

EXECUTIVE COMMITTEE'S DESK

Chairman's Message

- **P.Suresh Chander Pal** (sureshcpal@vsnl.net)

Greetings to you. It is said that success is the result of both teamwork and leadership.

I am happy to hear from members that our Section, has gained major successes, both in administration and activities, this year, through regular conduct of meetings, increased awareness of membership benefits, availing rebates and allotments, by timely submission of accounts and maintaining a good financial discipline.

It is necessary for IEEE to reach out, further, to its "silent" members and help in fulfilling their educational, technical and professional aspirations and enhance member services. We are having diverse cultures and economies and we need to make special efforts to achieve our goals. We need increased number of experienced and productive IEEE volunteers, in order to effectively leverage their expertise, for carrying out various activities, for the benefit of our members. We, always, strive for higher member retention and more active Student branches. We should expand and emphasize on GOLD and GOLD Affinity programs to attract young professionals.

Volunteerism in IEEE should be easier and more desirable. We should provide balanced, reliable information to the public, on key technological issues with a coherent strategy for outreach, including partnering with other sister associations. We should establish greater visibility and prestige in IEEE Awards and Recognition. We should also improve cooperation, communication, interaction and trust among IEEE members.

I seek the counsel of our members at every level. I solicit your views and suggestions.

IEEE Madras Section Activities--- Technical Lectures:

1) The Technical Lecture on "Renewable Energy the future Energy Source", by Mr. Allaudin, I.A.S, Chairman & Managing Director, Tamil Nadu Energy Development Agency, GOI, at Hotel Palmgrove, on 24th July'04, was very informative and useful, with the enthusiastic participation of over 50 members. Mr. P. Suresh Chander Pal, Section Chair, who presided over the meeting, welcomed the gathering and spoke on the theme.

Mr. Allaudin, spoke, among other things, on the investor-friendly policy of the State Govt., power-wheeling, banking facility, Wind-Power, Co-generation, Bio-mass gas based technology, Bio-fuel, Solar-Air-heating, Solar Lighting, Solar Water heating, battery operated Cars, Power Generation

Contd.. on next page

FROM THE EDITOR'S DESK

- **Rajeev Ganesh** (Rajeev_Ganesh@ieee.org)

To start with once again I am wishing for an infinite matrix into which I can put everything into. Unfortunately I don't think I'll ever get one. There has been tremendous feedback from numerous colleges all across Tamil Nadu. The IEEE events of the recent past show that this region is shooting like a rocket in IEEE activities. Thus we decided to dedicate this and further issues to focus on IEEE activities.

If any one of the reports or articles that you've sent us hasn't been included in this issue; don't worry its still in our list. I'll assure you that it'll be included in the next issue. Do keep sending those wonderful reports & articles to me or to IEEE_News@yahoo.com. I request U to stick to one page & keep the IEEE white paper format (look into www.ieee.org).

As for the editorial team, we decided to stick to just one article on iPod & tickle Ur brain with brainteasers. This time we decided to publish the report given to us by Crescent Engineering College. Soon every college will get its chance. Another jubilant fact is the number of student chapter inaugurations going on in our section showing the pace of our development. We also decided to include quite a few photos of these inaugurations & other activities in this issue.

As a whole I'd say this issue is invaded by the enormous effect of the ongoing IEEE activities. There will come a time when we are on top on the R10 section.

When we started we entered the deep blue sea. Now I can see that the shore isn't far away!!

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IEEE Madras Section Activities contd..

Power Generation thro' Garbage disposal etc and about the Govt. subsidies.

Dr.G.V.Rao, M/s.Jesudian, Narayaswamy, Sengottaiyan & others participated in the lively Q&A session. Mr.T.S.Rangarajan proposed a hearty vote of thanks.

