



## 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 news-letters at a regular pace. Besides providing regular information to the members, the news-letters 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 news-letters regularly since its inception in 1969. However, the obligation on part of the members does not seem to have been full-filled, 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 news letter 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, viz. 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 news-letter is again the Call for Technical Papers.

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

Editor.

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# GOD is in the Detail

**T**HERE 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 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, et al) 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 to learn about the universe and that there is something even

more fascinating than the God Particle that we do not know about.

Courtesy by:

Dawn Sci-Tech World Sep.20-2008

## 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 hen who has merely laid an egg cackles as if she had an asteroid.*

Mark Twain



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# 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.

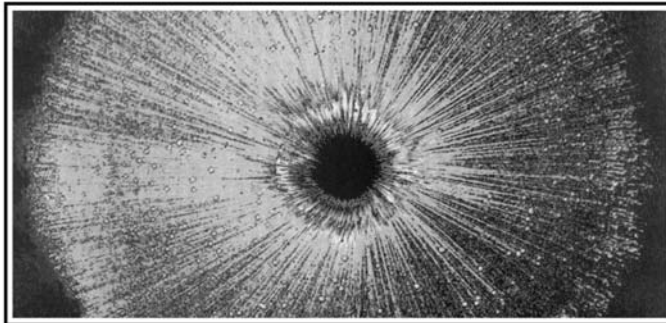
But, at what cost? Mankind has, forever, played with things that they do not fully understand, and this time around, they are playing with the very existence of this planet. When the LHC smashes two counter rotating beams of light together at energy levels of 14 trillion eV, it will give rise to conditions 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



**346<sup>th</sup> Central Council Meeting held on  
26<sup>th</sup> January 2008, in IEEEEP 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 Ahsan Baig  
Vice President
5. Engr. M. Saleem Arif  
Hony. Secretary General
6. Engr. Shahid 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
11. Engr. Syed Saleem Ald1tar
12. Engr. Ashiq Hussain Bhatti
13. Engr. Nadia Maqbool

**REGRETS**

1. Engr. Shafiq A. Siddiqi      Out of Country
2. Engr. Khalid Jalil
3. Engr. Bashir Ahmad Abbasi
4. Engr. Mian Fazal Ahmad
5. Engr. Fazal Rahmaan
6. Engr. Muhammad Yaqoob
7. Engr. Anwar-ul-Hassan
8. Engr. Amanullah Hashmi
9. Engr. Noor-ul-Huda
10. Engr. Abdul Waheed Khawaja

**Minutes of Central Council Meeting**



**The Institution of  
Electrical & Electronics Engineers  
Pakistan**

IEEEEP-350/HQ/316

Dated: 16.02.2008

Minutes of 346<sup>th</sup> IEEEEP Central Council meeting held on 26<sup>th</sup> January 2008 IEEEEP 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 345<sup>th</sup> meeting of the Central Council were confirmed by the Council.
2. Progress arising of the 345<sup>th</sup> minutes was discussed.
  - a) Letter which was drafted by Engr. Tahir Basharat Cheema regarding the matter that "PEPCO was hiring G.M'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 183<sup>rd</sup> meeting of the Admn & Finance Commiittee were discussed and endorsed.
  - b) Proceedings of the 175<sup>th</sup> meeting of Membership Committee were discussed and endorsed.
  - c) Regarding enrolment of a subscriber, M/s. Zubair Ghaznfar (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 emolment 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 centres. 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 IEEEEP 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 IEEEEP would fund the travel expenses for one day trip.

8. Prof. Dr. Suhail Aftab Qureshi Editor of IEEEEP 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 IEEEEP Journal. He informed that HEC requirements were as follows:-

- (i) ISBN Number.
- (ii) Web Site
- (iii) Foreign Referees

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

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

Efforts done by Prof Dr. Suhail Aftab Qureshi were appreciated by the house and he was assured of full support of IEEEEP (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 Arlif  
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 site and IEEE Journal.

### 2. SW BASED E-LEARNING OBJECTS FOR CORPORATE TRAINING

A comprehensive Research Proposal based on detailed literature survey was submitted to ICT RDP (Research Fund) on January 7, 2008. After feedback from ICT RDP, 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 tESCO 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 IEEE 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 IEEE.

