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Chairman's Message

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Dear friends.

It gives me pleasure to mention that the IEEE Madras Section, the largest Section in membership and no. of student branches, has celebrated the IEEE's 125th Anniversary on 27th August 2009 at Anna University, M.I.T.

Campus. Dr. John Vig, IEEE President joined us to deliver the presidential address. Dr. P. Mannar Jawahar, Vice Chancellor, Anna University Chennai inaugurated the function. There were two invited lectures by Dr. M. Anandakrishnan, Chairman, IIT Kanpur & Chairman, Science City, Chennai and Dr. Ashok Jhunjhunwala, IEEE Fellow, Professor of Electrical Engineering, IIT Madras. On behalf of the IEEE Madras Section, I sincerely thank all the above dignitaries for their presence and active involvement in this function. The present & past chairpersons of IEEE Madras Section, the chairpersons of society chapters & WIE and GOLD affinity groups, Execom members of the Section and volunteers whose selfless contributions have made it possible to conduct this milestone event.

The students had an opportunity to interact with the IEEE President Dr. John Vig, experts and IEEE Regional office bearers. Students presented a cultural program at the end of the function. About 250 delegates participated in this mega event. The credit for the successful conduct of this event goes to all the Execom members and office staff of IEEE Madras Section and the student volunteers. Our special thanks to Dr. T. Thiyagarajan, Secretary, who took full responsibility in convening this event at his institution.

There were many activities in the Section during the past one month. In association with IEEE CS and CSI, the Section organised a technical talk on "Neuromorphic Microchips" by Dr. N. Kumarappan, Prof. of Electrical Engineering, Annamalai University on 22nd Aug.

The Madras Section along with IEEE CS, IEEE Madras WIE and CSI Chennai arranged a talk by Mr. R. Sampath, Director, Quanta Consulting, Inc. USA and Chairman, IEEE Orange County, California, USA on the topic "Rural Development: Leveraging Global Technologies and Perspectives" on 12th Sep.

The CIO Forum of CSI Chennai & IEEE CS joined hands with Apollo Telemedicine Networking Foundation & Apollo Hospitals Educational and Research Foundation in the conduct of a workshop on "eHEALTH: The Emerging Scenario" in collaboration with ICMR & TRC on 15th Sep. Dr. Poongothai Aladi Aruna, Minister for IT, Govt. of Tamil Nadu & Dr. Preetha Reddy, Director, Apollo Hospitals Group were the Guests of Honour.

Being the most vibrant and active Section in Asia-Pacific Region, IEEE Madras Section has many achievements to its credit in terms of national and international conferences, technical and non-technical workshops, technical talks, faculty development programs and student congresses. Contributions of WIE and GOLD affinity groups of Madras Section towards social activities are well recognized by IEEE Headquarters.

From The Editor's Desk

H.R. Mohan hrmohan@gmail.com



Dear friends,

Link is pleased to inform that the 125th anniversary celebrations organised by the IEEE Madras Section at the MIT Campus of Anna University was a grand success with 250 plus participating in various activities held in the day long programme on 27th Aug 2009. This milestone event had addresses by dignitaries such as Dr. John Vig, IEEE President, Dr. P. Mannar Jawahar, VC, Anna Univ. Chennai

and invited talks by Dr. M. Anandakrishnan, Chairman, IIT Kanpur & IIT Rajasthan and Science City, Chennai and Dr. Ashok Jhunjhunwala, IEEE Fellow & Prof. of EE, IIT Madras. The afternoon events focused on students were informative and delightful. A short report and select photographs of the event appear in this issue of LINK. More pictures relating to the event are at the section website at http://ewh.ieee.org/r10/madras/. Link wishes to place on record the leadership of Dr. T. Thiyagarajan, Secretary and the Chairman, Dr. S. Salivahanan and the Execom members of the Section in the smooth conduct of this mega event of the year.

Brief reports of the events by the IEEE Computer Society such as Workshop on "COMSOL Multiphysics Modeling", CIO Meet on "Turning Information into Business Insight" and the Launch of the BI Product – MicroStrategy 9 appear in this issue of LINK along with an article "Technology for Sustainable Development" based on the invited talk by Dr. M. Anandkrishnan and the details of IAS Madras Chapter activities.

This issue also carries the proceedings of the student branch events held at Karpaga Vinayaga College of Engg & Tech, Bannari Amman Inst. of Tech, Kongu Engg College, St. Joseph College of Engg, St. Xavier Catholic College of Engg, Arunai Engg College and Sri Muthukumaran Inst. of Technology.

Link congratulates Mr. Prithivin Rajendran of SSN College of Engg and Ms. V. Sri Divya of St. Peter's Engg College, the winners of Info Contest 0908 who will receive a prize of rs. 500/= each sponsored by SRA Systems.

Link draws the attention of the student readers to the new combined membership for the year 2010 (which starts from Sep 2009 and valid for 16 months) in IEEE & IEEE CS with access to the IEEE CS Digital Library at USD 40 per year - an irresistible offer. A set of announcements ranging from the FDP on "Software Tools for Simulation and Analysis of Power Systems" in Oct, Special Lecture on "Your PET Digital Library", Special subscription offer at a discount of 31% to 67% on the cover prices of the Cyber Media Publications and Distinguished Guest Speaker Programme along with the calendar of events which include four forthcoming international conferences being held at Chennai for paper presentations and participation would be of interest to our readers.