2) Mr.S.Thangarathinam, Member, Tamil Nadu Electricity Regulatory Commission, delivered a lecture on "Power Sector Reforms Issues & Challenges", on 27th August '04, at Hotel Abu Palace, Chennai-84. Mr.P.Suresh Chander Pal, Section Chair, who presided over the meeting, spoke on the standards of performance & regulations, brought into effect in Maharashtra State, from September '04, and shared with the experience of our State Govt., 45 Members attended the meeting. Guest Speaker, Mr.S.Thangarathinam, spoke, elaborately, about our Indian and State power scenarios and various reforms, structure before and after, the enactment of the Electricity 2003. Issues and Challenges to Power Utilities & Reg. Commissions, competitive Electricity market, benefits to consumers, typical performance standards and the Reforms (efforts), taken in Tamil Nadu & the focus areas. The interactive Q & A session, was extended till 8p.m. on that day, at request of the participants, who were all praise for the excellent presentation.

IEEE Student Branch Activities:

1) The IEEE Student Branch of Kongu Engineering College at Perundurai, was inaugurated by Dr.M.Ponnaivaikko, Vice-Chairman, IEEE Madras Section, on 16th Aug. '04. There was a huge participation from the students of circuit Branches of ug as well as pg. Dr.Ponnaivaikko gave an outline of features and benefits, enjoyed by being an IEEE member. He stressed for conducting regular activities of the Student Branch, the importance of reporting effectively, SPAC, SPAC, career growth and self-management.

2) Mr.P.Suresh Chander Pal, Section Chair, inaugurated the largely attended National level Technical Symposium, "SAICOMVIRTUOSO-2004", on 21st July '04, at Sri Sai Ram Engineering College, at West Tambaram and there was tremendous response for the motivational address for enrolment and increasing the student membership strength. They had conducted 17 activities, in 2004, so far, including the International Conference on Computers, Controls and Communication, with the IEEE logo on the Banner and in the Invitation cards, and concessional registration charges to IEEE student members etc., from Aug. 20th to 22nd '04. The Student membership has increased from 19 to 45 and the Management/Student Branch Counselor, have promised to increase it to 100, before the end of this year. They had presented high quality Web-pages, within top 20% ranking and got the Certificates for their participation in the IEEE Region 10

Website Contest for two years. their College ranked ninth in meritorious performance among the 240 Engg. Colleges.

CRESTECH 2004

- By Anjana.J from Crescent Engineering College

The 2nd and 3rd of this September witnessed a celebration of technical expertise on a nation-wide platform. Crestech 2004 saw more than two thousand students from nearly a hundred and eighty colleges participate with zest and enthusiasm. The symposium was a spectrum of eight department-wise events Impulse, hosted by the ECE Department, Arcane, by the Computer Science Department, Cygnus - the EEE Department, Icon - the IT department, Civiclan by the Civil Department, Precision+ - the ICE Department, Cybercrest, by the MCA and Msc. Departments, and Confluence, hosted by the Mechanical Department. The inauguration ceremony was presided over by Mr.S.Venkataraman, M.D, Sun Industry automation Solutions, the key-note address enlightening the audience on 'Transparent factories'.

On the 2nd of September, Icon 2004 hosted a series of events that focused on 'Routing in communication networks', while the keynote address in Cybercrest was on Network security. Confluence threw light on Mobility Engineering and Precision plus beamed with blends such as Bio-medical instrumentation and control Engineering, Robotics and Automation, Neural and Fuzzy based automation and control. The next day brought with it, Arcane 2004 that conducted an assortment of innovative events combining technical and communicational skill requirements under the banner of 'Mobile Computing'. Impulse was a crowd puller that had twenty-three colleges fighting their way through challenging technical events. A fine riddle posed by the chief guest Dr. Nithyaanandam, Dean Academic, SVCE "Why do ceiling fans rotate in the anti-clock wise direction while table fans rotate in the clock-wise direction"!

