

BEACON

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

IEEE DELHI SECTION NEWSLETTER

VOL.19 NO. 1

June 2000

2000 IEEE IAS WORKSHOP ON ELECTRICAL SAFETY IN INDUSTRY

April 14 & 15, 2000 : NewDelhi



Mr. R. N. Srivastava inaugurating the Workshop; on the dais (L to R) Dr. S. Mukhopadhyay, Prof. B. P. Singh, Mr. S. Sethvedantham, Mr. C. Satish and Mr. Shahid Jamil



Mr. H. L. Bajaj (on the right) receiving the Award from Mr. R. N. Srivastava

Inauguration & Award Presentation

- Inauguration by Mr. R.N.Srivastava, Chairman, Central Electricity Authority
- Key-note address by Mr. S.Sethvedantham, Member, Central Electricity Authority
- Address by Mr. Shahid Jamil, Exxon Chemicals and representative of Petroleum and Chemical Industries
- Outstanding Chapter Engineer Award (OCEA) for 1998 & 1999 of PES-IAS Delhi Chapter presented to M/S Bhanu Bhushan of POWERGRID and Harbans L. Bajaj of NTPC respectively

Presentations & participation

- **Two** state-of-the-art lectures on 'Arc Flash Injuries and Protection' and 'A guide to the Maintenance, Operation and safety of Industrial and Commercial Power Systems' by M/S Shahid Jamil and Erling Caspar Hesla respectively
- **14** out of 16 papers presented in *five* sessions - Standards and Regulations, Safety Programs and Implementation, Accidents and Hazards Cases, Earthing, High Risk Areas
- video display on arc flash hazards

- **60** registered delegates coming from petroleum, chemical and cement industries, manufacturers, power consultancy organizations, Government bodies (regulatory, standards, inspection, railways), etc.
- **9** participants from abroad

Panel discussion & Feedback

- early registration for proper organization
- focussing on electrical safety exclusively for particular industry, such as, petroleum, mining, etc.
- introduction of electrical safety aspects into curriculum during undergraduate studies, may be through summer training
- lesser number of presentation with more time for each presentation
- sending of proceedings before workshop and thus minimizing presentation time to allow for more discussion
- for a particular topic instead of a number of presentations from different organizations, preference for working together for a joint presentation

- tutorial(s) preceding or following workshop
- in addition, for joining IEEE / IAS membership, acceptance of fee in Indian currency

For obtaining Proceedings of the Workshop (costing Rs.300

per copy) order may be sent to Dr. S.Mukhopadhyay (Secretary General of the Workshop), DII – 62 Pandara Road, New Delhi – 110 003 with payment through Demand Draft / Banker’s Cheque payable in Delhi / New Delhi in favour of ‘IEEE PES-IAS Delhi Chapter’.

THE TECHNOLOGICAL CONVERGENCE

Harish Tejwani, Hughes Software Systems

With the Internet becoming the core of all business activities, and a host of Net-based applications and services driving this process, the Network itself has attained a different connotation. The first generation Internet that was essentially perfect for data transmission is moving into its second generation by adding real-time capabilities for video and voice. The third generation Internet will make the Internet mobile – accessible anytime and anywhere, providing complete access to time-sensitive data, regardless of the physical location. This would give rise to a new crop of intelligent and portable electronic devices – personal digital assistants, laptops, mobile phones, office PCs, and home entertainment systems – which can work together in a seamless integrated system. These “smart devices” would allow users to plug into intelligent networks and gain direct, simple and secure access to both relevant information and services. This would invariably result in redefining existing business practices while changing the lives of people across cultural and geographic locations.

The world of Convergence envisages seamless voice and data over multiple access technologies, running over varying underlying data backbone technologies and different transport technologies. I list below some of these that are impacting the marketplace in a dramatic way

- **Wireless Technologies:** Wireless Access Protocol (WAP), General Packet Radio Services (GPRS), EDGE, Bluetooth, Universal Mobile Telecommunication Systems (UMTS), 1xRTT, 3xRTT
- **Voice/Data Integration Technologies (VoIP):** MEGACO, SIP, MGCP, H.323, SCTP and SIGTRAN adaptation for SS7 and ISDN
- **Transport Layer Technologies:** IP over SONET/SDH, IP over ATM, Frame Relay, Dense

Wavelength Division Multiplexing (DWDM).

