THE INSTITUTION OF
ELECTRICAL & ELECTRONICS ENGINEERS
PAKISTAN

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Disseminate Technical
Knowledge
Conserve Electricity

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EDITORIAL

The Institution is on record to make it a point to issue newsletters at a regular pace. Besides providing regular information to the members, the newsletters also give us the opportunity for two-way traffic, because the members of any particular institution or organization can write back with their opinions, views and thoughts - all which are of great advantage for the viability of the organization itself.

Your Institution, as a regular practice, has been issuing newsletters regularly since its inception in 1969. However, the obligation on part of the members does not seem to have been fulfilled, because normally we do not receive letters to the Editor. Hopefully, we would receiving the same from you soon, which will be included in the up-coming issues.

This time, as usual, the newsletter has an editorial and two beautiful pieces from the DAWN of September 20, 2008 titled "GOD is in the Detail" and "Curiosity Kills". Both these articles have been considered as important and should make very interesting reading. Thereafter, are the Minutes of the meeting of the Central Council, including the progress report submitted by Engr. Prof. Dr. Zahir Ahmad Fikri, M.S. 347th Minutes of the Central Council, 348th Minutes of the Central Council and 349th Minutes of the Central Council. Then comes the most important Excerpts from the History circa 1974.

Kindly go through the excerpts and see what your Institution was doing 25 years ago. After the Excerpts, we have the Seminar Report and Synopses and in the end of the newsletter is again the Call for Technical Papers.

The President, office bearers and the Central Council of IEEEP take the opportunity to wish all members a most "Happy Eid-ul-Azha".

Editor.
GOD is in the Detail

There was a time when scientists believed that the smallest particle of matter was an atom. Uncuttable, as named by the Greeks, this particle was the basic building block of all matter. Everything is made up of atoms, the air that we breathe, the water we drink, and even our very own bodies. Fast forward to 1897 and physicist J J Thomson made a startling discovery through his work on cathode rays: the subatomic particles. This effectively destroyed the concept of atoms as being indivisible units and being the fundamental particles.

From that moment on, everything changed. Peering into the depths of microcosm, we saw a whole new world - a universe, if you will - come to light. We saw that atoms are made of particles called protons, neutrons, and electrons; protons and neutrons are made of weird particles called quarks and gluons. Further particles were also discovered, thus the Standard Model was made and hence, Particle Physics was born.

This peeling away of the layers of the smallest particles known to man has given insight into far greater things, like the creation of the universe. But how can something so small and tiny give us insight about something as massive and colossal as the very creation of the universe, that is, the Big Bang? This is where the hunt for the most elusive particle comes into play. Scientists across the world have been hunting the particle which is theoretically responsible for the creation of the universe. It existed for the briefest of seconds when there was no concept of seconds - just moments after the Big Bang (approximately one billionth of a second). It is the only particle in the Standard Model to still remain theoretical and hidden from the prying eyes of humanity. Its scientific name is the Higgs boson, named so after Peter Higgs who has theorised its existence. But physicist Leon Lederman gave it another name: he called it, the God Particle. The Higgs boson is a particle, much like protons, neutrons, electrons, quarks and gluons, but is highly unstable in nature. It is part of a field, also theorised by Peter Higgs, called the Higgs field. This field pervades all space and the Higgs boson is the carrier of it, interacting with other particles. Just like the fictitious Jedi Knights from Star Wars interact with the Force. The Higgs boson is an important aspect of the Standard Model of Particle Physics - but no one has ever found it.

Theoretical physicist John Ellis is one of the scientists searching for the Higgs. Ellis explains that the Higgs field, in theory, is what gives fundamental particles mass. He offers an analogy: Different fundamental particles, he says, are like a crowd of people running through mud. Some particles, like quarks, have big boots that get covered with lots of mud; others, like electrons, have little shoes that barely gather any mud at all. Photons do not wear shoes - they just glide over the top of the mud without picking any up. And the Higgs field is the mud.

Ellis is not the only one looking for the particle. Over 8,000 'detective' scientists from over 85 countries are polishing their magnifying glasses. On September 10 this year, the proverbial magnifying glass of the detective scientists (nearly 27 miles long, and located underneath the French-Swiss border) was switched on. Housed in CERN, the European Organisation for Nuclear Research, the Large Hadron Collider (LHC) is the world's largest and highest-energy particle accelerator. It pushes particles, like protons, up to speeds of light and creates collisions between them.

The resulting debris from these collisions will confirm whether the Higgs boson exists or not. The particle itself is impossible to see, as it exists for the briefest of moments, but the decay rate and the remnants of the particle can be detected. This detection could confirm the predictions and missing links in the Standard Model, and could explain how particles (atoms, electrons, etc) all acquire mass.

The LHC has six massive detectors, all lined up across the giant ring, and, each detector has been given a specific task. The main tasks of the four are as follows:

ATLAS (A Toroidal LHC Apparatus) - The first of the two general purpose detectors, its job is to look for clues of extra dimensions, the origins of mass, and signs of new physics.
It will also hunt for the Higgs boson.

**CMS (Compact Muon Solenoid):** The second general purpose detector, like ATLAS, will be after the Higgs boson and look for clues into the nature of dark matter.

**ALICE (A Large Ion Collider Experiment):** This detector looks for clues of quark-gluon plasma, a liquid form of matter that existed shortly after the Big Bang.

**LHCb:** Shortly after the Big Bang, it is theorised that equal amounts of matter and anti-matter were created in the Big Bang. This detector will look for clues and investigate what happened to the missing antimatter.

The final two detectors, TOTEM and LHCF are smaller in scale, and deal with specialised research. These are the 'unusual' suspects and the detectives. And now, their game of hide and seek begins. Some say that this is quite a dangerous game. Already, people have been theorising that the LHC will create havoc and put the existence of the world in jeopardy. But to put the fears of the world at rest, the LHC has formed a group called the LSAG (LHC Safety Assessment Group) to address the safety issues of the upcoming experiments.

In defense of the accidental discovery or the making of black holes, the LSAG website states, "Speculations about microscopic black holes at the LHC refer to particles produced in the collisions of pairs of protons, each of which has energy comparable to that of a mosquito in flight."