## Activities of Lahore Local Centre

### Factory Visit M/s. Syed Bhais

Engr. Syed Saleem Akhtar Hony. Secretary- Lahore Local Centre IEEE, arranged a visit of factory and premises of Mis Syed Bhais (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 Jumbolon Industries, Engr. Mohsin M. Syed- Past Chairman IEEE Lahore Centre - Managing Director M/s Hybrid Technics & Chairman TEVTA, Engr. Sultan Ali Baraq, Engr. Qammar Raza Naqvi, and Archt. Zaheer 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 IEEE delivered vote of thanks to Chief Guest and House.

**347<sup>th</sup> Central Council Meeting held on  
27<sup>th</sup> March 2008, in Shalimar Hall  
Pearl Continental Hotel Karachi**

**List of Participants**

**PRESENT**

1. Engr. Shafiq A. Siddiqi (In chair)
2. Engr. Sibte A. Jafri Chairman KLC
3. Engr. M. Saleem Arif Hony. Secretary General
4. Engr. Nadia Maqbool Hony. Secretary KLC
5. Engr. Farrukh Javed Tariq Hony. 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 Ahmed Khan, Convener Member
17. Engr. Ahmed Zubair, Convener
18. Engr. Waqas Ashraf, Chief Resident
19. Engr. Akhtar Ansari
20. Engr. Parkash Lohana
21. Engr. Navid Ansari

**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 347<sup>th</sup> Central Council meeting of the IEEEP held on 27<sup>th</sup> 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 Hony. Secretary General, Engr. Shafiq A. Siddiqi chaired the meeting. List of participants is attached at Annex-A.
3. Engr. S. S. A. Jafri introduced members of the Karachi Local Centre and hi-lighted 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. Hony. 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 PEPCO 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 PEPCO 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, un-experienced persons enter into organizations and they can not 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 Nice President IEEEEP 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 / RWP, 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 up-date IEEEEP 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. Pervez, 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 IEEEEP 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 IEEEEP 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 IEEEEP 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 'their' 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

**348<sup>th</sup> Central Council Meeting held on  
3<sup>rd</sup> June 2008, in IEEEEP 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 Jalil                 |                         |
| 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 Siddiqi      |                |
| 3. Engr. Muhammad Yaqoob       |                |
| 4. Engr. S.T.H. Naqvi          | out of station |
| 5. Engr. Bashir Ahmad Abbasi   |                |
| 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

IEEEEP-350/HQ/2008/1957

Dated: 10.06.2008

Minutes of 348<sup>th</sup> Central Council meeting of the IEEEEP held on 3<sup>rd</sup> June 2008 at 3.00 p.m in IEEEEP HQ Office Lahore.

1. The meeting commenced with the recitation of Holy Quran.
2. The minutes of 347<sup>th</sup> meeting of Central Council were confirmed.
3. Progress of the 347<sup>th</sup> minutes of meeting was discussed. The Hony. Secretary General briefed the house about the last Central Council meeting held at Karachi and that it greatly helped to develop harmony between the IEEEEP HQ and the Karachi Local Centre.
4. Proceedings of 1851<sup>st</sup> meeting of Admin & Finance Committee were endorsed.
5. Proceedings of 175<sup>th</sup> meeting of Membership Committee were confirmed.
6. The Council endorsed the proposal of the President and the HSG that 32<sup>nd</sup> AGM be held at the end of July or 1<sup>st</sup> 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, Hony. 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 Hony. Secretary LLC.
8. Engr. Tahir Basharat Cheema discussed at length the progress of IEEEEP 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 IEEEEP Website and they have agreed to accomplish the task on the same terms and condition. Manager (Admn) 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 IEEEEP Website.
10. On the suggestion of Engr. Tahir Basharat Cheema, the house advised the Manager (Admn) that list of members be dispatched to the Local Centres for correction/updation, so that IEEEEP HQ may have the correct addresses of the members on its record.
11. The Hony. 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 IEEEEP to IEEEEP. 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 IEEEEP 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 IEEEEP(P) is planning to hold a Seminar on Conservation & Demand Side Management from own resources on 24<sup>th</sup> June in Avari Lahore. Engr. S. Saleem Akhtar was designated as Convenor Organizing Committee for the Seminar.
14. Engr. Dr. Suhail Aftab Qureshi - Editor IEEEEP Publications briefed the Council about the progress of recognition of the IEEEEP Research Journal by Higher Education Commission. He informed that as soon as the IEEEEP Website was up-dated, recognition from both internal and external bodies would be forthcoming.
15. The Council required Manager (Admn) to follow up the case of the Member's lobby by NESF AK/Hony. Treasurer.
16. The meeting ended with the vote of thanks to the chair.