- **Broadband Access Technologies:** Asymmetric Digital Subscriber Line, VDSL, Data over Cable
- **Network Management Technologies:** CORBA, COM/DCOM, TMN Agents, Java Beans
- **Application Technologies:** Object Oriented Modeling Techniques, Java, HTML, Applets, CGI, Servlets, RDBMS, IIS
- **Security Technologies:** Firewalls and Authentication Systems, Digital Certificates, Private/Public Key based Cryptographic Systems, Intrusion Detection Systems
- **Directory Enabled Technologies:** NDS, ADS, COPS, DEN

Two key areas that I believe will become essential prerequisites for the success of this seamless network-centric world will be increased manageability including tighter control, and highest levels of security. The former entails effective and efficient management of users, machines, devices and applications. The rules of this have yet to be codified and are likely to evolve. The latter includes intrusion prevention and detection mechanisms. If you can have anytime, anywhere access to external world, then the external world can as well reach you anywhere and anytime.

Thus in a not too distant future Convergence would lead to consolidation of technologies that would offer a “ubiquitous unified front-end” across multiple platforms, systems and networks. Will the transition into this New World Era and the technological predictions be as smooth as we envision it to be? Will the current infrastructure become a passe? Will the Businesses and users seamlessly operate without fearing the likes of “LOVE BUG” stalking them? Only time will tell...

ANNUAL GENERAL MEETING

The Annual General Meeting (AGM) of the IEEE Delhi Section was held at 11-30 AM on January 16, 2000 (Sunday) at India International Centre, Lodhi Estate, New Delhi. It was attended by 46 members. At the outset the Section expressed its heartfelt condolences to Dr J K Pal and prayed that his soul may rest in peace.

The deliberations of the AGM are as follows:

1. Welcome Address by the Chairman, IEEE Delhi Section

1.1 Mr R K Asthana, Chairman, IEEE Delhi Section welcomed the members to the AGM. He briefed the members on the various activities organised during 1999. He mentioned that the Section had organised 54 events, of which 35 were technical, educational and professional activities.

1.2 During the year Regional Committee Meeting was held at Bali (Indonesia) which was attended by the Vice Chair and Section Congress 1999 was held at Minneapolis (USA) which was attended by Section Chair. IEEE President visited Delhi during the year and all members were invited for interaction with him. Proceedings of these meetings are already published in Section News Letter, BEACON.

1.3 Section membership grew from 876 (as on 1st Jan 1999) to over 2000 (as on December 1999) during the year. For this Section Chair congratulated MDC Chair, Mr R K Vir and wished similar growth for the year 2000. He also mentioned that out of about 2000 members, there are hardly 100 senior members and invited all eligible members to apply for Senior Membership (*How to Become a Senior Member, elsewhere in this Issue*). Section Chair congratulated editor newsletter, Mr P K Srivastava for timely bringing out both issues of half yearly newsletter of the section. Section Chair appreciated the Electronic Co-ordinator, Dr Mukhopadhyay's efforts for introducing e-mail/web sites in a big way for functioning of the section and requested all section members to convey their e-mail addresses, if not done already, so that section could communicate to them electronically.

1.4 Section Chair informed that based on interaction with IEEE President, it emerged that in case an application for Fellow is not cleared in one go, nomination has to be made again and there is no embargo on subsequent nomination.

2. Confirmation of the minutes of the last AGM held on January 17, 1999

2.1 The minutes of the last AGM as circulated earlier were then moved for approval by the house.

2.2 The minutes were approved as proposed by Mr P V

Ekande and seconded by Dr P N Choudhary.