Astronomical black holes are much heavier than anything that could be produced at the LHC. According to the well-established properties of gravity, described by Einstein's relativity, it is impossible for microscopic black holes to be produced at the LHC.” And with regards to cosmic rays, "over the past billions of years, Nature has already generated on earth as many collisions as about a million LHC experiments - and the planet still exists." There is also no need to catch your breath. Although the LHC has come online, it will take about two months for it to get ready for the first proper experiment. And there are many questions that it can answer.

But some continue to speculate that we will learn absolutely nothing at all, and even that could be a good thing. In fact, Stephen Hawking, the world renowned mathematician and theoretical physicist, in a BBC interview said: "I think it will be much more exciting if we don’t find the Higgs. That will show something is wrong, and we need to think again."

I have a bet of one hundred dollars that we won’t find the Higgs.” In the same interview Hawking mentions the possibility of finding super partners and adds that "whatever the LHC finds, or fails to find, the results will tell us a lot about the structure of the universe.”

His statement permeates the entire scientific community which awaits any kind of results: Good or bad, find or no find. If the Higgs is found, it will prove a 40-year-old theory correct and the world will peer into the depths of its own creation. If there is no Higgs particle, it will prove that we have much more to learn about the universe and that there is something even more fascinating than the God Particle that we do not know about.

**QUOTATIONS**

**When a man points a finger at someone else, he should remember that four of his fingers are pointing at himself.**

Louis Nizer

**A fool without fear is sometimes wiser than an angel with fear.**

Nancy Astor

**He that is good for making excuses is seldom good for anything else.**

Benjamin Franklin

**The way to get things done is not to mind who gets the credit of doing them.**

Benjamin Jowett

**If a man is not faithful to his own individuality, he cannot be loyal to anything.**

Claude McKay

**Men too involved in details usually become unable to deal with great matters.**

Francois de La Rochefoucauld

**Noise proves nothing. Often a ten who has merely laid an egg crackles as if she had an asteroid.**

Mark Twain
Curiosity Kills

Exciting as it may sound, CERN’s LHC experiment has drawn a lot of criticism for its perceived ‘attack’ on earth’s survival, writes Abbas Reza

EVER wondered how the universe was created? How the planet we live on came to be? The scientists at CERN might have the answer. CERN, whose headquarters is in Geneva, is the world’s largest particle physics laboratory and the creator of the Large Hadron Collider (LHC). The LHC experiments could reveal the origins of mass, shed light on dark matter and, scientists hope, can create conditions that existed right after the theorised Big Bang that created the universe. These experiments could provide the answers to a slew of questions haunting mankind for eons.

But, at what cost? Mankind has, forever, played with things that they do not fully understand, and this time around, they are playing with the very existence of this planet. When the LHC smashess two counter rotating beams of light together at energy levels of 14 trillion eV, it will give rise to conditions that existed right after the Big Bang with temperatures being measured in the trillions degree centigrade. And some speculate that temperatures this high can create ‘mini black holes’ that could expand to tear the earth apart.

By their own admission, the scientists involved in this experiment cannot really predict the result of this experiment. The worst case scenario is that the conditions created by the colliding particles will create a black hole which will destroy the planet. Many feel that if there is even the minutest of chance of this happening, it is still too big a chance. In fact, German chemist, Professor Otto Rossler, insists that his calculations have shown that it is quite plausible that the mini black hole may survive and grow exponentially to eat the planet from inside out. His worst case scenario gives earth four years from the time the black hole is first formed. Scientists at CERN counter by detailing their plans for the safeguards they have put in place and they cite their research of particle collisions in far away galaxies as evidence that the doomsayers are dead wrong on this one. But how do you put safety features in place for something that you cannot really explain or know how to control? They also claim that accelerated particle collision experiments have been going on for decades without any noticeable effects on the planet. But never has such an experiment been conducted at such a massive scale and such speeds, and people are apprehensive about the kind of chain reaction the extreme temperature can cause. The last Big Bang created this universe. The force of the blast was such that the universe is still expanding some 14 billion years later. This experiment admittedly is not of the same magnitude as the Big Bang, but still has the potential of devastating results. It is all too well to be a pioneer in new and emerging technology, but one cannot gamble with the lives of almost 6.5 billion people and countless creatures from the animal kingdom. One can hope and pray that the doomsayers are - as advocates of LHC say - wrong, and that all goes well if the experiment does go ahead. It is undoubtedly very exciting to solve the mysteries of this universe, but people wonder whether experiments of such kind are worth the trouble and worry. Of course, they are curious too, about how it all started, but they feel that do not want to satisfy their curiosity by wagering on the planet’s very survival. After all, we all know that curiosity kills the cat.

Courtesy by: Dawn Sci-Tech World Sep.20-2008
346th Central Council Meeting held on 26th January 2008, in IEEEP HQ
List of Participants

PRESENT
1. Engr. Muhammad Anwar Khalid
   President (in Chair)
2. Engr. Ch. Asghar Ali Randhawa
   Immediate Past President
3. Engr. Riaz Absan Baig
   Vice President
5. Engr. M. Saleem Arif
   Hony. Secretary General
6. Engr. Shabid Aslam
   Hony. Treasurer
7. Engr. Farrukh Javed Tariq
   Hony. Joint Secretary
8. Engr. Tahir Basharat Cheema
9. Engr. Engr. Dr. Zahir Ahmad Fikri
10. Engr. Prof. Dr. Suhail Aftab Qureshi
12. Engr. Ashiq Hussain Bhatti
13. Engr. Nadia Maqubool

REGRETS
1. Engr. Shafiq A. Siddiqui Out of Country
2. Engr. Khalid Jaffar
3. Engr. Bashir Ahmad Abbasi
4. Engr. Mian Fazal Ahmad
5. Engr. Fazal Rahmaan
6. Engr. Muhammad Aqoob
7. Engr. Anwar-ul-Hassan
8. Engr. Amanullah Hashmi
10. Engr. Abdul Waheed Khawaja

Minutes of Central Council Meeting

The Institution of Electrical & Electronics Engineers Pakistan

IEEEP-350/HQ/316 Dated: 16.02.2008

Minutes of 346th IEEEP Central Council meeting held on 26th January 2008 IEEEP HQ Office, 4-Lawrence Road, Lahore.