We invite proposals for participating in the Digital Literacy Programme which aims at empowering the rural youth and women. Finally, we reiterate our request to the contributors, to follow the guidelines while submitting the materials for publication, failing which, we will be constrained to miss out their contributions.

Editorial Team

Mr. H.R. Mohan, Dr. S. Salivahanan, Dr. M. Ponnavaikko, Dr. P. Suresh Chander Pal, Mr. T.S. Rangarajan, Mrs. M. Ramalatha

Inauguration of IEEE Student Branch at Karpaga Vinayaga College of Engineering and Technology



The IEEE student branch at Karpaga Vinayaga College of Engg and Tech was inaugurated the on Monday, 24th Aug 2009. Dr. Suresh Chander Pal student activity chairman of Madras Section graced the occasion as the chief guest.

The function started with a prayer. IEEE

student chairman, Mr. D. Murali (IV ECE) welcomed the gathering. IEEE student vice chairman Ms. Arya Mol (III ECE) introduced the chief guest Dr. Suresh Chander Pal, a man of incredible hard work and enthusiasm, who has been the propelling force for the success of IEEE in the state of Tamil Nadu for over a decade. He inaugurated the student branch by lighting the kuthuvilakku and releasing the branch certificate.

Following the presidential address given by the Director Mrs. Meenakshi Annamalai, Dr. Pal, in his address, detailed out on the branch operations and the benefits of being an IEEE member. He formed the different operational committees and explained the duties of their heads. The committees and the respective chairs are as under:

- Program committee Anoop Kumar (IV ECE)
- Publicity committee Joshua Anderson (IV ECE) & Arya Mol (III ECE)
- Membership activities Saravana Pradeep (III ECE) & Shankari (III ECE)
- Women in Engineering Kaveri (IVECE)
- Newsletter committee Durairaj (IV ECE)
 & Udhayathendral (IV ECE)
- Website designing D.Murali (IV ECE)

The advisor Mr. N. V. Sundragopal and the principal Mr. Rangaragulu felicitated the gathering. The plan of activities was delivered by the HOD/ECE and IEEE branch counselor Mrs. Ramalatha Marimuthu. Mr. Vijaya Sarathy (III ECE), Secretary delivered the vote of thanks. The program was compeered by Treasurer Ms. Sethu Ratna (IV ECE).

Student Professional Awareness Conference at Bannari Amman Institute of Technology



The IEEE Student Branch of BIT Sathyamangalam organized the Student Professional Awareness Conference (S-PAC '09) on the 8th August 2009. The spacious and elegant Vedanayagam Auditorium was the venue. The one day conference was a placement oriented event imparting professionalism to the student engineers. Hence a leading professional Mr K N Visveswaran Mentor Hexaware Technologies, Chennai a Purdue University turned postgraduate was the speaker of the day. The Conference was well begun with the welcome address given by Mr R Karthikeyan Student Chairman of S-PAC highlighting the vision of IEEE.

Dr A Shanmugam, Principal felicitated the conference. His words enlightened the students about the fundamentals and mission of engineering practice. The objectives of engineering practice such as the quality of the curriculum was the topic of his address. He



also guided the students well about the preparation and the needs of a qualified professional. He also stressed the importance of proper learning environment. He stressed on the most needed confidence in professionalism.

The secretary of the IEEE Student Branch, Mr Shravan Potturu introduced the office bearers for the academic year 2009-2010. This was followed by a soul striking Oath taking ceremony, wherein Dr G Gurusamy Branch Counselor along with the office bearers pledged their vision and mission for the forthcoming year.

The inaugural address delivered by the Chief Guest Mr K N Visveswaran was the star-studded event of the day. His flabbergasting energy and efficiency kept the audience tuned throughout the lecture. His crisp details about professionalism, the ability to complete tasks and the way to success with humanity added

more flavour to his lecture. The entire session was carried on well inculcating and enhancing the inquisitive nature in the students. The questionnaire part of the session kept the students in the peak of attention. Following the inaugural address was the most happening quizzing extravaganza, Brain Busters'09. There was an active participation from all the students and the winner was awarded with attractive prizes.

Prof P Suresh Kumar, Director, School of Management Studies, BIT engaged the students with his inspiring lecture in the afternoon session. His guidance to dream big and to realize the dreams was a limelight. The most expected events of the day such as the Flash Presentation Contest, Poster Designing Contest and Stall Designing Contest followed the lecture and the winners were awarded with prizes and certificates.

Simply Mail Solutions, a message mela wherein the students were told to message the answers for the questions asked raised the octaves of the conference. Later Management Games ,which enhanced the intellectual abilities of the audience were conducted. At the end, Mr K Charandeep, Joint Secretary of the IEEE Student Branch proposed the vote of thanks. This year the S-PAC was entirely a qualitative venture to mould better professionals.

Visit our Website www.ewh.ieee.org/r10/madras

Inaugural of the activities of IEEE Student Branch at Kongu Engineering College



The inaugural of the activities of IEEE student branch, Kongu Engineering College was held on 29th Jul 2009. Prof. Narayanan-staff coordinator of IEEE welcomed the gathering. In

his address, he invited the students to actively participate in the events of the forum. He proudly mentioned that the KEC IEEE student branch is the recipient of Maximum Growth and Retainment Award in the Asia Pacific Region. Mrs. V.R, Saraswathy, Staff coordinator introduced the office bearers for the year 2009-2010. Prof. Krishnaswamy, Vice Principal of KEC presided over the function. He underlined the importance of professional ethics and the need for commitment to ethical values among young engineers. He pointed out the importance of practical insights for developing the innovative ideas into worthy products.