3. Presentation of Activity Report by the Secretary

3.1 Mr A Velayutham, Secretary presented the report on the activities of the Section during 1999.

3.2 Mr R K Vir expressed that there is reduction in number of activities and suggested that attempts should be made to increase the spread of organisers. He also suggested that 2-3 Sections may jointly avail benefit of distinguished lectures programme.

3.3 Mr Dinesh P Gupta suggested that to increase the awareness and interaction, Chapter Chairmen may also be invited to the meeting of EXCOM once or twice in a year.

3.4 Section to accord recognition to a person who enrolls 5 or more new members. This will be in addition to Member- Get A- Member scheme of IEEE, HQ.

3.5 After the discussion the report was approved as proposed by Mr P V Ekande and seconded by Mr R K Vir.

4. Presentation of Financial Report by the Treasurer

4.1 Dr S S Januar, Treasurer who took over in July '99 from Mr R K Agrawal who left the country, presented the audited accounts for the year 1999. The one page report covered the various transactions under 'Receipts' and 'Disbursements' along with the corresponding figures for the previous two years i.e. 1997 and 1998 for the purpose of comparison. Members present appreciated the financial report showing 3 years comparative figures as it fulfilled members pending request for several years. Chairman and members congratulated Dr Januar for the same.

4.2 After discussions the report was approved with Dr P N Choudhary proposing and Mr Dinesh P Gupta seconding it.

5. Introduction of the new Executive Committee

5.1 Since no petition was received, the slate proposed by the Nomination Committee was approved.

5.2 Mr H L Bajaj suggested that Dr B R Gupta may be co-opted in the Executive Committee which was noted for necessary action by the EXCOM.

5.3 The new Executive Committee members were introduced to the House. The concerned list appears in this issue of BEACON.

June 11, 2000

New Delhi

Dinesh P Gupta
Secretary, IEEE Delhi Section

FROM THE CHAIRMAN'S DESK



Dear Members,

An eventful year 1999 had ended in December 1999. It is satisfying to recall the dedicated efforts of the Section Execom officers during the year. A few of the achievements are Membership growth from 876 to over 2000, 35 technical / educational / professional activities, timely bringing out both the issues of section newsletter "BEACON" in July & December 1999, a new student branch at Radaur (Dist. Yamuna nagar), use of increased electronic communication, visit of IEEE TAB Colloquia led by President IEEE, Dr. Kenneth R. Laker, Section Congress 99 at Minneapolis, Minnesota, USA. Each section execom member deserves appreciation for his/her valuable contribution. While acknowledging the good work by the Execom, I must admit, Section did not succeed in proposing formation of a sub-section inspite of great potential for same in Punjab (100 members), Chandigarh (125 members) & Rajasthan (100 members). During the Annual General Meeting of the section held on January 16, 2000, new Committee took over.

On 14th & 15th April 2000, PES-IAS Chapter along with Section organised a workshop on "2000 IEEE IAS workshop on Electrical Safety in Industry", Report on the same is given else where in the Newsletter. During the Workshop Outstanding Chapter Engineer Awards for the year 1999 was presented to Shri Harbans L. Bajaj, Director (Commercial), NTPC and for 1998 to Shri Bhanu Bhushan, Director (Operations), Power Grid Corporation of India Limited. During the year so far section has organised 7 technical / professional activities. Details are given elsewhere in the newsletter.

As a result of vigorous membership drive for the year 1999, section membership grew over 2000 and for the same section has been awarded **"1999 Section membership Growth Award by IEEE Regional Activities Board for outstanding Leadership and**

results in IEEE membership development Activities for Region 10". This achievement got a jolt in April 2000 when membership fell to 1350. It is presumably due to non-renewal of membership for the year 2000 or delayed renewals, I, therefore request to all those members who have not yet renewed their membership, to renew the same urgently. In case of any doubt / difficulty, please get in touch with section MDC Chair or any other Office bearer.