List of participants is placed at Annex-1.

After recitation from the Holy QURAN, the agenda was taken up item wise. The Council welcomed Engr. Nadia Maqbool from Karachi, who participated in the meeting as Secretary, Karachi Local Centre.

1. The minutes of 345th meeting of the Central Council were confirmed by the Council.

2. Progress arising of the 345th minutes was discussed.
   a) Letter which was drafted by Engr. Tahir Basharat Cheema regarding the matter that ‘TEPCO was hiring GM’s and CEO’s from the market instead of promoting Wapda Officers’, was perused and it was decided to dispatch this to the concerned quarters for necessary action.

3. a) Proceedings of the 183rd meeting of the Admn & Finance Committee were discussed and endorsed.
   b) Proceedings of the 175th meeting of Membership Committee were discussed and endorsed.
   c) Regarding enrolment of a subscriber, M/s. Zubair Ghaznavi (Pvt) Ltd, it was informed that the file was lying with the Chairman, Membership Committee, for enquiry and after clearance by Engr. Fazal Rahmaan it will be considered eligible for the enrolment as a Subscriber. The Council endorsed the action.
   d) While transferring, Member to Fellow, Engr. Dr. Z.A. Fakri’s case was referred back to Membership Committee due to non-
availability of C.V. and application form which was not duly filled by the applicant.

4. After considerable deliberation, it was decided that the 32nd AGM/Convention will be held at Hotel Avari “Khurshid Mahal” Lahore tentatively in 1st week of March 2008.

It was unanimously decided that President Prime Minister of Pakistan be invited to inaugurate the opening session of 32nd Convention as a Chief Guest. However, in case none of the two is available, Minister for Water & Power be invited.

5. While considering agenda item “performance of Local Centres”, a concern was shown on the lack of activities by the local centers. And it was decided to activate all the local centers. Chairman Lahore Local Centre informed the Council that they would arrange a seminar on “Power Crisis” in the 2nd week of February, 2008…

- Regarding Faisalabad Local Centre, it was 
  informed that with the assistance of HQ, and the CEO FESCO, reactivation of Faisalabad Local Centre is in progress.

- The H. S.G. assured the Council that Multan, Hyderabad, Rwp/Islamabad Local Centres will also be activated and the focal persons in each centres are being contacted.

6. It was informed that appointment of Mr. Muhammad Ihsan Khan as Manager Administration has been finalized and he is expected to join IEEEP no later than 1st February, 2008. It was told that in case he fails to join on the set date, then the second candidate, Mr. Munib Ahmad, would be asked to join on the same terms and conditions.

7. Any other point

Engr. Asghar Ali Randhawa suggested that next meeting of the Central Council be held at Karachi. The council unanimously agreed and approved and decided that meeting should be held in last week of February, 2008 at Karachi. It was also decided that those having institutional support, a few others should also attend the meeting from Lahore including the President and other office bearers. For a couple of others) The President would decide and the IEEEP would fund the travel expenses for one day trip.

8. Prof. Dr. Suhail Afzal Qureshi, Editor of IEEEP Journal, informed the Council about the achievements regarding up-grading the standard of the Journal. He explained that he was trying to get HEC approval for the IEEEP Journal. He informed that HEC requirements were as follows:-

(i) ISBN Number.
(ii) Website
(iii) Foreign Referees

He said that he could apply for ISBN number from France, if the Journal is available on website. In this regard, Engr. Tahir Cheema was requested to get the job done through the company which has been assigned the contract to update the website and do other IT works. Prof. Dr. Suhail Afzal Qureshi also told the house that following professors and researchers have very kindly accepted his request to become external/ foreign referees for the IEEEP Journals.

(i) Prof. Dr. Akhtar Kalam
   (Victoria University Melbourne, Australia)
(ii) Prof. Dr. Mahmood Nagrial
    (University of Sydney, Australia)
(iii) Prof. Dr. D.P. Kolthari
     (Professor, Centre for Energy Studies, India Institute of Technology, New Delhi, India)
(iv) Mr. Tariq Masood
     (Chairman IEEE, Qatar)
(v) Prof. Dr. Tahir Ali Chughtai
    (University of Manchester, UK)

Efforts done by Prof Dr. Suhail Afzal Qureshi were appreciated by the house and he was assured of full support of IEEEP (P) HQ.

9. Prof. Dr. Zahir A. Fikri informed the Council regarding the progress report made by him. The detailed report is attached (Annex-II).

The meeting adjourned with a vote of thanks to the chair.

Engr. M. Saleem Arif
Hony. Secretary General
Progress Report

As on JANUARY 4, 2008
BY: Prof. Dr. Zahir Fikri

1. LESCO'S SW BASED GIS PORTAL FOR T&G NETWORKS

The work on the SW based GIS portal for LESCO is nearly 70% complete. Basic portal with ontology was developed and tested. The GIS software that is based on PRIMAGIS was integrated. The LESCO data and maps were converted from PDF to SVG format and integrated into the portal. The CIM ontology was studied. The LESCO T &G ontology was developed and is being finalised. Automatic updating of portal data and maps is being studied. Portal syndication of content is also under development. It is expected that the complete portal will be ready for online demos in March 2008. The MS student has started working on his thesis. A PDF version will be made available at this portal in due course. The project is proceeding in a very satisfactory manner. Results will be published on IEEE- Web page and IEEE Journal.

2. SW BASED ELEARNING OBJECTS FOR CORPORATE TRAINING

A comprehensive Research Proposal based on detailed literature survey was submitted to ICT RDF (Research Fund) on January 7, 2008. After feedback from ICTRDF, a detailed proposal will be submitted. The research team shall consist of a team of researchers and software developers. The domains shall cover Project Management, Business Process Reengineering, and Modeling. Orientation etc in a utility such as PTCL or NTDC. Good results are expected from this activity also. All results will be published in IEEE Journal. This will be a 3 year contract with about 300 man-months of effort.

3. SW Based Portals for NTDC

This project is yet under review. A presentation shall be made to Managing Director PEPCO as soon as a suitable appointment is made for this purpose. Secretary General Saleem Arif, Advisor to PEPCO has been requested to assist in getting a suitable time for presentation. Work on the LESCO Portal will also be shown in this presentation.