The Chief Guest, Prof. P. Jayachandar, Professor & Dean, Department of CSE, Vellalar College of Engineering & Technology, Thindal, Erode in his address, gave an overview of the evolution of IEEE. He threw light on the recent contributions made by the Indian Engineers in the field of software, space, etc., He suggested the students to develop an interest in the promising field of sensors, transducers. The Year Plans of IEEE and WIE were presented by Somesharun, Chairman of IEEE and Shankari, Chairman of WIE. After the talk, Prof. K. Narayanan presented a memento to Prof. P. Jayachandar. The inaugural function ended with a vote of thanks by Treasurer of IEEE.

Report by: Ms. Sheetlal Bhararia, Secretary, ieeekec@gmail.com OR Sheetal.8689@gmail.com

Guest Lecture at St. Joseph's College of Engineering



It was a great afternoon on 14t Aug 2009 when the chief guest of the day walked into the Audio Visual Hall of St. Joseph's College of Engineering. The hall was thronged by a sea of inquisitive faces; all eager to know about what this buzz word 'IEEE' was all about. And we had the right person to quench the thirst of knowledge about IEEE. It was none other than our beloved IEEE Chair, Student Activities, Dr. Suresh Chander Pal, who had been kind enough to accept our request to honour us as the Chief Guest of the day.

The air of enthusiasm grew manifold when Dr. Suresh started talking and interacting with the lively audience. He inculcated the qualities and virtues one must have in this competitive world and attributed these characteristics to success of the person in one's field. Starting off with a stimulating speech, the chief guest went on to talk about IEEE's foundation history. Having given a brief preface, he listed the details about the IEEE Regions and Student Chapters and how students can avail benefits from these IEEE bodies. The students were amazed at the statistics of people associated with IEEE and were really glad that they were a part of the IEEE family.

Dr. Suresh also threw light in to the various advantages that IEEE offers to its members and made the students realize by citing a few examples about how IEEE can actually be a forum for the students to turn their ideas into reality. He encouraged the students to come up with innovative ideas and assured that IEEE would not only provide them the necessary backing, but also help shape the ideas. Eventually, he called upon all the office bearers and other in

Activities of IEEE IAS Madras Chapter

A meeting on 'Personality Management' was arranged on the $10^{\mbox{\tiny th}}\mbox{August}\,2009$ at the Hotel Ashoka, Egmore, Chennai. The Guest speaker was Dr. K. Balasubramanian, Chief Executive Officer, Vision Unlimited. The speaker highlighted on the various aspects of confidence building measures and the personality development. For the engineers it was a unique experience to learn their importance, to the organization to remain stress free and also to enjoy their work. The meeting was well attended by around 30 engineers including members. The welcome address and introduction of guest speaker was done by Dr. G.V. Rao, Chairman, IEEE-IAS (Madras Chapter). A High tea was arranged at the end of the meeting.

Michael Faraday's birthday celebrations meeting was organised on 25th August 2009 in Rowsons Marketing Pvt Ltd., Madras premises. The meeting was arranged with breakfast and attended by 15 engineers

Report by Dr.G.V.Rao, Chairman, IEEE-IAS Madras chapter charges of various committees and urged them to bring up the IEEE student branch. No doubt, the students were taken into the world of IEEE by the eminent Chief Guest and were sure to respond to the calls put forth. The meeting drew up to a close with a photo session with Dr. Suresh.

The IEEE Student Branch of St. Joseph's College of Engineering is very thankful to Dr. Suresh Chander Pal for having graced the occasion and really opening up the young minds and stirring them to perform well.

Workshop on COMSOL Multiphysics Modeling

The IEEE Computer Society, Madras Chapter & CIO Forum of CSI Chennai joining with COMSOL Multiphysics Pvt. Ltd organized a free workshop on "COMSOL Multiphysics Modeling" on 4th Aug 2009.

This workshop was aimed to provide an overview to COMSOL Multiphysics Modeling which will lead one through the work flow and bring designs to life with multiphysics simulations in applications such as fluid-structural interactions, thermal expansion, electromagnetic-structural interactions, and more. This event featured a live demo of the modeling and its capabilities by the resource persons from COMSOL Multiphysics Pvt. Ltd, Bangalore. Participants numbering about 45 from both academic & industry who attended this workshop were provided with a free trial version of the software for experimenting at their workplace.

IEEE MAS LINK SRA Systems

Info Contest

H.R. Mohan

Chairman, IEEE CS, Madras Chapter Editor, IEEE MAS LINK AVP (Systems), The Hindu, Chennai

This is the 17th edition in the series of Info Contest - a regular column in our newsletter IEEE MAS LINK. The content mix now includes some General Knowledge questions in addition to IT related. This, we believe would provide an overall exposure and also facilitate more participation.

TWO lucky winners who answer to maximum no. of questions and early (selected by lot if multiple entries qualify) will receive an award of Rs. 500/= each, sponsored by SRA Systems.

Members are encouraged to participate in the contest and win prizes. Answers are to be sent by EMAIL ONLY. Please follow the guidelines provided at the end of the questions.

Info Contest - 0909

This contest has 25 questions in five sections — A, B, C, D & E — each having five questions.