S/Shri Harbans L. Bajaj, Pratap N. Choudhry, Subrata Mukhopadhyay, Man Mohan S. Puri, Pramod K. Srivastava, A. Velayutham and Raj Kumar Vir of Section have been chosen for IEEE Millenium Award. Besides above, Section also got following awards :

1. 1999 Section Membership Growth Award by IEEE, Regional Activities Board (RAB).
2. Certificate for Section Chair in appreciation of valued services to IEEE, Technical Activities Board (TAB).

Section is increasingly using Electronic Communication. Section Web site is being regularly updated by Section Electronic Communications Coordinator. The details of technical programs, section activities and general information can be obtained from section Web page site at www.ewh.ieee.org/r10/delhi. Members are encouraged to visit section Web site to get details of various activities of the section.

Volunteers are strength as well assets of IEEE. All of you are encouraged to help section in organizing various activities. You are most welcome to offer your valued suggestions.

With Warm best wishes.

June 6, 2000

Place : Delhi

(Rajendra K. Asthana)
E-mail : asthana@ieee.org

PERSPECTIVE OF DESIGN AUTOMATION FOR ERP SOLUTION

P.V. Ekande, D.G.M. (IT&DA). NTPC

In today's competitive environment, Business Process Re-engineering is being taken up by many industries which lead to adoption of Enterprise Resource Planning (ERP).

While ERP had its origins in manufacturing and production planning system, the scope of ERP offerings has expanded to include other supporting functions such as Design & Engineering, Procurement, Materials Management/Warehousing, Quality Management, Logistics and Deliveries, Asset Management, Human Resource Management and Finance Management.

Design Automation acts as a major contributor in this system. With present day Hi-Tech software such as 2-D/3-D CAD, 3-D Integrated Plant Design Software, Electronic Document Management, DBMS, it is possible to project, edit, up date design/documents involving multi-functional interaction and responsibilities. The prototype design is attached with specification sheet, quality plans, testing and inspection protocols etc. The integration is then feasible for material procurement, subsequent scheduling for manufacturing, material despatches, progress for

fabrication and construction in case of multi-facet projects, progress monitoring. Any of these activities can be visualised on 3-D model linking with resource deployment. The expertise from external sources can be tapped off easily with communication networks.

Design Automation tools can be linked with Material Management and Operation and Maintenance. It can incorporate feedbacks for products and equipment. The Design Automation provides substantial time and cost reduction.

PES-IAS DELHI CHAPTER RECEIVES PES OUTSTANDING CHAPTER AWARD

According to the information received from Power Engineering Society HQ., for the year 1999, Delhi Chapter has been selected by them as the recipient of Outstanding Chapter Award under small chapter category. Chapter Chair Dr. S.Mukhopadhyay and his team are congratulated for bringing this laurel again to the country (in fact for the second time, after Hyderabad Chapter).

THE IMPORTANCE OF CORPORATE COMMUNICATIONS

Information is the new currency of today's economy. In an increasingly competitive global market place, creating communications strategies to reach and enhance interactions with Potential Customers, Business Partners, Employees and the Community at large are critical to success. The Industry today, therefore, recognizes the significance of efficient Corporate Communications as an integral ingredient for its success. CorCom is the vehicle that designs and delivers the Company's brand message for quicker and effective results. Effective communication in the corporate world addresses external as well as internal needs. To assess and promote the company's brand, establish effective internal communications channels,

update and maintain company's Web Site making it more informative, interaction with professional forums like IEEE, sponsorships, Print Media coverage of important events and Press Releases are some of the key activities which come under purview of CorCom. It is for this reason almost all the top companies like BHEL, NTPC, Indian Railways, Hughes Software, TCS, Wipro and the likes have dedicated CorCom teams working towards meeting these ends. They not only help in the implementation of company's values and popularise the company's way of life through events and on-going initiatives but also play a strategic role in achieving its stated vision by unveiling its various facets to the external world.