Cygnus, conducted by the EEE Department, dazzled with highly technical quizzes and paper presentation competitions on Digital Signal Processing, Control Systems and Power systems. The 'Chipcode' event was an informal that enthralled the audience as did its Computer Science counterpart 'Silent Messaging Service' Dumb Charades. Civiclan conducted an absolutely flawless symposium under the banner of 'RACE Recent Advancements in Civil Engineering' and witnessed some highly interesting papers that blended concepts such as Artificial Intelligence and Forensics with the irreplaceable Civil Engineering methodologies.

The four stages brimmed with men of tall achievements such as Mr. M.J.Shankar Raman, Senior manager, HCL Technologies, Mr.G. Sundaresan, Chief Executive of A.G.Automation, Dr. Paneer Selvam, Ex- CEO of Softcon India PVT Ltd, Mr.Arumugam Maruthanayagam, Project Leader, Sathyam Computer Services Ltd and Dr.N.Kumar Bitchumani, Consultant in L&T Ramboll. With a grand valedictory ceremony, the fete came to an end on the 3rd of September at six in the evening. Crestech 2004 stands tall as proof of the fact that young Indian prodigies are in the making today.

ANSWERS FOR AUGUST ISSUE OF BRAIN TEASERS

- | | |
|---------------------------------|-------------|
| 1. Mouse | 5. Web Cam |
| 2. Joystick | 6. Woofers |
| 3. Keyboard | 7. Monitor |
| 4. Central processing Unit(CPU) | 8. Joystick |

Article of The Month: Apple's iPod

-Masha Sarah Easow (starz_mse@yahoo.com)

Apple's iPod, a 6.5-ounce MP3 player, is one of the most exciting products to come from Apple in years. Powered by FireWire, the iPod can hold up to 5GB of data, providing a compelling balance of size and capacity. It is small enough to fit comfortably in a pocket. Between the iPod's stainless-steel back and Lucite front is a hard drive large enough to hold roughly 1,000 songs encoded in MP3 format at 160 kbps. The drive's enormous cache-32MB of solid-state RAM-virtually eliminates any interruption in smooth play. Accessing your music files via the iPod is also very easy. The 1.5-by-1.5-inch screen has very crisp text, and a bright backlight makes the display easy to see in the dark. The controls are designed for one-handed use.

Features & Specifications:

- Support for MP3, variable bit rate MP3, AIFF, and WAV format music files
- 5, 10, or 20 GB storage, usable in FireWire 400 (IEEE 1394a) disk mode
- Built-in 6-pin FireWire interface for data transfer and recharging battery
- Up to 10 hours of life from a built-in rechargeable lithium-ion battery
- 20-minute data buffer to reduce skipping
- Upgradeable firmware for bug fixes, future music formats, or added functionality
- 2-inch, 160 by 128 pixel, 102 dpi backlit display
- 6.5 to 7.2 ounces; 2.4 by 4.0 by 0.8 inches

More Than Just An MP3 Player:

The firmware in the iPod is upgradeable, so Apple can implement bug fixes, support more music formats, or provide new and/or improved interface features. It has 5 GB to 20 GB of storage space when you connect your iPod to your FireWire equipped Macintosh or PC, offering room for your presentations, graphic files, digital pictures, or movies. Unlike most MP3 players, you are really getting two products in one: a leading-edge music player, and a portable hard drive you can take anywhere. The upgradeable firmware continues to leave the door open for iPod to get even better.

Interface & Battery

With the iPod's scroll-wheel you can access your music collection by artist, title, and song. Through one-handed operation you can navigate through menus, choose your song, stop, reverse, or fast-forward through the song, or set preferences such as turning on the shuffle mode or the backlight. Not only can you store lots of your music on the iPod (1,000 or more MP3s), but you can play that music for up to 10 hours from the built-in rechargeable lithium-ion battery. The iPod recharges completely in about 3 hours through the FireWire cable while connected to your computer, or you can plug it in directly to a two-prong power outlet through an included adapter. All in all, the iPod is a fairly powerful handheld device, with 32 MBytes RAM, and a PortalPlayer microprocessor with an ARM7TDMI core - similar to that used in recent Pocket PCs.Z

Report on "Ethics in Engineering"-talk by Mr.N.Vittal,I.A.S.(Retired),former Chief Commissioner of Vigilance,Govt.of India,on 8th Sept.'04.

