## The Institution of Engineers Pakistan, Karachi Centre



## NEWSLETTER Vol. 38 issue March-2014 Registration No: 288

## International Women's Day Celebrations "Equality for Women is Progress for All"

Saturday the 8th March, 2014 at IEP Convention Centre



Engr. Farhat Adil, Chairman, IEPKC presenting the welcome address



Engr. S. Jamshed Rizvi, President, IEP gave the presidential Address



Engr. Ayaz Mirza, Secretary, IEP, Karachi Centre briefing the History of IEP



Engr. Beena Riaz Member

**Organizing Committee** 

conducting the event

Engr. Asfia Aleem Chairperson of IWD Celebration presenting the introduction of the Event



Engr.Rukhsana Rahooja Member Organizing Committee during her Presentation



Engr. Dr. Sadia Muniza Faraz, Member Organizing Committee presenting the paper

Chairman Think Tank Committee giving the Concluding Remarks

Engr. Nooruddin Ahmed,

The Institution of Engineers Pakistan, Karachi Centre celebrated the International Women's Day on Saturday the 8<sup>th</sup> March, 2014, at IEP Convention Center. The International Theme for this unique celebration was **"Equality for Women is Progress for All"**. Engr. Beena Riaz conducted the event.

The programme started from recitation of Holy Quran by Engr. Dr. Sadia Muniza Faraz, and National Anthem was also presented. Engr. Farhat Adil, Chairman, IEP Karachi Centre welcome the audience. He raised concern over drop out ratio of lady engineers during education and service before and after marriage and suggested to find a way out. He also appreciated the efforts of organizing committee specially Engr. Asfia Aleem, the Chief Organizer for arranging such an event in very short time.

Egnr. S. Jamshed Rizvi, President the IEP presented presidential address and praised the efforts of women engineers for organizing an exclusive event which was first of its kind held at the Institution of Engineers Pakistan, Karachi Centre in a very short notice, reflecting the dedication of the organizing committee.

Engr. Ayaz Mirza, Secretary IEP Karachi Centre gave a presentation about The Institution of Engineers Pakistan. He thanked all the participants, organizing committee members and invite them to please come forward and take part in the IEP Karachi Centre activities.

Engr. Asfia Aleem, Member Local Council and First Lady Engineer of Pakistan gave the Introduction of the event.

Engr. S. Jamshed Rizvi, President, IEP, Engr. Farhat Adil Chairman, IEP Karachi Centre and Engr. Ayaz Mirza, Secretary IEP Karachi Centre jointly presented the shields to Engr. Asfia Aleem, Authors and the members of the Organizing Committee.

Following papers were presented:

"Career Development and Combating Unemployment of Women in Engineering Profession"

By Engr. Rukhsana Rahooja, Member , Organizing Committee

"Future Recommendations The Way Forward"

By Engr. Dr. Sadia Muniza Fraz, Assistant Professor, Electronics Department, NEDUET and Member Local Council

#### "A presentation on the theme of International Women's Day"

by Engr.Mubaraka Mossa Raza and Engr. Ayesha Khan

158 delegates were registered from various organizations/Universities.

Concluding remarks were given by Engr. Nooruddin Ahmed. He appreciated the efforts put up by the IEP office bearers and members of the organizing committee.

He expressed hope that women will continue to gather here, identify their problems and find practical solutions by taking ownership. He reassured that IEP will continue to support them in all respects. The event formally came to an end with the vote of thanks by Engr. Beena Riaz.



Engr. Mubaraka Moosa Raza presenting the paper



Engr Aysha Khan during her presentation

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IEP Officials standing in respect of National Anthem