4. Other proposals

Work on other proposals is under way. Proposals for a Comprehensive Portal for LCWD and IEEEP are under consideration. A project for Government of Punjab covering Training and Solar energy is also under consideration.

5. Financial obligations

None of the above projects have any financial obligation by IEEEP.

Activities of Lahore Local Centre

Factory Visit M/s. Syed Bhai
Engr. Syed Saleem Akhtar Hony, Secretary-Lahore Local Centre IEEEP, arranged a visit of factory and premises of Mis Syed Bhai's (Pvt.) Ltd. Ferozpur Road, Lahore. Engr. Ashiq Hussain Bhatti, Chairman Lahore Local Centre, Members of Central & Lahore Local Council visited the factory on July 14, 2008. Engr. Muhammad Tufail Shad, Manager Quality Control, Mian Nazim, Sr. Manager Marketing briefed the delegates about the organization. The delegates were also served a delicious lunch.

Seminar on "EFFICIENT USE OF ENERGY FOR SUSTAINABLE ECONOMIC GROWTH"

The Institution of Electrical & Electronics Engineers Pakistan Lahore Local Centre arranged a Seminar on "EFFICIENT USE OF ENERGY FOR SUSTAINABLE ECONOMIC GROWTH" on Monday 20th October 2008 at Mashhadi Hall Pakistan Engineering Congress Building, Lahore. Federal Environment Minister Mr. Hameedullah Jan Afridi was the Chief Guest. Mr. Fareedullah Managing Director ENERCON and various electrical, electronics, chemical engineers & architects attended the seminar. Engr. Nisar Mohyuddin - Executive Director Diamond Jumbison Industries, Engr. Molsin M. Syed- Past Chairman IEEEP Lahore Centre - Managing Director M/s Hybrid Technics & Chairman TEVTA, Engr. Sultan Ali Banaq, Engr. Qamar Raza Naqvi, Arch. Ziaheer A. Sheikh spoke about the subject. Engr. Ashiq Hussain Bhatti and Engr. Syed Saleem Akhtar also addressed the seminar. Mr. Asghar Ali Randhawa Past President IEEEP delivered vote of thanks to Chief Guest and House.
347th Central Council Meeting held on 27th March 2008, in Shalimar Hall, Pearl Continental Hotel Karachi

List of Participants

PRESENT
1. Engr. Shafiq A. Siddiqui (In chair)
2. Engr. Sibte A. Jafri, Chairman KLC
3. Engr. M. Saleem Arif, Hon. Secretary General
4. Engr. Nadia Maqbool, Hon. Secretary KLC
5. Engr. Farrukh Javed Tariq, Hon. Joint Secretary
6. Engr. Tahir Basharat Cheema
7. Engr. Dr. Z. A. Fikri
8. Engr. S. T. H. Naqvi
9. Engr. G. R. Bhatti
10. Engr. Syed Khurshid Pervez
11. Engr. Muhammad Ikram-ul-Hassan
12. Engr. Farooq Nadeem
13. Engr. Tahir Saleem
14. Engr. Akash Kenwal Ram, Convener
15. Engr. Irfan Shaikh, Convener
16. Engr. Tafsir Ahmad Khan, Convener Member
17. Engr. Ahmed Zubair, Convener
18. Engr. Waqas Ashraf, Chief Resident
19. Engr. Akhtar Ansari
20. Engr. Parveen Lohana
21. Engr. Navid Ansar

Members Karachi Local Centre by special invitation

Minutes of Central Council Meeting

The Institution of Electrical & Electronics Engineers Pakistan

IEEEP-350/HQ/1796
Dated: 29.04.2008

Minutes of 347th Central Council meeting of the IEEEP held on 27th March, 2008 at 6.00 p.m. in Shalimar Hall, Pearl Continental Hotel, Karachi.

1. The meeting commenced with the recitation of Holy Quran.

2. On request of Hon. Secretary General, Engr. Shafiq A. Siddiqui chaired the meeting. List of participants is attached at Annex-A.

3. Engr. S. T. H. Naqvi introduced members of the Karachi Local Centre and highlighted their duties. The HSG, Engr. M. Saleem Arif introduced participants from Lahore. He particularly commended the services of Engr. Tahir Basharat Cheema for the cause of IEEEP.

4. Hon. Secretary General remarked that it was a memorable day because the Central Council was meeting at Karachi. He extended his gratitude to Engrs. Sibte A. Jafri, Nadia Maqbool and others for arranging the meeting. He further said that it was great to have seniors like Engr. S. T. H. Naqvi and Prof. Dr. Z. A. Fikri available in the meeting.

5. Engr. Nadia Maqbool, Secretary KLC, pointed out that notification indicating association of IEEEP HQ with KLC was still pending for want of issuance. Engr. Tahir Basharat Cheema responded that the same was being provided very shortly.

6. Engr. S. T. H. Naqvi inquired about the progress achieved as regards para 2(a) of the last Central Council minutes. He again maintained that PEPICO was hiring persons from outside on higher salaries, whereas in-service cadre engineers were getting much less. He demanded removal of the disparity. Moreover, as PEPICO was in losses, it should curtail such expenditures, and also ensure that there was no difference in packages for various categories of employees.
7. Engr. Tahir Basharat Cheema was also of the view that because Wapda/PEPCO had lot of experience at its disposal, hence people from outside should not be hired at higher salaries. Engr. Shafiq A. Siddiqi endorsed and added that through inducting people from outside, unexperienced persons enter into organizations and they cannot come up to the standards. It was proposed unanimously that once again a formal letter be issued to the authorities requesting for curtailing the policy of hiring outside executives in Wapda/PEPCO specially when ample relevant experience was already available. Engr. S. S. A. Jafri maintained that another letter be addressed to Secretary (Water & Power) Govt. of Pakistan as resolution of the Central Council about non-hiring of outside executives in PEPCO. Engr. G. R. Bhatti proposed that letter be written to Prime Minister with a copy to the Secretary (Water & Power). It was unanimously decided that a delegation headed by Engr. S. S. A. Jafri comprising of President, Vice President, IEEEP and Dr. Fikri, as member would meet the relevant GOP Officers and then personally hand over the letter to them.