A. In the following acronyms/abbreviations "D" stands for what.

- A1. IDE
- A2. LCD
- A3. ISDN
- A4. HDTV
- A5. SDRAM

B. Provide the answer.

- B1. Name the world's first solar powered phone claimed to have been launched by Samsung.
- B2. Whose advt. campaign is "Walk When You Talk"
- B3. Name the IT major which has become the first private organization to get security cover of the Central Industrial Security Force (CISF)
- B4. Name the co-inventor of USB Flash Drive, who is an Indian.
- B5. What is the name the GSM Mobile based remote control system / technology

tested by th mobile operator Tata Teleservices in Gujarat for the use with water pump sets in agriculture areas

C. Provide the answer / Fill in the blanks.

September 2009

- C1. is an innovative SMS scheme recently launched by Tata DoCoMo in which SMSs are charges at one paise per character.
- C2. \longrightarrow is considered as the father of the iPod
- C3. YouTube was founded in February, 2005 by Chad Hurley, Steve Chen and Jawed Karim. All are ex-employees of ———
- C4. —— is the netbook recently launched by Nokia
- C5. ——— is a type of challenge-response test used in computing to ensure that the response is not generated by a computer

D. Provide the answer.

- D1. India is the world's largest sugar consumer / producer. Select the correct answer
- D2. Name the solar powered cycle rickshaw developed by CSIR Labs
- D3. Who has topped the list of world's 10 top earning cricketers compiled by Forbes
- D4. Name the recently launched Samsung mobile phone with colorful design and social networking capabilities such as FaceBook, Twitter and MySpace
- D5. "World's Local Bank" Identify this bank

E. Fill in the blanks / Provide the answer.

- E1. The Personal office of US president is called as ———
- E2. is the coldest place in India
- E3. Lawrence Bragg who received the Nobel prize for Physics was the youngest of the Nobel Laureates at the time of the award. How old was he at that time.
- E4. King of Fruits : Mango = King of Vegetables: ———
- E5. The Mughal Emperor Akbar was an illiterate and unable to read or write. State True or False

Guidelines to submit the answers to the Info Contest by email.

In the Subject,

• Write the Contest No. (Info Contest - 0909) in the subject line.

In the body of the mail,

• In the first line, write the contest No: Info Contest - 0909

- In the second line, write your membership no.
- In the third line, write your email id.
- In the fourth line, write your name.
- In the fifth line, write your college / organization name
- In the sixth line, write the answers to the five questions of Section A, separated by comma.
- In the seventh line, write the answers to the five questions of Section B, separated by comma.
- In the eighth line, write the answers to the five questions of Section C, separated by comma.
- In the ninth line, write the answers to the five questions of Section D, separated by comma.
- In the tenth line, write the answers to the five questions of Section E, separated by comma.

As the evaluation of the entries is automated, pl. ensure the above guidelines are followed.

Email the answers to: hrmohan.infocontest@gmail.com

The last date to receive the answers by email is 5th Oct 2009.

Info Contest - 0908 : Answers & Winners

Answers:

Interchange, Interface, Internet, Ink, International IRE, 7, The IEEE Medal of Honor, Computer Society, IEEE xplore
Netscuse, typosquatting, mickey,
DeCSS,timesjobs.com

Kapil Dev, Michael Collins, Teregna, Tihar Jail in New Delhi, Sir Francis Bacon miniCAT, Friendship Day, H5N1, White, Ashok Raghunath Vichare.

Winners:



Mr. Prithvin Rajendran SSN College of Engineering Mem No.: 80610826 Email: prithvin_88@yahoo.com

Ms. V. Sri Divya St.Peter's Engineering College Mem No.: 90437864 Email: vsdivya@ieee.org

Both the above will be awarded a prize of Rs. 500/= each. LINK acknowledges with thanks the sponsorship of the awards by SRA Systems (www.srasystems.com).

Technology for Sustainable Development



M. Anandakrishnan Chairman, IIT Kanpur & IIT Rajasthan Chairman Science City, Chennai Former VC, Anna University, Chennai

Article based on the invited talk delivered on 27th Aug 2009 at the IEEE's 125th year celebrations.

Economies everywhere are keen on maintaining high growth rate in order to create sufficient wealth for national development goals such as agriculture, education, energy, infrastructure, widening health services and so on. All available technological capabilities are harnessed for this purpose. In this context a section of policy makers, planner and general public consider that all development efforts should be sustainable, meaning thereby that Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is a process of change in which the use of resources, investment strategies, technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. Because sustainable development is a context-driven concept, different societies tend to define it based on their own values, needs and expectations.

Unfortunately, such an holistic approach is not adopted as deliberate option by most countries, developed as well as developing, for the following reasons:

Firstly, they are under intense global competitive pressure, which makes sustainability concerns take a lower priority. Secondly, the political system strives hard to show visible results of 'development' during their term of office sometimes resorting to shortcuts. Thirdly, there are entrenched vested interests at national and local levels interested in manipulating the decision making process at the cost of environmental, ecological and social interest. Fourthly, the propensity for corruption at all levels makes the policies and legislation for sustainable development meaningless. Consequently, many countries are unable to measure up to the sustainability standards.

In the sustainability efforts there are many technologies, which are capable of providing ample support. Three major groups of technologies are revolutionising industrial processes around the world - information, biotechnology and advanced industrial materials. Referred to as the "enabling technologies", they are responsible for creating a multitude of new products and services and transforming production methods in almost every sector of the global economy. In a knowledge-based economy, scientific understanding and appropriate applications of these enabling technologies are important determinants of sustainable economic growth.