Engr. Farida Salam, Engr. Bushra Nadeem, Engr. Atiya Afaq Mrs. Farhat Adil



Members organizing committee standing in respect of National Anthem



Group Photograph with Engr. Asfia Aleem , First Lady Engineer of Pakistan



A view of Participants



Lady Engineers from NESPAK with Engr. Farhat Adil, Chairman, IEP, Karachi Centre

## Career Development and Combating Unemployment of Women in Engineering Profession By Engr. Rukhsana Rahooja

Engr. Rukhsana Rahooja talked in detail on Career Development and Combating Unemployment of Women in Engineering Profession. She highlighted significance of career development and how it was achieved through Continuing Professional Development (CPD) and Engineering Practice Examination (EPE). She explained to the participants the progression of career from a Registered Engineer to a Professional Engineer. Engr. Rahooja informed the participants that the Pakistan Engineering Council under its Act has mandate for introducing and ensuring continued professional development activities amongst its growing community of engineers and has devised a comprehensive framework for compliance titled: The Professional Development of Engineers Bye-Laws-2008. These Bye Laws were approved by the Government of Pakistan and have been enforced by the PEC w.e.f. July 2010. Thereafter, it is mandatory for all registered engineers of PEC for compliance. Engr. Rahooja explained that career development of professionals is being taken up seriously and concerted efforts are made by the universities and a number of recognized professional bodies to offer CPD courses to keep the engineers abreast of the changes in the rapidly changing world, broaden professional skills to become more effective and valuable for prospective employment by earning CPD points from such coursed. She apprised the participants that in order to maintain minimum standards of competence, practical knowledge and skills of Registered Engineers and Professional Engineers the PEC has outlined parameters comprehensively in clause 13 (b) of the above Bye-law . Engr. Rahooja explained in detail about the required number of CPD points that every Registered Engineer (after 2005) has to accumulate before sitting for an EPE to qualify for the title of Professional Engineer and then continuously accumulate CPD points for yearly renewal of the title of Professional Engineer. Engr. Rukhsana Rahooja elucidated the mechanism of accumulating and keeping a record of the CPD points on an annual basis. She stressed the women engineers to maintain record of their CPD points meticulously in each of the following four categories identified by the PEC namely:

#### 1. Formal education 2. Work-based learning 3. Developmental activities 4. individual activities

At the conclusion of the technical details regarding career and professional development, Engr. Rahooja gave some tips of 'DOs and 'DONTs' to women engineers for the periods when they are unemployed and to those too who are privileged with employment. She stressed the women engineers never to give up hope and continue accumulating CPD points during their unemployment phase more vigorously. Engr. Rahooja advised the relatively successful women to assist fellow women engineers in various activities and encourage networking with their respective Alumni as well.

Engr. Rahooja stressed the young women graduates to continue preparing the entrance tests for seeking employments in public sector organizations and should not 'console' themselves with the myth that being women they accept back seats in career development

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Engr. Syed Jamshed Rizvi , President, IEP presenting the shield to Engr. Rukhsana Rahooja, Speaker and Member Organizing Committee of IWD Celebrations



Engr. Syed Jamshed Rizvi , President, IEP presenting the shield to Engr. Asfia Aleem, First Lady Engineer of Pakistan and Chairperson IWD Celebrations



Engr. Frhat Adil, Chairman, IEP Karachi Centre, presenting the shield to Engr. Dr. Sadia Muniza Faraz-Speaker and Member Organizing Committee of IWD Celebrations



Engr. Farhat Adil Chairman, IEP, Karachi Centre and Engr. Asfia Aleem presenting the shield to Engr. Beena Riaz, Moderator and Member Organizing Committee of IWD Celebrations



Engr. S.Jamshed Rizvi, President, IEP Engr. Farhat Adil Chairman, IEP, Karachi Centre presenting the shield to Engr. Mah Talat Mirza, Member Organizing Committee of IWD Celebrations



Engr. Syed Jamshed Rizvi , President, IEP and Engr. Ayaz Mirza, Secretary, IEP, Karachi Centre presenting the shield to Engr. Shagufta Ishtiyaque Member Organizing Committee of IWD Celebrations



Engr. Nooruddin Ahmed, Chairman, Think Tank Committee presenting the shield to Engr. Mubaraka Moosa Raza, Speaker and Member Organizing Committee of IWD Celebrations



Engr. Asfia Aleem and Engr. Ayaz Mirza, Secretary, IEP, Karachi Centre Presenting the shield to Engr. Aysha Khan, Speaker and Member Organizing Committee of IWD Celebrations



Engr. Farhat Adil, Chairman, IEP, Karachi Centre and Engr. Asifa Aleem presenting the shield to Engr. Farzana Ali, Member Organizing Committee of IWD Celebrations