8. Engr. Shafiq A. Siddiqi proposed that criteria and pre-requisites be formulated for election of President, Vice President and HSG etc. and the Central Council to which all those present unanimously agreed. It was suggested that M/s. Shafiq A. Siddiqi and Engr. Tahir Basharat Cheema would put up draft criteria in the next meeting.

9. Engr. S. S. A. Jafri showed concern that previously all functions were held on schedule, but now seminars etc are usually not held in a timely fashion. Engr. Shafiq A. Siddiqi proposed that a body of Council Elders be established and special Council of existing Chairman and HSG be formulated to hold symposium/ seminars - on schedule.

10. It was proposed that the Annual General Meeting/Convention will be held in the month of May 2008. The Council accepted the proposal and desired that efforts for holding AGM/Convention be started forth with.

11. The HSG informed the Council that the performance of Lahore Local Centre was very poor and some action should be taken. Engr. S. S. A. Jafri desired that 2/3 more months could be tolerated, so that new body could come and do the needful. The Council approved the same. Besides, Engr. S. S. A. Jafri proposed that Engr. Shafiq A. Siddiqi and Engr. Tahir Basharat Cheema should formulate modality to improve the performance of local Centres especially Lahore. The House agreed to the proposal.

12. The Council approved the proposal of Engr. Shafiq A. Siddiqi and Engr. S. S. A. Jafri that local centres must arrange one lecture per month. For this, the Vice President (South) and Vice President (North) were desired to implement the decision and also submit progress to the Council in a months time.

13. Regarding activities of other local centres, Engr. Tahir Basharat Cheema apprised the Council that Faisalabad, Peshawar and Islamabad Centres were showing encouraging response and all seven dormant local centres would start operating soon. Further the names of various engineers/members at Islamabad/ Peshawar, Hyderabad and Quetta were also discussed for possible induction in the local centres there. The Council approved all of these.

14. Engr. Tahir Basharat Cheema was entrusted with the responsibility to update IEEEP website.

15. Engr. S. S. A. Jafri proposed that the next Central Council meeting be held at Hyderabad for the purpose of re-activation of Hyderabad Local Centre. Engr. S. K. Purvez, Vice President (South) promised that he would personally visit Hyderabad to streamline the situation. The Council approved the proposal that next meeting would be held at Hyderabad in the month of June, 2008.

16. Dr. Z.A Fikri apprised the Council that he was working on web-designing and portal for distance corporate learning and all research work will be published at IEEEP forums. He added that there could be strong on-line distance learning through computer systems with the collaboration of virtual university. The Council praised the
efforts of Dr. Fikri and also suggested arranging for academic-industry linkage.

17. Engr. Shafiq A. Siddiqi and Engr. S. S. A. Jafri focused the Council about good working of Karachi Local Centre. They desired that IEEEP HQ should also attract donors, companies and other people for running their programmes. The Council endorsed the view point.

18. The Council approved the total estimated expenditure of Rs 479,000/- on major repair work of IEEEP building as approved by Admin & Finance Committee, subject to the condition that no replacement of any door will be permitted as these were made of precious deodar wood. Further more, it was also decided that the roofs will not be painted.

19. The Karachi Centre admired the HQ for having its own building in Lahore. They desired, that at the occasion of forthcoming AGM/Convention, when the higher authorities, like Prime Minister/President might be the chief guest, the HQ may request them for a piece of land for Karachi Centre, so that they could also have the "own building. This was agreed.

20. Engr. Tahir Saleem of the Karachi local Centre voiced that Research Journals, News letters etc. should not be circulated directly to the members, but it should be done through local centres. He also pointed out the need to expedite membership cases in HQ. The HSG endorsed the same. The Council agreed that the printed journals be dispatched to the Local Centres for re-circulation to the addressees. However, the issue of wrong addresses of members was also discussed. It was decided that the HQ Office would send the available lists to the KLC for correction and verification etc.

21. Engr. Ubaid Khan brought his Fellowship case to the notice, of the council. The Council considered his matter for early disposal by the HQ office and the Membership Committee.

22. The meeting ended with the vote of thanks to the chair.

Engr. M. Saleem Arif
Hony. Secretary General

348th Central Council Meeting held on 3rd June 2008, in IEEEP HQ Office
4-Lawrence Road, Lahore.

List of Participants

PRESENT
1. Engr. Muhammad Anwar Khalid President
2. Engr. Riaz Ahsan Baig Vice President
3. Engr. M. Saleem Arif Hony. Secretary General
4. Engr. Farrukh Javed Tariq Hony. Joint Secretary
5. Engr. Fazal Rahmaan
6. Engr. Dr. Z. A. Kikri
7. Engr. Khalid Jail
8. Engr Prof. Dr. Suhail Aftab Qureshi
9. Engr. Tahir Basharat Cheema
10. Engr. Syed Saleem Akhtar
11. Engr. Noor-ul-Huda
12. Engr. Shahid Hussain Gardezi
13. Engr. Ashiq Hussain Bhatti

REGRET
1. Engr. Shahid Aslam out of country
2. Engr. Shafiq A Siddiqui
3. Engr. Muhammad Yaqoob
4. Engr. S. T. H. Naqvi out of station
5. Engr. Bashir Ahmad Alibasi
6. Engr. Anwar ul Hassan
7. Engr. Mian Fazal Ahmad
8. Engr. Ahmad Saeed Akhtar out of station
9. Engr. Fazal Ahmad Khan
10. Engr. Abdul Waheed Khawaja
Minutes of Central Council Meeting

The Institution of Electrical & Electronics Engineers Pakistan

IEEEP-350/HQ/2008/1957 Dated: 10.06.2008

Minutes of 348th Central Council meeting of the IIEEP held on 3rd June 2008 at 3.00 p.m in IIEEP HQ Office Lahore.

1. The meeting commenced with the recitation of Holy Quran.

2. The minutes of 347th meeting of Central Council were confirmed.

3. Progress of the 347th minutes of meeting was discussed. The Hon. Secretary General briefed the house about the last Central Council meeting held at Karachi and that it greatly helped to develop harmony between the IIEEP HQ and the Karachi Local Centre.