"Engineering has a value dimension and it is essential that Engineers follow "Swadharma" or professional ethics", said Mr.N.Vittal, former Chief Vigilance Commissioner, Government of India, speaking on "Ethics in Engineering", at a function, jointly organized by the Institute of Electrical & Electronics Engineers (IEEE), Madras Section and the IEEE Power Engineering Society, Madras Chapter, on 8th Sept.'04 at Chennai.

Welcoming the participants, Mr.P.Suresh Chander Pal, IEEE Madras Section Chair, stressed the need for integrating ethics in technical education and said that it is particularly more relevant in the present context of indiscipline noticed among the executives, judiciary and the administrators.

Mr. Vittal, recalled the Ten Commandments, - "thou shall not kill, thou shall not steal, thou shall not bear false witness etc" which are all examples of values, that will lead to a healthy and developing society. Corporate governance is nothing but a reiteration of the ancient wisdom, that honesty is the best policy. The dramatic collapse of some of the Fortune 500 companies like Enron, Worldcom and Anderson in 2000, shows that even highly successful companies can ultimately come to grief, if they did not practice the basic principles of integrity. For every profession, we should think of a code of conduct or a set of values, which has a moral content and that would be the essence of professional ethics for that profession. Bhagawat Gita crystalizes the importance of professional conduct that it is better to die rather than to give up one's dharma. Besides professional skills, Engineer should have values, continuous quest for perfection, that is quality, productivity without wastage and intellectual, moral and financial integrity.

In the 2001 earthquake in Ahmedabad, many buildings, which were recently constructed, collapsed, whereas some of the old buildings, were able to stand the test, which are indications of lack of professional conduct of the Engineer, behind such constructions, with an element involving corruption. Corruption is again the lack of integrity. To decide on the ethical attributes, you should apply a three point test, - is it legal, fair and is it according to one's conscience? There should be transparency in operations leading to accountability, which should ensure safety and protect the interest of the stakeholders, - consumers, suppliers, employees & the society at large. Professional ethics depends on the quality of the individual, the value he cherishes and on the effectiveness of the the enforcement system, he said. It is a healthy sign that Anna University has included in the seventh semester, a course on ethics in engineering, apparently modeled on similar courses in the U.S. Quoting the Chandokya Upanishad, Mr. Vittal said, that when we apply our knowledge with faith, conviction and deep analysis, then our action becomes strong and in turn, leads to success.

Dr.G.V.Rao, IEEE PES Chair introduced Mr. Vittal and Mr. Ramanathan, Section Secretary, proposed a vote of thanks.

BRAIN TEASERS

- Masha Sarah Easow (starz_mse@yahoo.com)

WHAT AM I? (Brain Teasers)

I slip, I slide, you can even move me from side to side.?

Punch me.?

I do all the work around here.?

See through me.?

Turn me on, turn me up.?

Look at me to see what's going on.?

Hold me, bend and maneuver.?

Report on Internet Conferencing on 7th Sept. 2004:

- By Mr. P. Suresh Chander Pal

It was a nice experience, participating in the Internet Conferencing with Dr. Jung Uck Seo, Region 10 Director, making his presentation, on Value of IEEE membership and Volunteerism, from 8.30 a.m. to 10 a.m. (Indian time), on September 7th, 2004. Thanks to Dr. M. Ponnavaikko, IEEE Madras Section Vice-Chair, who made arrangements for viewing the presentation, for the benefit of the IEEE Members, at 'SRM Institute of Science & Technology - Deemed University', at Kattankulathur, near Chennai. The presentation on the Screen was very clear & the information, very useful, but the audio connection from the phone to the Speaker could not be made. The audio system worked for 5 minutes at the start, but it was later cut off. Mr. P. Suresh Chander Pal, IEEE Madras Section Chair and Dr. M. Ponnavaikko, Section Vice-Chair, raised a few questions, which appeared on the screen and were received by them. It is hoped that these will be answered later, as the session closed at 10 a.m. on that day. The basic concept of all the IEEE Members, being volunteers to promote global peace thro' technological innovations with knowledge and information-sharing and community-networking, worldwide and enabling members' interests & careers, was beautifully explained and the two stories of the Old Bridge-builder and Volunteers in Heaven, were quite interesting and informative.