Agenda 21 also contains several other important statements with emphasis on facilitating the accessibility and transfer of technology, particularly in developing countries, as well as the essential role of capacity building and technology cooperation in promoting sustainable development. It states that: New and efficient technologies will be essential to increase the capabilities (in particular of developing countries) to achieve sustainable development, sustain the world's economy, protect the environment, and alleviate poverty and human suffering. Inherent in these activities is the need to address the improvement of technology currently used and its replacement, when appropriate, with more accessible and more environmentally sound technology.

However, these are not individual technologies, but should be treated as total systems that include know-how, procedures, goods and services, and equipment, as well as organisational and managerial procedures for promoting environmental sustainability.

The environmentally sound technologies may be based on transformation of all technologies to become more environmentally sound. They capture the full life cycle flow of the material, energy and water in the production and consumption system. They cover the full spectrum from basic technologies that are adjunct to the production and consumption system, to fully integrated technologies where the environmental technology is the production or consumption technology itself. They include closed system technologies (where the goal is zero waste and/or significant reductions in resource use), as well as environmental technologies that may result in emissions and consider technology development within both the ecological and social context.

In this respect, a study undertaken by the Yale University to develop the Environmental Sustainability Index (ESI) provides a comparative assessment of the situations among 146 countries. This index is based on five components associated with environmental sustainability.

1. Environmental Systems: A country is more likely to be environmentally sustainable to the extent that its vital environmental systems are maintained at healthy levels, and to the extent to which levels are improving rather than deteriorating.

2. Reducing Environmental Stresses:

A country is more likely to be environmentally sustainable if the levels of anthropogenic stress are low enough to engender no demonstrable harm to its environmental systems.

3. Reducing Human Vulnerability: A country is more likely to be environmentally sustainable to the extent that people and social systems are not vulnerable to environmental disturbances that affect basic human wellbeing; becoming less vulnerable is a sign that a society is on a track to greater sustainability.

4. Social and Institutional Capacity: A country is more likely to be environmentally sustainable to the extent that it has in place institutions and underlying social patterns of skills, attitudes, and networks that foster effective responses to environmental challenges.

5. Global Stewardship: A country is more likely to be environmentally sustainable if it cooperates with other countries to manage common environmental problems, and if it reduces negative Tran boundary environmental impacts on other countries to levels that cause no serious harm.

Based on the above considerations, countries are ranked from 1 to 146, where the country with rank 1 has the best sustainability score. The ESI score is on the scale of 1 to 100, where 100 represents the best sustainability record. For purposes of illustrations, the data for a selected number of countries in terms of ESI rank and ESI score are shown below.

ESI Rank	Country	ESI Score
1	Finland	75.1
3	Uruguay	71.8
6	Canada	66.4
8	Guyana	62.9
11	Brazil	62.2
13	Australia	61
25	Central African Rep.	58.7
30	Japan	57.3
36	France	55.2
38	Malaysia	54.0
42	Bhutan	53.5

ESI Rank	Country	ESI Score
45	USA	52.9
49	Ghana	52.8
60	Zambia	51.1
65	UK	50.2
79	Sri Lanka	48.5
101	India	45.2
114	Bangladesh	44.1
122	South Korea	43.0
131	Pakistan	39.9
133	China	38.6
146	North Korea	29.2

Interpretation: Finland is ranked as number 1 with ESI score of 75.1. It is interesting to note that many industrialised countries, such as France, USA and UK show a lower score, because of the environmental damage caused by their industries. At the same time, many countries, which are not highly industrialised such as Uruguay, Guyana and Central African Republic shows a higher score, possibly because of the absence of polluting industry and their care for environment. Many newly industrialising countries such as India, China and South Korea, show poorer score because

of their rapid industrialisation without adequate environmental safeguards. Some least developed countries such as Bangladesh show very low score, in spite of the absence of polluting industries, perhaps due to high level of poverty.

The moral of the story is that every technology is a double edged sword from a sustainability point of view and it depends upon the wisdom of the society in making use of them for sustainability gains.

Guest Lecture on "Next Generation IT" at Kongu Engineering College



Aguest lecture on NEXT GENERATION IT at Kongu Engineering College was delivered on 17th Aug 2009 by Mr.T.S. Rangarajan, Principal Consultant, Tata Consultancy Services, Chennai. Prof.K.Narayanan, staff coordinator of IEEE, KEC welcomed the gathering. Mr.V. Mohanraj, Vice-chairman of IEEE, KEC introduced the chief guest.

The speaker Mr.T.S.Rangarajan started his talk with a note that "Next generation IT" is the enhancement of computer networking. He pointed out that 'Sensing and Actuation' is the basic idea behind this technology wherein the capabilities of the computer is improved and automation of computer is achieved. He then elaborated on why this technology is coined the name "6th sense technology" with a mindblowing video presentations. The video clipping showed the unique ability of the device to walk up to any surface and access easily to benevolent information without any changes in user gestures. Mr.Rangarajan underlined that the power and cost consumption is less in this new technology.

The incredible element in the video was when the device tracked the words associated

with a person (like the name, college name) as he/she moved towards the device. Then he introduced the idea of "Context Management", and "Workspace". He also gave the glimpse of "Google name" and how it is different from email. The participants comprised of faculty and students were overwhelming and the entire talk was interactive with the students clarifying their doubts on recent trends like cloud computing, crowd sourcing etc.