Engr. M. Saleem Arif  
Hony. Secretary General



**349<sup>th</sup> Central Council Meeting held on  
30<sup>th</sup> August 2008, in IEEE HQ  
4-Lawrence Road, Lahore**

**List of Participants**

**PRESENT**

- |                                    |                         |
|------------------------------------|-------------------------|
| 1. Engr. Muhammad Anwar Khalid     | President (in Chair)    |
| 2. Engr. M. Saleem Arif            | Hony. Secretary General |
| 3. Engr. Shahid Aslam              | Hony. Treasurer         |
| 4. Engr. Farrukh Javed Tariq       | Hony. Joint Secretary   |
| 5. Engr. Fazal Rahmaan             |                         |
| 6. Engr. Dr. Z. A. Fikri           |                         |
| 7. Engr. Khalid Jalil              |                         |
| 8. Engr. Muhammad Yaqoob           |                         |
| 9. Engr. Anwar-ul-Hassan           |                         |
| 10. Engr. Mian Fazal Ahmad         |                         |
| 11. Engr. Syed Saleem Akhtar       |                         |
| 12. Engr. Noor-ul-Huda             |                         |
| 13. Engr. Prof. Dr. Zubair A. Khan |                         |
| 14. Engr. Shahid Hussain Gardezi   |                         |
| 15. Engr. Ashiq Hussain Bhatti     |                         |

**REGRET**

- |                                |                |
|--------------------------------|----------------|
| 1. Engr. Riaz Ahsan Baig       | Vice President |
| 2. Engr. S.S.A. Jaffri         |                |
| 3. Engr. Shafiq A Siddiqi      |                |
| 4. Engr. Asghar Ali Randhawa   |                |
| 5. Engr. Bashir Ahmad Abbasi   |                |
| 6. Engr. Fazal Ahmad Khan      |                |
| 7. Engr. Amanullah Hashami     |                |
| 8. Engr. Tahir Basharat Cheema |                |

**Minutes of Central Council Meeting**



**The Institution of  
Electrical & Electronics Engineers  
Pakistan**

IEEEP-350/HQ/2008/238

Dated: 17.09.2008

Minutes of 349<sup>th</sup> Central Council Meeting of the IEEEP held on 30<sup>th</sup> 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-Rehmaan 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 co-ordinate with them for achievement of their goals. He asserted that all Local Centres should participate in overall organizational goals and the H.Q 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 21 st 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. ShamsulMulk, 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 IEEEEP 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 IEEE 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	Convenor
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 Admn. & 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 Admn & 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 IEEEEP 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 IEEEEP 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 IEEE (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



## THE INSTITUTION OF ELECTRICAL ENGINEERS PAKISTAN

Phone : 57134

15th June, 1974  
15th July, 1974

IEEP Newsletter 2/6, 2/7

### EXCERPTS FORM HISTORY-1974

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. Hunid laid before the Council a letter from Mr. M. S. Vehra Chairman IEEE (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.

#### Putting more into a moment condenses time

The effect was very spontaneous. On the 6th of June, IEEE (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 IEEE (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 capacitors 7.0 million Carbon resistor 40.0 million, potentiometers 1.5 million—Total numbers of persons employed is 415, which include 20 graduates in engineering physics and chemistry and 30 polytechnic diploma holders.