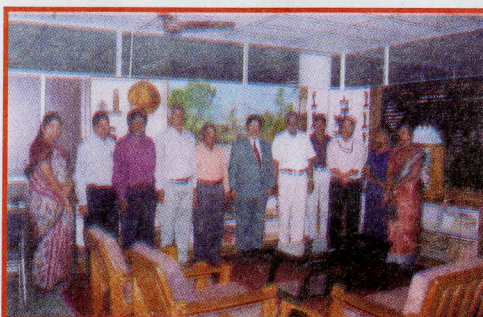
K. Ramanathan Secretary, IEEE Madras Section (left) Presenting Memento to the Chief Guest Lecture on : 2nd March 2004 at GRT Grand Days.



Technical Lecture : "Grid Operation in Tamil Nadu, - in the context of electricity Act 2003" Er. A.A. Sadagopan, Member, (Gen.) TNEB is receiving memento from Dr. G.V. Rao, Chair, IEEE-PES, Madras Chapter on 5th June 2004.



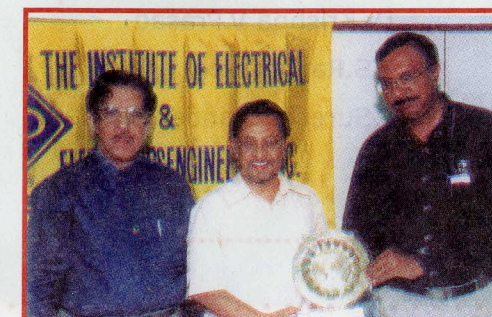
Technical Lecture : "Power Sector Reforms - Issues & Challaneges" Mr. S. Thangarathnam, Member TNERC., is receiving memento from Mr. P. Suresh Chander Pal, Chairman, IEEE Madras Section on 27th August 2004



Mr. Suresh Chandra Pal, IEEE Madras Section (Centre) with Mr. Vadivel, Principal & Prof. Viswanathan, Br. Counsellor of IRTT, Erode, other faculty members from neighbouring engineering colleges at the student Branch meet on 30th Aug. 2004, at Erode



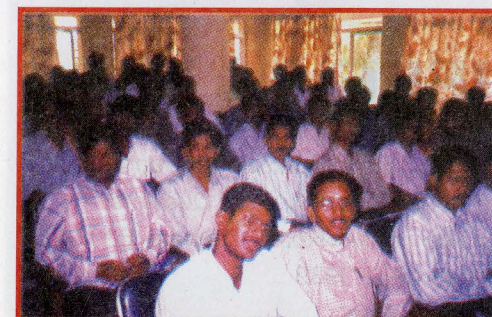
Technical Lecture : "e-Paper" Mr. N. Chandrasekaran, Esix, Chair, M.D. receiving memento from Mr. Vasagam, V.C. Dr. M.G.R. Deemed University, on 24th April 2004



Technical Lecture : Renewable Energy - the Future Energy Source. Mr. K. Allaudin, I.A.S., Chair & MD. TEDA., is receiving memento from Mr. T.S. Rangarajan, Treasurer, IEEE Madras Section on 24th July 2004



Technical Lecture : "Ethics in Engineering" - Mr. N. Vittal, I.A.S., Retd. Ex-Chairman, (COPE) is receiving memento from Dr. R. Srinivasan, Past Chairman, IEEE Madras Section on 8th September 2004.



IEEE Student Branch Meeting at National Engineering College, Kovilpatti on 3rd September 2004.

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Dr.Krishna V.Prasad
T.S.Rangarajan
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