LIST OF TECHNICAL & PROFESSIONAL ACTIVITIES

From January to June 2000

February 02	Talk on 'Digital World' (with Video display) by Dr. Farzin Deravi, University of Kent, U.K. at IIC, New Delhi (organized by IEE)
March 18	Day-long Workshop on 'Real-Time Power System Simulation' at EE Dept., IIT Delhi as coordinated by Prof. M.L.Kothari, IIT Delhi with main resource person as Dr. H.L.Nakra, formerly of IREQ, Canada (along with PES-IAS Chapter, EE Dept. of IIT, IEE and POWERGRID)
April 13	Talk on 'Static Compensator (STATCOM) and Flexible AC Transmission System (FACTS)' by Dr. Ambrish Chandra, formerly of University of Roorkee at EE Dept., IIT Delhi (along with PES-IAS Chapter)
April 14 & 15	Two-day Workshop on Electrical Safety in Industry held at India Habitat Centre, New Delhi (along with PES-IAS Chapter)
May 17	Talk on 'Condition Monitoring of Power Transformer - Frequency Response Analysis Approach' by Mr. P.K.Goel, NTPC, NOIDA at IIC, New Delhi (by EMS and PES-IAS Chapters along with IREEA)
June 23	Talk on 'New Developments for the Indian Power Distribution Systems' by Mr. K.K.Chhabra, WAPCOS, New Delhi at IIC, New Delhi (organized by PES-IAS Chapter and IEE)
June 30	Talk on 'Instrument Landing System (ILS)' by Prof. Q.C.Gupta, formerly of Delhi College of Engineering, Delhi at IIC, New Delhi (organized by ComSoc Chapter and IEE)

FUTURE PROGRAMS LIKELY TO COME UP

(look for the details under 'Lecture Schedule' at <http://www.ewh.ieee.org/r10/delhi> in the beginning of month)

July	Talk in the area of Computer Applications by Mr. Arvind Kochhar, Independent Consultant and Entrepreneur, New Delhi
	Talk on 'Electromagnetic Compatibility' by Dr. V.P.Kodali, formerly of Dept. of Electronics, Govt. of India, New Delhi
August 09 (9.30 a.m. to 12.30 p.m.)	Talk on 'Voice Over Internet - the Challenges Ahead' by IEEE ComSoc Distinguished Lecturer Dr. K.K.Ramakrishnan (AT&T Labs, New Jersey, USA) at Hughes Software Systems, Gurgaon
September	Talk on 'Power Electronics Application in Power System' (4 th Thomas Alva Edison Memorial Lecture) by IEEE Uno Lamme medal recipient Dr. P.C.S.Krishnayya, formerly of IREQ, Hydro-Quebec, Canada

CALL FOR PAPERS

1. IEEE International Conference on Personal Wireless Communication - 2000 (ICPWC' 2000) will be held from December 17-20 at Grand Kakatiya Sheraton Hotel, Hyderabad, India. For more details contact Dr. R. G. Gupta guptarg@mit.gov.in or <http://ece.iisc.ernet.in/icpwc2000/>
2. 8th International Conference on Advanced Computing and Communications will be held from December 14-16, 2000, Cochin, India. For more details contact Prof. K. Poulouse Jacob csdir@giasmd01.vsnl.net.in or <http://www.adcom2000.homepage.com/>

HOW TO BECOME A SENIOR MEMBER

You are eligible to become a Senior Member if you meet following requirements :

- Are an engineer, scientist, educator, technical executive or originator in IEEE designated fields.
- Are in the profession for atleast 10 years (Credit upto 5 years is awarded for an engineering degree)
- Have shown professional accomplishment over a period of atleast 5 years.
- Reference from 3 current senior members or fellows.

Examples of significant accomplishments :

- Substantial engineering responsibility or achievement.
- Publication of engineering or scientific papers, books or inventions.
- Technical directions or management of important scientific or engineering work with evidence or accomplishment.
- Recognised contributions to the welfare of the

scientific or engineering profession.

- Development or furtherance of important scientific or engineering courses in a rep programme.
- Contributions equivalent to above in areas such as technical editing, patent prosecution, or patent law, provided these contributions serve to advantage progress substantially in IEEE designated fields.

