academic institutions should emphasize on Interaction with experts in industry, adopt latest technologies apart from following standard syllabus, facilities and collaboration with industries, conduct conferences & workshops, confidence and professional development programs, group discussions, practical application training with prominence to team work, problem based experimental activities in Civil Engineering.

Dr. D.K. Sharma discussed various skills, which should be developed amongst the Engineering students, which may improve their employability. However employment is a matter of demand and supply ratio. Mushroom growth of engineering institutions has adversely affected the employment and Governments have important role to play to avoid this mismatch. He suggested that students should not use short cut methods and should study standard books. Target should be fixed and mindset has to be changed to face challenges of future. Parents should guide, motivate and monitor their wards. Students should acquire deep

knowledge of both theory and practice.

Er. P.S. Singhal FIE, Retd. S.E., U.P Irrigation was the moderator and Convener of the webinar. Er. M.L. Jain, Hony. Secretary Meerut Local Centre presented the vote of thanks.

(b) Technical Webinar 21-02-2021

An all India Webinar on the subject of "Energy Efficient Design of Buildings with Reference to 'Energy Conservation Building Code' was organized by this centre under the aegis of Civil Engineering Division Board. This programme was also controlled by the IEI HQ and on the air live by NSDF, Shimla. All corporate members of IEI were invited to join the webinar. Er. Narendra Singh, President IEI gave motivational presidential address. Er. V.B. Singh Chairman, Civil Engineering Division Board explained the subject of the webinar. Er. Rajneesh Kumar welcomed all guests. The three panelists of the webinar were Er. Deepak Bansal FIE, Joint General Manager (Projects), HUDCO Ltd. New Delhi, Er. Ram Kumar, Senior Project Officer, UP, NEDA, Lucknow and Er. Raj Verma, ECBC Consultant for UP, Lucknow.

Er. Deepak Bansal started with sharing his experiences in Affordable Housing Scheme he has been associated with for last 27 years. These houses should be sustainable as well as according to the requirement of the people. In the process of designing such buildings it has to be assured that it should be certified as per ECBC provisions, GRIHA provisions and most of the green building guide lines. A building with 50 to 75 years life and minimum water, lighting and air-conditioning requirements is a good green building. To start with ECBC was mainly for commercial Buildings with lot of lighting and air-conditioning requirement. Presently to reduce the carbon foot print, not only the energy consumption should be at its minimum but use of renewable sources of energy is important. He suggested the use of new materials like hollow concrete blocks, stabilized mud blocks etc. as per requirement and availability. He discussed various factors in planning for building like site planning and land use planning with practical examples. He said that Building envelope is very important. ECBC, GRIHA and all others provisions stress on Building Envelope as it controls the lighting and A/C requirements. Building Design must be most efficient to reduce the cost and better the performance.

Er. Ram Kumar gave an overview of ECBC. He divided his talk in three parts; Back ground of Energy Efficiency program, UP Energy Conservation Building Code and star rating and green initiatives of buildings. The subject of energy efficiency in buildings is not new, but after UN intervention on climate change, the subject got priority. India is committed to reduce GHG emissions to 35% by 2030. Therefore, energy efficiency has to be increased in all the sectors particularly in building sector, because it consumes 33% of our total energy consumption. Many countries have issued energy codes for design and construction of energy efficient buildings, as per their climatic and geographical conditions. India brought its code in 2007 and modified it in 2017. UP is the first state to

notify ECBC-2018 based on GOI code. During last 20 years, UP and other states have made rules for green buildings design & construction. This includes rain water harvesting, solar water heating system, installation of photo voltaic power plants and incentives were declared by government from time to time. UP ECBC, based on central ECBC is applicable to buildings having connected load of 100 KW or more and plot area of 1000sq.metres The code specifies three performance levels i.e., ECBC, ECBC+ and super ECBC for minimum 30%, 45%, 55% energy savings respectively. State has to decide the administrative mechanism for implementing ECBC. BEE has star rating the commercial buildings. This is based on saving in energy consumption and goes from one to five stars. Others are the Green Building Ratings in India, as IGBC and GRIHA. These ratings are based not only on energy consumption but takes into consideration other factor like water conservation, rain water harvesting, air quality, renewable energy integration, environmental quality, water quality, waste disposal etc. He also discussed the incentives being given to green buildings.

Er. Raj Verma informed that UP is a leading state in the implementation of ECBC. All concerning government departments, Architects and builders have been coordinated to construct energy efficient buildings. ECBC is mandatory but ECBC+ , Super ECBC and Net Zero buildings are the next stages. ECBC 2017 is the code applicable for commercial and government buildings and Eco-Nivas Samhita 2018 is the code for residential buildings. ECBC guidelines must be

followed from the design level itself to save cost. Material must be selected accordingly. Daylight simulation is to be taken up in the design. The ECBC implementation is quite simple in UP. The developer has to submit a deceleration with the plan of the building about ECBC compliance. There are two levels in the process of construction-construction of envelope and electrical fittings. Envelope design considerations include appropriate orientation and shading, enhanced walls and roof insulation and efficient glazing. If envelope is designed well and material for walls and roof with low conductivity is used, lesser amount of energy will be required to maintain comfort conditions. Insulation of roof must be more effective than walls. In the comfort system and electrical equipment, efficient equipment with minimum three star rating should be used. Er. Verma presented several case studies of energy efficient commercial and residential buildings.

Er. P.S. Singhal FIE, Retd. S.E., U.P Irrigation was the moderator and Convener of the webinar. Er. M.L. Jain, Hony. Secretary Meerut Local Centre presented the vote of thanks

3. Other Activities

- (a) Republic Day was celebrated on 26th January 2021 in IEI office.
- (b) Family get together was arranged on the occasion of Holi on 22-03-2021 at IMA Hall Near Bachcha Park, Meerut

Forthcoming Events

Date	Time	Event	Venue
18-04-2021	11.00 AM	Technical Webinar on Smart Grid	Online
24-04-2021	06.30 PM	9 th AGM	TimbukToo Resturant, Garh Road, Meerut
17-05-2021	03.00 PM	World Telecommunication Day	BSNL Conference Hall, Tejgarhi, Meerut

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