Members of Organizing Committee, IWD



A Group Photograph



A Group of Lady Engineers of NESPAK

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If u r a real friend If u r a real man. Appreciate the beauty of my mind Not the quality of being shine. Appreciate the beauty of my thoughts Not the beauty of flaws. Appreciate the love for simplicity Not the love for publicity. Appreciate the respect for care Not the respect for flatter. Appreciate the characteristics i own Not the dress i wore. Appreciate the trust i hold Not the lie i told. Appreciate the promise i kept not the words you just felt. Appreciate the strengths i showed Not the strength of which i just swore. Appreciate the love for lame Not the love for fame. Appreciate the money i shared Not just the money i earned. Appreciate the passion for work Not the tension for work. Appreciate the voice of conscience Not the voice of mine. Appreciate the regret for mistake Not the habit of being fake. This will make me a good human This will make me a good woman

## **OBITURARY**

#### Sept-2013 to March-2014

The Editorial Board on behalf of IEP, Karachi Centre expresses profound grief on the sad demise of the following. We pray to Almighty to grant forgiveness to the departed soul-Ameen.

Capt. Nadeem Ahmed, Engr. Nasiruddin T. Ansari, Engr. M.Hidayatullah Khan Khaishgi, Engr. Wasiuddin Ahmed Zuberi, Mother of Engr. Firdous Shamim Naqvi, Mother of Engr. Zaheer Ahmed Ather, Uncle of Engr. Sohail Bashir, Engr. Sajjad Mehmud, Sister in law of Engr. Major Akhlaq Ahmed Khan, Engr. Habibur Rehman, Mother of Engr. Syed Ahmed

# Modular Floating Dome Biogas Plant

The Present invention relate to biogas plant and provide a modular floating dome biogas plant with daily production between 1.2 -1.5 cubic meter biogas through conversion of fermentable organic matter, in particular cattle dung from tow buffaloes/cows, into combustible gas and fully mature organic manure. The capacity of biogas plant can be enhanced by cascading through specially provided coupling arrangement for 2, 4, 6 and onward number of buffaloes/cows. The biogas plant according to present invention comprise cattle dung holder, inlet chute for dung, outlet chute for manure, digester tanks, gas holder tank, manure outlet, biogas outlet port and stainless steel cage. The invention further provides a method of bio-gasification initiated by a group of facultative micro-organism acting upon fermentable through enzymatic hydrolysis. The biogas plant according to the present invention is advantageous for its unique long life, light in weight, transportable and easy to use product for production of biogas.

#### Bio Gas is mixture of gases and normally comprises of the following:

Methane	(CH <sub>4</sub> )	60-70%
Carbon Dioxide	(CO <sub>2</sub> )	30-35%
Nitrogen	(N <sub>2</sub> )	1%
Hydrogen	(H <sub>2</sub> )	0.1-0.5%
Carbon Monoxide	(CO)	0.1%
Hydrogen Sulphide	(H2 S)	Traces

#### **Design Parameters**

#### i) Required Manure:

- One buffalo can produce about 20 to 22 kg manure per day. On average tow buffalos will produce about 40 kg manure per day that is equivalent to 1.48m<sup>3</sup> biogas produced from 1000 kg biomass i.e. 0.03 m<sup>3</sup>.kg
- The ratio of dung and water is 1.1
- 40 kg dung+40 kg water = 80 kg
- Total input per day=80 kg
- Input for 30 Days=80 kgX30 days=2400 kg approx. per month
- ii) Temperature: Normal operational temperature will be 20° c to 35° c
- iii) PH value: Neutral PH and ranges 6.8 to 7.2
- Digester Tanks: Tank of 2.4m<sup>3</sup> (86.75ft<sup>3</sup>) capacity is required diameter and height of 1.68m (66 inch.)
- v) Gas Holder Tanks: Tank of 2 m<sup>3</sup> (70.63ft<sup>3</sup>) capacity is required and it is fabricated to the final size of 1.067m (42 inches) diameter and height of 1.524m (60 inches).



A group photo of the Members of Admin & Finance Committee Meeting held on 15th March. 2014

#### <u>EP BLOG</u>

#### IEP Karachi Centre has developed a BLOG on its

Website: http://www.iepkarachi.org.pk where members can discuss matters of technical interest & share their experience. All members are requested to visit BLOG and forward their comments for its improvement on our e-mail address: <u>main@iepkarachi.org.pk</u>, secretary@iepkarachi.org.pk

#### <u>Announcement</u>

IEP is very grateful to all the sponsors of ENTECH-PAKISTAN-2013. It will be a regular annual feature of IEP, Karachi Centre. Dates for ENTECH-PAKSITAN-2014 will be announced short<u>ly</u>



Engr. Asim Murtaza Khan, Chairman Alternate Energy Committee visited Nazeer Hussain University

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