How to Obtain Form for Senior Membership

Forms can be obtained by visiting <http://www.ieee.org/organizations/rab/md/sforms.htm>. Forms can also be submitted electronically.

Alternatively hard copies can be obtained from section MDC or Section Chair. Application form duly completed can be sent either by fax (No. 001-732-981-0225) or mailed to “IEEE Admissions & Advancements, 445 Hoes Lane, PO Box 1331, Piscataway, New-Jersey 08855-1331, USA.”

(from : Section Chair, Rajendra K. Asthana)

ARE YOU COPING WITH STRESS ?

Job stress is becoming a worldwide epidemic.

That’s the gist of a recent Associated Press story about a report by the International Labor Organization.

The report titled “Job Stress : The 20th Century Disease,” says that stress-related injury claims on the job “have climbed from 5 percent of all occupational disease claims in 1980 to 15 percent a decade later.”

The ILO, in arm of the United Nations, estimates “the cost of job stress in the U.S. alone at \$200 billion annually”.

According to the report, the cost stems from “compensation claims, reduced productivity, absenteeism, added health insurance costs and direct medical expenses for related diseases such as ulcers, high blood pressure and heart attacks.”

One cause of stress is the constant monitoring of employees from “how quickly they perform a task to the frequency and length of breaks”.

Unfortunately, companies are contributing to stress but doing little to help employees cope with it, notes, the report.

Here are some ways management might help to reduce employee stress;

- **Understand that** employee helplessness and uncertainty are two major causes of stress. Empower employees to make, trust them to do their

jobs correctly, and let them know where they stand.

- **Increase** employee self-esteem. One way : Let people know they are valued.
Here are some ways employees can cope with workplace stress :
- **Realize that** stress is based on your perception of something that you feel threatens you—and that you have the power to change the perception. Step back and ask yourself what about the situation threatens you—and how you can see it differently. One suggestion : Find something in the situation you can control—and do so.
- **Develop a** commitment toward your job. Determine what it is about your job that makes a difference—and see it as a mission. In this way, you’ll react to your own pressures.
- **Develop** additional job skills. Take courses, read books, etc. The more competent you feel, the more you’ll feel in control of your career.
- **Gain Control** of as many aspects of your life as you can. If the job situation seems out of had, concentrate on those things in your private life that you can direct and regulate.
- **Avoid trying** to be a perfectionist. Just strive to do the best you can under the circumstances.
- **Learn relaxation** techniques. Examples : biofeedback, meditation, deep breathing.

SOURCE : COMMUNICATION BRIEFINGS

NEWS IN BRIEF



FROM PES REGION 10

Dr. S. Mukhopadhyay, ex-Chairman of the Delhi Section and currently PES-IAS Delhi Chapter Chair, has assumed the office of PES Region 10 East Chapters Representative recently. He succeeds Prof. M. Ramamoorthy, ex-Director

General, CPRI, Bangalore. Delhi Section wishes all the success for Dr. Mukhopadhyay in his new assignment.

IAS CHAPTER LEADERSHIP WORKSHOP

An Industrial Application Society (IAS) Chapter Leadership Workshop, meant for the Chairs of Region 10 Area West was held at India International Centre, New Delhi on April 16, 2000. Besides four of Chapter Chairman and couple of Officers of local IAS Chapter, were present IAS Officers Messrs. Kevin L. Peterson, Erling Caspar Hesla and C. Satish. These Officers delivered talks on various issues related to IAS, like, membership goals and incentives, DL program, web-site development, technical activities, etc. and in particular, Chapter Leadership Manual released in April 2000.