After the talk, Prof.K.Narayanan presented a memento to Mr.T.S.Rangarajan. Ms.K.Aruna, Vice-chairperson of WIE, KEC proposed the Vote of Thanks.

Report by: Ms. Sheetlal Bhararia, Secretary, ieeekec@gmail.com OR sheetal.8689@gmail.com

Seminar on "Future for Engineers" at St. Xavier's Catholic College of Engineering



A seminar on the topic "Future for Engineers" by Dr. V. Shanmugavel, Director, Shanmugavel and Associates, Chennai & Former Chief Engineer, TNEB was organized by IEEE Student Branch, St. Xavier's Catholic College of Engineering on 8th August 2009.

Ms.J.P. Jisha John, Chairman, IEEE Women in Engineering welcomed the gathering. A briefing on IEEE code of ethics was given by Ms. A. Arathy Jose, IEEE student member The resource person Dr. V. Shanmugavel, in his presentation, highlighted the opportunities for engineers in administration, army, medical, automobile and education. He, further, outlined the different avenues in the field of auditing like Energy Audit, Technical Audit, Water Audit, Safety Audit and Cost Audit.

In his talk, the energy auditing concepts were detailed out with examples. He also spoke on Non-Destructive Testing, Corrosion Engineering and he concluded his presentation by comparing the necessity of energy conservation in the context of global warming.

After the seminar presentation, C. John Moses, IEEE Student Branch Counselor presented a memento to the Dr. V. Shanmugavel.

Mr. A. Darwin Jose Raju, IEEE SB Coordinator presented certificates to the participants. Vote of thanks was proposed by Mr. N. S. Sinil Prakash, Chairman, IEEE Student Branch and the program ended with national anthem.

Section Membership as on

15th September 2009 Life Fellow 1 Fellow 1 Life Senior 7 Senior Member 68 Life Member 4 Member 1584 Associate 92

Associate - 92
Affliate - 40
Graduate Student Member - 748
Student Member - 4436

Total - 6,981

IEEE 125th Anniversary Celebrations

The IEEE Madras Section organized the IEEE 125th anniversary celebrations on 27th August 2009 at MIT Campus, Anna University Chennai. Dr. P. Mannar Jawahar, Vice Chancellor, Anna University Chennai, inaugurated the celebrations and delivered the inaugural address. Dr. John Vig, IEEE President, delivered the presidential address. Dr. S. Salivahnan, Chairman IEEE Madras Section welcomed the delegates. Dr.T. Thyagarajan, Secretary, IEEE Madras section introduced the Vice Chancellor to the audience. Dr. P. Suresh Chander Pal, SAC, Madras section introduced the IEEE President to the audience. Dr. Amithava Das Gupta, Vice Chair, IEEE Madras section proposed the formal vote of thanks at the inaugural session.

The inaugural function was followed by the inauguration of Industrial Exhibition by Dr. A. Joseph Stanley, Dean, MIT Campus, Anna University Chennai. M/s Qmax and M/s Numeric Power Systems had put up stalls along with IEEE Madras section.

The inauguration of Industrial Exhibition was followed by the invited lecture on 'Technologies for Sustainable Development' by Dr. M. Anandakrishnan, Chairman, IIT Kanpur & Rajasthan and Science City Chennai. Mr. H. R. Mohan, Execom member introduced him to the audience. It was followed by the invited lecture on "Towards Technology Leadership Wireless Communication" by Prof. Ashok Jhunjhunwala, Professor, Department of Electrical Engineering, IIT Madras. Dr. Amithava Das Gupta, Vice Chair, IEEE Madras section introduced him. Both the lectures were very informative and were well received by the audience.

Past IEEE chair persons, present execom members, society chairs, members, branch counselors, student members, members of the GOLD and WIE affinity groups, faculty from MIT and invites from industries attended the program. In order to commemorate the occasion, all the present and past office bearers of IEEE Madras Section were felicitated and best student branches, society chapters, MGA awardees were recognized and felicitated. Acomprehensive souvenir was also released on this occasion.

In the afternoon, Dr. Mini S. Thomas, R10 SAC Coordinator and Dr. P. Suresh Chander Pal SAC Chair, Madras Section gave presentations on various opportunities under IEEE student activities. Mrs. Ramalatha Marimuthu R10 WIE Coordinator and Mr. S. Elangovan GOLD Vice Chair, Madras Section presented their affinity groups activities. It was followed by the student activities coordinated by Mr. Prijo. The event ended with the cultural program by the students of MIT campus.

Report by Dr. T. Thyagarajan, Secretary, IEEE Madras Section



Welcome Address by Chairman



Lighting of the Lamp



Secretary Introducing VC



Inaugural Address by VC



Chair SAC Introducing IEEE President



Address by IEEE President



Dignitaries with Souvenir



Vote of Thanks by Vice Chairman



Exhibition Inauguration by Dean MIT



Stall by Omax



Stall by Numeric Power Systems



Stall by IEEE Madras Section



Mr. Mohan Introducing Dr. M. Anandakrishnan



Invited Lecture by Dr. M. Anandakrishnan



Dr. Amitav Das Gupta Introducing Dr. Ashok Jhunjhunwala



Invited Lecture by Dr. Ashok Jhunjhunwala



Dr. Mini, R10 SAC coordinator Addressing the students



Address by Dr. Suresh Chander Pal Chair, SAC & Mr. Prijo



Address by Ms. Ramalatha, R10 WIE Coordinator



Address by Mr. S. Elangovan, GOLD Vice Chair



Volunteers with Madras Section Execom Members



 $Section \ Of fice \ Staff with \ Execom \ Members$



Student Branch Coordinators with Execom Members



GINI Hub Reps with Execom Members



 ${\it Cultural\ Programme\ -\ Song}$



Cultural Programme - Dance



Cultural Programme - Dance



Secretary at Keyboard -Entertaining Audience



Audience



Memento to Past Chair Dr. Suresh Chander Pal



Memento to Past Chair Mr. Srinivasan



Memento to Past Chair Dr. Ponnavaikko



Memento to Past Chair Dr. Sasi



IEEE President with group just before leaving Chennai

CIO Meet on "Turning Information into Business Insight"