4. Proceedings of 185th meeting of Admin & Finance Committee were endorsed.

5. Proceedings of 175th meeting of Membership Committee were confirmed.

6. The Council endorsed the proposal of the President and the HSG that 32nd AGM be held at the end of July or 1st week of August 2008. The Council directed that efforts be started hence forth to make the AGM an appropriate event.

7. On the issue of below par performance of Lahore Local Centre, the Chairman LLC Engr. Ashiq Hussain Bhatti, apprised the house that in the last LLC Council meeting, Engr. Khawaja Abdul Waheed, Hon. Secretary LLC was unwilling to continue as Secretary LLC and that the post needed to be filled in with any other suitable person. The Council unanimously approved the nomination of Engr. Syed Saleem Akhtar as Hon. Secretary LLC.

8. Engr. Tahir Basharat Cheema discussed at length the progress of IIEEP Website. He delivered that the earlier vendor greatly disappointed and wasted two precious years, and that now Wapda IS department has been entrusted with the responsibility of IIEEP Website and they have agreed to accomplish the task on the same terms and condition. Manager (Admin) was required to follow the case.

9. The Council appreciated the efforts of Dr. Z.A. Fikri and requested that, in the next meeting, he would dilate on his work on Portal to connection with the IIEEP Website.

10. On the suggestion of Engr. Tahir Basharat Cheema, the house advised the Manager (Admin) that list of members be dispatched to the Local Centres for correction/ updation, so that IIEEP HQ may have the correct addresses of the members on its record.

11. The Hon. Joint Secretary Engr. Farrukh Javed Tariq apprised that he would take-up the issue of the exemption of Taxes from FBR and also arrange change/revision of the name of IEEP to IIEEP. The Council requested Engr. Farrukh Javed Tariq to get the work done at the earliest.

12. The Council approved that a full-time Accountant with the back ground of budget and Accounts be appointed in IIEEP HQ for smooth budgeting, Audits, Accounts, Taxation matters etc. of the Institution. The HSG was requested to arrange for appropriate recruitment.

13. It was informed that IEEEP is planning to hold a Seminar on Conservation & Demand Side Management from own resources on 24th June in Avari Lahore. Engr. S. Saleem Akhtar was designated as Convenor Organizing Committee for the Seminar.

14. Engr. Dr. Suhaib Aftab Qureshi - Editor IEEEP Publications briefed the Council about the progress of recognition of the IEEEP Research Journal by Higher Education Commission. He informed that as soon as the IEEEP Website was up-dated, recognition from both internal and external bodies would be forthcoming.

15. The Council required Manager (Admin) to follow up the case of the Member's lobby by NESP AK/Hony. Treasurer.

16. The meeting ended with the vote of thanks to the chair.

Engr. M. Saleem Arif
Hony. Secretary General
Minutes of Central Council Meeting

The Institution of Electrical & Electronics Engineers Pakistan


Minutes of 349th Central Council Meeting of the IEEEP held on 30th August, 2008 at 3.00 pm in IEEEP HQ Office, 4-Lawrence Road, Lahore.

1. The meeting started with the recitation of Holy Quran.

2. The minutes of 348th meeting of Central Council were confirmed.

3. Progress of the 348th minutes of meeting was discussed. The Hony Secretary General gave an over view of the progress. The house urged that Agenda of the meeting henceforth be circulated to Members prior to meeting’s scheduled date.

4. Engr. Fazal-ur-Rehman pointed out that the Agenda of the Central Council usually does not mention outstanding issues. It was agreed that henceforth the resolution of outstanding issues be included in the agenda.

5. The Hony. Treasurer apprised the Council that, as below par performance of Lahore Local Centre was continuing, therefore, the LLC was a financial liability on IEEEP Headquarters and the HQ could no more feed the LLC. The house endorsed the concerns of the Hony. Treasurer. It was unanimously agreed that the LLC should develop its own sources to meet its expenditures. However, the HQ will continue to help LLC for their operational and other day to day activities.

6. Dr. Z.A. Fikri proposed that every year after the AGM, all the Local Centres including Lahore Local Centre should announce and publish calendar of their activities and the HQ could coordinate with them for achievement of their goals. He asserted that all Local Centres should participate in overall organizational goals and the HQ should supervise their activities. His proposal was unanimously endorsed.
7. Issues relating to AGM were discussed in detail. It was decided that the AGM & Convention would be held on 21st October 2008 tentatively. It was also proposed that an organizing & fund raising committee be constituted for the convention so that the event could be held successfully.

8. The Council debated the issue of Chief Guest in the forthcoming convention. It was proposed that Prime Minister, Minister for Water & Power or Chief Minister Punjab could be invited as Chief Guest in the convention. Dr. Fikri opined that Mr. Shamsul Muqir, Ex-Chairman Wapda might be considered as Chief Guest.

9. It was pointed out that the Addresses and contact nos. of the members were required to be updated. Manager Administration was directed to update the Addresses, contact numbers of all the corporate members as quickly as possible, but not later than 30th September, 2008.

10. The Hony. Joint Secretary was requested to expedite resolution of issue of tax exemption.

11. The Hony Secretary General apprised the house about the appointment of full time Accountant in IEEEP HQ Office. The issue was discussed at length. It was agreed that Hony. Treasurer would evaluate the performance of the existing part time Accountant and give his comments/report. Based upon that report, further action will be taken.

12. It was pointed out that our activities are not visible to the public. In this connection, it was resolved that after every event and even after each Central Council Meeting a Press Release would be issued.

13. Attention was invited towards an important issue that IEEEP was holding seminars on important National Issues and holding other activities but the outcome is not visible. The recommendations are not consolidated nor made public for action by the Govt/ concerned agencies. It was proposed that an Action Report on the three seminars be prepared and then sent to concerned Ministries in the Govt. for necessary action. The following committee was constituted.

Engr. Dr. Z. A. Fikri Convener
Engr. Dr. Sohail Aftab Qureshi
Engr. Dr. Zubair A. Khan
Engr. Khalid Jalil
Engr. M. Saleem Arif Hony. Secretary General

It was also decided to hold technical session after the AGM. In this session the hard copies of the papers should be available for distribution to the participants.