#### Men and environment are in constant quivering inter play

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

#### Administrative and Finance Committee

- |    |                        |           |
|----|------------------------|-----------|
| 1. | Dr. Muhammad A. Haque  | Chairman  |
| 2. | Mr. Shafiq A. Siddiqui | Secretary |
| 3. | Mr. Mahmood A. Cheema  | Member    |
| 4. | Mr. Dost Mohammad Khan | Member    |
| 5. | Mr. S. A. Mannan       | Member    |
| 6. | Malik Muhammad Ashraf  | Member    |

#### Board of Management for Publications

- |    |                          |           |
|----|--------------------------|-----------|
| 1. | Dr. Kazi Ainud-Din Ahmad | Chairman  |
| 2. | Dr. Muhammad A. Haque    | Publisher |
| 3. | Mr. Abdul Aziz           | Member    |
| 4. | Mr. Munawar H. Bhatti    | Member    |
| 5. | Mr. Ahmad Abbas Khan     | Member    |
| 6. | Mr. R. N. Batra          | Editor    |

#### Membership Committee

- |    |                         |                  |
|----|-------------------------|------------------|
| 1. | Mian Munawarud-Din      | Chairman         |
| 2. | Mr. M. Amin             | Member           |
| 3. | Mr. Lewis E. Hussain    | Member           |
| 4. | Mr. S. Irfan Ahmad      | Member           |
| 5. | Brig. M. Sardar Hussain | Member           |
| 6. | Mr. Ahmad Abbas Khan    | Member/Secretary |

#### Academic Committee

- |    |                          |          |
|----|--------------------------|----------|
| 1. | Dr. Kazi Ainud-Din Ahmad | Chairman |
| 2. | Mr. S. Irfan Ahmad       | Member   |
| 3. | Mr. M. Ayub Sadozai      | Member   |
| 4. | Mr. Saleem Hassan        | Member   |
| 5. | Col. Ifthikhar Ahmad     | Member   |
| 6. | Mr. Abdul Hamid          | Member   |

#### Examination Board

- |    |                          |          |
|----|--------------------------|----------|
| 1. | Mr. R. A. Sheikh         | Chairman |
| 2. | Ch. A. Hamid             | Member   |
| 3. | Dr. Kazi Ainud-Din Ahmad | Member   |
| 4. | Malik Mohammad Ashraf    | Member   |
| 5. | Dr. Muhammad A. Haque    |          |
- Hony controller of examination

#### Library & Research Laboratories Committee

- |    |                        |                  |
|----|------------------------|------------------|
| 1. | Mr. S. Irfan Ahmad     | Chairman         |
| 2. | Mr. Dost Mohammad Khan | Member           |
| 3. | Mr. I. D. Arshad       | Member           |
| 4. | Dr. M. Y. Siddiqui     | Member           |
| 5. | Mr. Saleem Hassan      | Member/Secretary |

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 love of 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, millers 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 Algerdas Nasvytis 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. Nasvytis 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 pollutant by a factor of four.....

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

Laughter is a tranquilizer with no side effects

Arnold H. Glarfo

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 Engineer) 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 steins from those remarks.

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

Readers may wonder what occupies a retired engineer's time. We asked Dr. Harold what his present dawn-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 represent 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 boned 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 job." 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

current? After all, the boss really expects to pay for what the engineer can produce. On the other hand, if an employer does not encourage the types of updating and broadening efforts outlined in Dr. Harold's essay, the engineer may well perceive that attitude as an admonition not to indulge in such activities. The sad result may simply be a hastening of the day when the employer rates the engineer as "topped out, surplus, or deadwood."

Engineers like author Harold, whose history of technical contributions are well known; obviously avoid the trap suggested by the foregoing observations. But how many engineers do? Management of one's time, in the broad sense, is perhaps the key to both personal and business success. More than once, engineers have been termed too pragmatic with regard to getting ahead. We "don't buy" activities, unless they clearly relate to short-term objectives. Dr. Harold's implicit warnings are worthy of heed. Reproduced from IEEE (USA) 'Spectrum' of Sept., 1973 (Concluded)

Oh, its a bad day if you have to stare life in the face.....

#### 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 avenging 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 determinedly 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 abject 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,  
Disintegrate you? who could be so ungrateful?  
Surely none, but the 'conspirators'.  
'O' land 'O' Motherland,  
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

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 environments. 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 Wadsworth Longfellow



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

Gordon Graham



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**GLIMPSES OF IEEEEP**  
**SEMINAR ON POLICY FRAME WORK & INCENTIVES FOR NEW TECHNOLOGY**  
**IN ENERGY CONSERVATION & DEMAND SIDE MANAGEMENT**





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



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**Upto Nov. 2008**

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