IEEE Computer Society, Madras Chapter and the CIO Forum of CSI Chennai joined the CIO Magazine and IBM in the CIO meet event on "Turning Information into Business Insight" Thursday, 30th Jul 2009. About 80 IT professionals attended this meet.

This knowledge sharing event was focused at senior IT professionals to facilitate organisation maneuverability, drive changes, innovate and improve efficiency and help build smarter enterprises. Mr. John J Thomas and Ms. Suchitra Joshi from IBM gave presentations on "cloud computing and creating on demand infrastructure" and discussed on the advantages of this approach.

A panel on "Taking on the Challenge of

Change" moderated by Vijay Ramachandran, Editor-in-Chief, IDG Media India Pvt Ltd with Mr. H.R. Mohan, AVP (Systems), The Hindu, Mr. V. Balakrishnan, CIO, Polaris Software Lab and Mr. N. Natarajan, CIO, Hexaware as panelists discussed and deliberated on the following aspects.

- Would you choose to equip your organization to be maneuverable? Or is a bit of inertia a good thing as well?
- Is risk mitigation at cross-purposes with agility?
- How do you keep your infrastructure adaptable yet not overly redundant?
- How do you integrate legacy while responding to changing business paradigms?
- How do you deal with increased expectation thresholds from business?
 Do you believe that as the pace of business accelerates, the physical and digital foundations on which progress depends are straining to keep up?
- How do you view alternative sourcing approaches, like cloud computing, to deliver new services with agility and speed?

Forthcoming Events

ELECZY - 09: National Level Student's Technical Symposium. 1st Oct 2009 at M.P.Nachimuthu M.Jaganathan Engineering College, Chennimalai, Erode. Contact: Details: email at eleczyee@gmail.com OR mpneleczy@gmail.com OR visit the website at www.mpnmjec.ac.in

ICGCAC 09: International Conference on Global Computing and Communications: 9 - 11, Dec 2009, Chennai. Contact: Email: deancs@hindustanuniv.ac.in Web: www.hindustanuniv.ac.in/ICOGCAC09

CONSEG 09: International Conference of Software Engineering: 17 - 19, Dec 2009, Chennai. Contact Email: gopalaswamy_ramesh@yahoo.com Web: www.csi-chennai.org/conseg09

International Conference on Millennium Developmental Goals: The Role of Information and Communications Technologies: 27 - 29 Dec 2009, Chennai. Contact: Email: mdgict@rmk.ac.in Web: www.rmkec.ac.in/mdgict

International Conference on Wireless Communication and Sensor Computing: 02 - 04, Jan 2010, Chennai. Contact: Email: icwcsc2010@ssn.edu.in Web: www.ssn.edu.in/icwcsc2010

Guest Lecture on "Recent Trends in Electronics" at Arunai Engineering College



Arunai IEEE Student Branch along with the Department of Electronics and Instrumentation had organized a guest lecture on 12th Aug 2009.

Er. S. Vinayaga Babu, Director, 4Semi Technologies India Pvt. Ltd., Bangalore and Mr..Samuel Ravi Kumar, Secretary, 4 Semi Technologies, were invited as chief guests.

Mr. Selvarasu, Head Department of Electronics and Instrumentation welcomed the gathering. Dr. Arumugam, Director, Arunai Engg College and Mr. Mohanavelu, Principal felicitated the gathering.

Then our chief guest Er S. Vinayaga Babu started his technical talk on the topic "Recent Trends in Electronics". He was mainly insisting about how the future world is going to be. There will be no printed books, no text, everything will in electronic form and be in flash drives and CDs etc. Throughout his session, he maintained the talk interactive. He explained about the boom in the chip industry. Then he started his talk on "Career Development". He spoke on financial

rewards, interesting jobs, advancement, how the industry will value engineers. He answered queries of the students relating to on engineering jobs and also higher studies. He, further, explained on the criteria for employment in his company. The speaker had advised everyone to learn soft skills over and above the technical knowledge relating to their branch of engineering and studies. He wished every one to become a dedicated professional

Mr. Samuel Ravi Kumar spoke about his company and the instruments they are manufacturing at present.

Finally Ms. G. Malathi, Treasurer, IEEE Student Branch, had given Vote of thanks.

Library" — (Petaflops - Execution, Exabytes -

Storage, and Terabits - Bandwidth) by Dr. S.V.