14. Proceedings of 186th meeting of Admin. & Finance Committee were endorsed.

15. The Hony. Treasurer apprised the Council that the design of Member's Lobby would be ready by 30th September, 2008.

16. The Hony. Treasurer informed that Admin & Finance Committee has recommended confirmation of the services of Manager Administration and grant him Pay Scale-18. The Council endorsed the recommendation and agreed to fix gross salary up-to approx Rs. 35,000/- per month in Pay Scale-18. He will be eligible for annual increment as per rules.

17. Proceedings of 176th meeting of Membership Committee were confirmed.

18. On the issue of IEEEP Membership Cards, it was agreed that the Membership Cards be issued to the various categories of members. It was proposed that Central Council Members be given cards of different color.

19. Dr. Z. A. Fikri explained his work on portal functioning in connection with IEEEP Website. He informed that he would not charge any amount for the services, rendered to the Institution. The house greatly appreciated the efforts of Dr. Fikri and gave approval for his work and advised him to get started on his project. However, on the proposal of Hony. Joint Secretary, the Council advised Dr. Fikri to submit a paper on his action plan.

20. Dr. Fikri reiterated his proposal to make IEEEP (P) own building as a model for energy conservation rather make it “Zero Energy Building”. It was greatly appreciated and he was given go ahead. Before taking any action, the tenant M/s. NESPAK will be taken in confidence.

The Meeting ended with a vote of thanks to the chair.

Engr. M. Saleem Arif
Hony. Secretary General
Dear IEEP Members,

The Council has got into its stride; at its meeting on 22nd May 1974, it formed the Committees for the year, and laid down the ground rules and the parameters for their operation. The Committee have met and further brought the wheels of operation into motion.

During the Council meeting, Ch, A. Hundai laid before the Council a letter from Mr. M. S. Vehra Chairman IEE (Pakistan Section) inviting IEEP to a closer co-operation regarding lectures and technical visits; the proposal was welcomed and reciprocal activity was proposed to be initiated.

The effect was very spontaneous. On the 6th of June, IEE (USA) organized a visit to ELMAC Limited at 3.00 p.m. which lasted over three hours; the members went round the factory, after Mr. A. M. Hassan had introduced them to the products of the organization and the background of its formation back in 1962.

About 30 members of IEE (USA), some of them common to IEE (Pak) were present and subsequently enjoyed the hospitality of ELMAC.

"The product range manufactured at ELMAC is suitable for small signal applications for low and medium power communications equipment, be it in the entertainment field or professional or defence, have the following capacity—Germanium transistors 4.0 million, Silicon Transistors 6.0 million, Germanium Diodes .5 million, Electrolytic Capacitor 7.0 million, Polyester capacitores 7.0 million Carbon resistor 40.0 million, potentialenues 1.5 million—Total numbers of persons employed is 415, which include 20 graduates in engineering physics and chemistry and 30 polytechnic diploma holders.

The Council in its 38th meeting on 22nd May 1974, nominated the following Committees.

Administrative and Finance Committee
1. Dr. Muhammad A. Haque
2. Mr. Shafiq A. Siddiqui
3. Mr. Mahmood A. Cheema
4. Mr. Dost Mohammad Khan
5. Mr. S. A. Maan
6. Malik Muhammad Ashraf

Board of Management for Publications
1. Dr. Kazi Amin-Din Ahmad
2. Dr. Muhammad A. Haque
3. Mr. Abdul Aziz
4. Mr. Munawar H. Bhatti
5. Mr. Ahmad Abbas Khan
6. Mr. R. N. Batra

Membership Committee
1. Mian Munawarud-Din
2. Mr. M. Amin
3. Mr. Lewis E. Hussain
4. Mr. S. Urfan Ahmad
5. Brig. M. Sardar Hassan
6. Mr. Ahmad Abbas Khan

Academic Committee
1. Dr. Kazi Amin-Din Ahmad
2. Mr. S. Urfan Ahmad
3. Mr. M. Ayub Sadozai
4. Mr. Saleem Hassan
5. Col. (Retd) Ahmad
6. Mr. Abdul Hamid

Examination Board
1. Mr. R. A. Sheikh
2. Ch. A. Hamid
3. Dr. Kazi Amin-Din Ahmad
4. Malik Mohammad Ashraf
5. Mr. Muhammad A. Haque

Library & Research Laboratories Committee
1. Mr. S. Urfan Ahmad
2. Mr. Dost Mohammad Khan
3. Mr. I.D. Arshad
4. Dr. M. Y. Siddiqui
5. Mr. Saleem Hassan

Professional specialists seemingly derive their rewards from inward standards of excellence from their professional societies, from the intrinsic satisfaction of their task. In fact they are committed to the task, not the job; to their standards not their boss. And because they have degrees, they travel.

Future Shock.—Alvin Toffler
Youth is not a time of life. It is a state of mind. It is a temper of the will, equality of the imagination, a vigour of emotions, a predominance of courage over timidity and of the appetite for adventure over ease.

Nobody grows old by merely living a number years, people grow old only by deserting their ideals. Years may wrinkle the skin, but to give up enthusiasm wrinkles the soul.

You are as young as your faith, as old as your doubt, as young as your self-confidence, as old as your fear, as young as your hope, as old as your despair.

Reproduced from Indus—Sept., 1973 (WAPDA)

Science

A flywheel in your future

Flywheels are perhaps the oldest mechanical devices known to man. Since remote antiquity they have been used in one form or another by potters, weavers, milers and other craftsmen.

In the past, flywheels have been used to convert one form of energy into another—The kick of the potters foot into the rotations of his wheel...........

Modern champions of the flywheel want to extend this concept: they see the device as a means of storing energy that would otherwise go waste...........

The greater the mass of a flywheel and the faster it spins, the more energy can be stored in it ............In recent years technologists have improved flywheels energy capacity by as much as 1000 per cent....................

For the public, the first experience of flywheel power is likely to become with Advanced Concept Train, an electrical rapid-transit vehicle being built by the Boeing Vertol Company for the department of transportation..................

Whenever the train brakes to a halt, the system feeds the energy produced, which would normally be dissipated as heat, to a series of flywheels located underneath the train in Vacuum Chambers. When the train is about to start the system is reversed. The energy stored in the flywheels is fed to the trains motors and used to take it up to the cruising speed. Only then does the train go back onto third rail power................... But it is in the private car that inventors see the biggest challenge for the flywheel.....