FROM INDIA COUNCIL

IEEE India Council is holding a congress of Student Branches at Chennai in July 2000 in which Branch Councillors and Branch Presidents have been invited. The Congress will deliberate on various issues concerning students like role of IEEE in students growth, particularly relating to career, technology and employment, specific problems in Indian environment etc. There are presently over 150 Student Branches in India and the Student Congress should provide a good forum to them to sort out their issues and sent recommendations to IEEE Hqrs. for their consideration

In view of larger membership growth in India, India Council is extending support to all sections to form new Sub Sections at places of large membership concentration so that more activities can be organized for the benefit of those members who are away from the Section Hqrs.

P. K. Srivastava
Executive Vice Chairman
IEEE India Council

FROM THE EDITOR



Dear Fellow Member,

This is the first issue of our newsletter, BEACON, in this millennium and the Editorial Board felt that it is now time to give it a new look. The BEACON in its present form has been continuing since last more than a decade. We

hope the new millennium look will be found by you more interesting and informative. After all change should always be for good and in this case also you will find it good.

India is very fast becoming a super power in Information Technology which is evident from the demand of Indian IT professionals from all over the world. Uptil now only U.S.A. was the destination of the Indian IT professionals. But now as per the press reports, countries like Germany, Japan, South Korea are also asking for Indian professionals and a time is coming soon when Indians will dominate the IT industry of the world. The IEEE in India can certainly play role in achieving this goal.

Keeping the IT goal in mind the Editorial Board has rightly thought to include some technical features, particularly in IT field, which are of common interest. The Information Technology is developing so fast and is becoming almost a part of our daily life. But, yet many of us are still not familiar with even the terminology what to talk of the latest trends.

Delhi Section is continuing to be very active as ever. The number of activities organized consists of broad spectrum of topics catering to divergent interests of the members and, I hope, the members are taking full advantage. The tremendous growth in membership is very heartening and should act as catalyst to generate more enthusiasm in organizing more and more activities.

Large number of members may now necessitate formation of Sub Sections at places where the concentration of members is more so that more activities can be planned for the members. India Council has offered to extend help in formation of new Sub Sections and our section can take full advantage of it.

With all good wishes,

Yours sincerely

(P.K. Srivastava)

PATENTING FOR BUSINESS DEVELOPMENT

India is lagging behind in assimilating the vast patent literature available in various technical fields and also in spreading the patent awareness. Very little amount of valuable patent literature appear in the open domain. Apart from the published literature, innovator can rely on the patent information for the state of the art and further develop and innovate based on the knowledge of prior art.

With the globalization and liberalization, multinationals are establishing their manufacturing base in India and trying to spread their technologies in the Indian market. This threat is of serious concern to Indian industry and indigenous innovation is the need of the hour.

Dr. Mashelkar DG, CSIR is of the opinion that going to library and looking through abstracts is an outdated way and advocates to use the internet continuously to search other data bases and find instantly the patents granted yesterday. His view that, "there is no use looking at research papers because they were published after it was found that information contained in them cannot be used" elaborates the need to look into the patent information thoroughly. According to him "the slogan of today should not be publish or perish but **patent and prosper**". Surviving and prospering in business have never been easy. Innovation is the key to productivity. Change is the order of the day and "**Innovate or evaporate**" is the latest slogan.

Basics about Patents. Following are the frequent questions asked by many and condensed answers have been prepared from the Indian Patent Law.

What is intellectual property ?

Patents, designs and trade marks are three different species of industrial property. These forms of industrial property along with copyright are now referred to as intellectual property.

What is a patent?

Patent is a grant from the Govt. which confers on the grantee for a limited term, the exclusive privilege of making, selling and using the invention and also authorizing others to do so throughout India.

What is a design?

Design means only features of shape, configuration, pattern or ornament applied to any article by any industrial process or means whether manual, mechanical or chemical.

What is a trade mark?

The trade mark can be briefly described as a word, name, device, label, signature, letter or numeral or any combination thereof used by a manufacturer or trader to identify his goods from those of other manufacturers.

What is a copyright?

Write ups, package design, advertisements, artistic, musical and literary works are protected through copyrights.

What can be patented?