Raghavan, Professor, Network Systems

Laboratory, Dept. of Computer Science, IIT

Madras and Chairman, Technical Advisory

Committee, National Knowledge Network is

being organized at MOP Vasihnav College for

Women, Nungambakkam by Ranganathan

Centre for Information Studies and IEEE CS

Madras along with other professional bodies

on 14th Oct 2009. Formal invites will follow

Lecture on "Your PET Digital

Announcements

Special Subscription Offer for Cyber Media Publications: Discounts in the range 31% to 67% on the cover price are being made available exclusively for the members of IEEE & CSI till 30th Sep 2009. For special rates and the subscription form pl. visit http://ieeecs-madras.managedbiz.com/ cmilpubs.pdf or contact Mr. C. Ramachandran, Phone: +91- 44 - 28221712 Email: ramachandranc@cybermedia.co.in

Join IEEE and the IEEE Computer Society, and receive FREE access to the Computer Society Digital Library (CSDL) for only \$40. The 2010 membership year begins early September 2009 - mark your calendar now to become a member of IEEE and the IEEE Computer Society for just \$40, and get access to the Computer Society Digital Library.Pl. visit http://www2.computer.org/portal/web/ membership/join

Distinguished Guest Programme: IEEE Computer Society and CSI Div II on Software is pleased to announce that Dr. Prabhaker Mateti, Associate Professor, Dept. of Computer Science & Engineering, Wright State University, Dayton, Ohio, USA is visiting India during Dec 2009 and will be available to run short courses and deliver guest lectures. Proposals are invited from institutions interested in hosting him to conduct short courses and deliver guest lectures. The hosting institutions are expected to meet the cost of journey within India, accommodation and local hospitality. For additional information, pl. contact Mr. H.R. Mohan, Chairman, IEEE CS & CSI Div II at hrm.ieeecs@gmail.com

soon. Forthcoming Faculty Development

Programme: SSN College of Engineering & Aarupadai veedu Institute of Technology will be hosting the FDPs in Nocv 2009 & Dec 2009 respectively. Pl. look for detailed

announcements.

Launch of MicroStrategy 9 - Business Intelligent **Product**

IEEE Computer Society, Madras Chapter joined with MicroStratgey, OBSI Technologies and CSI CIO Forum on 24th Jul 2009 in the launch of MicroStrategy 9 (BI Platform), a featurerich release of the BI product which helps companies seamlessly extend business intelligence from small, individual applications into an integrated enterprise BI operation. The event focused on the new technology and capabilities of MicroStrategy BI suite designed to:

- Graphically display the key information about your business
- Provide interactive analysis to better understand your business challenges and opportunities

- Dramatically increase the speed and simplicity of deploying new BI capabilities
- Empower business users with extensive self-service capabilities
- Support enterprise BI by extending the scale, performance, and efficiency of BI

The presentations and demos were done on the MicroStrategy products and Sybase Appliance by the respective vendors. The participants were offered free orientation programme on how to go about implementing BI solution in their organizations by the Chennai based partners of MicroStrategy. This launch meeting was attended by about 100 senior IT professionals and academic faculty members.

Faculty Development Programme

on

Software Tools For Simulation and Analysis of Power System

3 - 4 October 2009 Kalasalingam University Anand Nagar, Krishnankoil-626190

Coordinators

Dr. N. Kumarappan, Annamalai University Dr. D. Devaraj, Kalasalingam University.

> Fee: Free for IEEE members and Rs. 1000/= for non members.

For registration & further details pl. contact IEEE Madras Section Email: ieeemas@gmail.com Phone: 044-24423939 Mobile: 9382328776

Guest Lecture and Technical Seminar atSri Muthukumaran Institute of Technology



The IEEE student branch of Sri Muthukumaran Institute of Technology, Chikkarayapuram (Near Mangadu), Chennai and Yuva Sakthi organized a youth motivation campaign on 10th August 2009. This was followed by a technical seminar given by our college students on "Power Transmission Systems". This event was attended by around 250 students of the college.

IEEE-MAS Link Volume: 6

The program started at 9.30 in the morning. The chief guest at the program was Mr. N. Vittal,

IAS (Retd) and the former commissioner of Central Vigilance Commission.

The prayer song was delivered by Miss. Jamuna Kannan and Miss. S. Rajeswari of the IEEE Student branch. Following this, Prof. A. Murugasan, Head of the Department, Department of Electrical and Electronics Engineering welcomed the gathering.

Mr. B. Arun of the student branch introduced the chief guest Mr. N. Vittal who was

began his administrative service at the young age of 22. He had served as the secretary of the Government of India in the Department of Information Technology. He was included in the list of 50 members who had contributed to the development for the Indian economics. The achievements of the chief guest and the events of the day were explained in brief by Mr.Karthik, a member of Yuva sakthi. The chief guest was then honored by Prof. A. Murugaesan, HOD, Dept of EEE and Miss. Sukanya, member of Yuva Sakthi.

The chief guest, Mr.Vittal delivered an inspiring and interesting lecture for an hour on the topic "Strategic Strengths of India". It had motivated one and all. The talk was followed by an interaction session, where the students of SMIT put forward their queries to the chief guest. The chief guest was patient enough to answer all the questions.

After a short tea break, the technical seminar on "Power Transmission Systems" was presented by Mr. M. Karthik and Mr. S. N. Arun Kumar of the student branch The was found to be very useful where in the students became familiar with the electrical systems.

The vote of thanks was delivered by Mrs. Sheeba Joice, Asst. Professor, Dept. of Electrical and Electronics Engineering.

Report by: S. Keerthana, Vice Chairman, WIE, SMIT

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Posted On: 24th September 2009 Posted at: Egmore RMS (Patrika)

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