One car flywheel plan, developed by Cleve-unique land engineer Algerda Naysvity involves a unique transmission that would alternately use the car's engine to provide traction and power to the flywheel, and then shut the engine off and turn the vehicle entirely over to the flywheel. Naysvity estimates that such a car would use its engine only a quarter of the time in city driving and thus could reduce gasoline consumption and emission of pollutants by a factor of four...........

(Extracts from News Week—Feb. 26, 1974)

Laughter is a tranquilizer with no side effects

Edward W. Harold (F) worked for RCA for 38 years before his "retirement" last year. During his time there, he gained recognition for his leadership in creating an outstanding semiconductor and transistor research laboratory from what was previously an electron tube research group. Dr. Harold was a member of Spectrum's Editorial Board, served on the Institution's Board of Directors from 1956 to 1958, and has been active on many committees and boards. He organized the Princeton N.J., Section (Institute of Radio Engineers) in 1947.

This essay was inspired by the experience upon his retirement from regular employment last year. He recalls that he approached retirement with trepidation not sure he'd be comfortable with what appeared to be nothing to do. His feelings, he said, were like those of a fellow on the edge of a cold lake; his friends already in the water, kept saying "Come on in—it's just great". When he finally took the plunge, he found the common syndrome still existed: too much to do and too little time to do it. Upon that occasion, he was reminded of a previously retired friend who when asked what he was doing, said "absolutely nothing, and I just barely have time enough for that." Dr. Harold's plunge inspired him to relate his experience to the IEEE Electron Device Techniques Conference last May in a Luncheon address, and the present essay stems from those remarks.

Feelings are for animals. Words are the speciality of man.

Readers are what occupies a retired engineer's time. We asked Dr. Harold what his present down-to-dusk activities are and he began by insisting he doesn't solve any of the world's great problems and "the older I get, the less I believe that solutions are even possible." Nevertheless, he is now working on the manuscript of a book on color picture tubes, of which he is coauthor with three other RCA men. He has also written a chapter on the same topic for a reference book, and has reviewed several proposed IEEE Press books and manuscripts for journals. In between, he has designed and built a home burglar alarm system. On the other hand what was once merely a hobby now occupies most of his time...financial investment. It represents his most important source of income. He spends hours with his HP-35 calculator, using an engineer's approach on how to cope with anticipated future inflation. But don't ask me for the answer; it hasn't arrived yet, he notes. In anticipation of a recent minor surgical procedure, Dr. Harold bonged up on the subject at the Rutgers Medical Library, thus enabling him to "tell the surgeon and others in the hospital how they should be doing their jobs." In the realm of "Free advice": Dr. Harold had done some unpaid consulting and has given much advice to his twin grandsons who are just entering college and intend to become engineers.

Only the very young and the very old have homes.

The dilemma underscored by Dr. Harold in this article gives rise to thoughts of how employers of engineers view the same problem. Are they willing to underwrite from at least a time standpoint, the investment needed for an engineer merely to keep
MOTHERLAND

By
Major MOHAMMAD VASIN, MIERE

"O' land 'O beautiful land; never shall ye be trampled again, Sacrifices in thousands, we have not made in vain. How can we wash the shame that your enemies have brought on you, By averting the sorrows that they have consistently wrought on you, I have a dream, that vindicate thy honour, we will. For every citizen of the soil shall deliberately go through the mill. Strong and prosperous you shall be, for we will make you so, Only thy well-wishers shall stay for all others will go. 'O land, 'O Pakland you are land of the pure, We shall not rest till all thy wounds we cure. That object surrender we dare not ask you to forgive, Only the assurance by thy sons to die for you, and live. Disobey you? who could be so disrespectful? Surely none, but the exploiters, Disintergrate you? who could be so ungrateful? Surely none, but the 'conspirators'. 'O land 'O Pakistan, Bread and shelter even to the saboteurs? We salute thy greatness. But be witness to redemption pledged by thine saviours.

Holographic Moving Map Display
B. R. Clay, RCA Corporation
Advanced Technology Laboratories
Burlington, Massachusetts

Abstract
A high brightness display is achieved using tungsten sources to read out phase image plane holograms. Full color is provided by using three super-imposed component holograms derived from three primary color separation object transparencies of the original subject. The holograms are contained on transparent embossing from electroplated masters. Any frame on the tape can be retrieved rapidly by means of the superimposed frame address Fraunhofer binary holograms which use a silicon diode array. The system lends itself to post-embossing annotation.

Reference Fresnel holograms recorded on each frame enable the frame to be positioned in X and Y so as to allow the map image to be driven in response to navigational tracking requirements.

Because incident readout light is modulated by diffraction rather than absorption, the holograms do not rise in temperature as a result of the conversion of light to heat. This feature enables considerably more light flux to be gated by the holograms than could be gated by any other medium of the same area. The resulting image brightness is adequate for viewing in the high ambient light environment. Since the production of color involves diffraction rather than absorption by dyed emulsion, bleaching with consequent color degradation cannot occur.

QUOTATIONS

The key to everything is patience. You get the chicken by hatching the egg—not by smashing it.

Ellen Glasgow

Originality is not seen in single words or even sentences. Originality is the sum total of a man’s thinking and writing.

Isaac Bashevis Singer

To achieve great things, we must live as though we are never going to die.

Luc de Clapiers de Vauvenargues

We judge ourselves by what we feel capable of doing; while others judge us by what we have already done.

Henry Wadsorth Longfellow

Decision is sharp knife that cuts clean straight; indecision, a dull one that hacking and tears and leaves ragged edges behind it.

Gordon Graham
GLIMPSES OF IEEEP
SEMINAR ON POLICY FRAME WORK & INCENTIVES FOR NEW TECHNOLOGY IN ENERGY CONSERVATION & DEMAND SIDE MANAGEMENT
GLIMPSES OF IEEP
SEMINAR ON POLICY FRAME WORK & INCENTIVES FOR NEW TECHNOLOGY IN ENERGY CONSERVATION & DEMAND SIDE MANAGEMENT