"Art", "process", method or "manner of manufacture" must relate to the making of something which could be a substance, an article, or a machine. It can utilize known principles, substances, equipment, etc., but ultimately the "invented process" must result in either a "more efficient" or a "cheaper" way of making the material or could even lead to a "purer" product or "more useful" end result. In most cases, inventions are "incremental improvements" of existing practices or products but to be patentable they must satisfy the basic requirements stated above.

What cannot be patented?

Inventions relating to atomic energy.

Invention which is frivolous or which claims obviously contrary to established natural laws.

Invention against morality or injurious to public health. Mere discovery of a scientific principle or formulation of an abstract theory.

Mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.

Who can apply for a patent?

Person claiming to be the true and first inventor of the invention or an assignee of the true and first inventor can apply for patent.

What is the difference between process patent and product patent?

The most common belief is that products are not patentable in India. A Clarification to this is that, substances capable of being used as food/medicine/drugs and the entire class of materials that are results of chemical reactions do not qualify for patenting. Or in simple terms, the end product which can be produced by varying the chemical reactants and processes but has the same functional properties can not be patented. However the process can be patented. Since India has become member country of World Trade Organisation (WTO), obligations have to be met with regard to products and patents by 2005 and hence Indian patent law is now undergoing necessary modifications.

What are infringement and related issues?

The exclusive right to make, use, sell or distribute granted to a patentee when violated by others is termed as infringement

Source : BHEL Corp. R&D, Hyderabad

IEEE DELHI SECTION EXECUTIVE COMMITTEE: 2000

Position	Name	Organisation	Tel (O) / (R)	E-mail Address
Chairman	Mr. R. K. Asthana	BHEL	6001093 (O)	asthana@ieee.org
Vice Chairman	Dr. R. Balasubramanian	IIT	6861977 / 5014 (O)	balu@ieee.org
Secretary	Mr. Dinesh P. Gupta	BHEL	6001010 / 2481 (O)	dpgupta@ieee.org
Treasurer	Dr. S.S.Jamuar	IIT	6591070 (O)	ssjamuar@ieee.org
Joint Secretary	Dr. (Mrs.) Mini S.Thomas	JMI	6835831 (O)	mini@ieee.org
Past Chairman	Dr. S. Mukhopadhyay	CEA	6170541 (O)	subrata@ieee.org
Member	Mr. P. K. Srivastava	Ex-BHEL	914552570 (R)	pks@ieee.org
Member	Mr. M. M. S. Puri	DESEIN	6446438, 6453761-65 (O)	anant@giasd101.vsnl.net.in
Member	Mr. R. K. Vir	Ex-RLYS	4602840 (O)	
Member	Mr. P.V.Ekande	NTPC	914550947 (O)	enggpve@ntpceoc.ernet.in
Member	Dr. Ashok Bhattacharya	DCE	7776677 (R)	BH_ASOK@dceng.ernet.in
Member	Dr.(Mrs.) Devi Chadha	IIT	6512640 (R)	dchadha@ee.iitd.ernet.in
Member	Mr. Rajendra Singh	RLYS		rajendrasingh@vsnl.com
Member	Mr. Harish Tejawani	HUGHES	7221116 (R)	htejwani@ieee.org
Member	Dr. Ram Nath	BHEL	4367725 (O)	ramnath@ieee.org
Member	Mr. V.K. Dutt	Railways	3387336 (O)	

VARIOUS SUB-COMMITTEES OF IEEE DELHI SECTION FOR 2000

SL. NO.	NAME OF SUB-COMMITTEE	CHAIRPERSON	MEMBERS
1.	Membership Development	Mr. R.K.Vir	Mr. Rajendra Singh Mr. Harish Tejawani Mr. L.D.Gupta Mr. V.K.Dutt
2.	Fellowship and Awards	Dr. R.Balasubramanian	Dr. V.R.Singh* Dr. S.Mukhopadhyay Dr. S.C.Dutta Roy*
3.	Student and Educational Activities	Dr. (Mrs.) Mini S.Thomas	Dr. Asok Bhattacharya Dr. (Mrs.) G. Bhuvanewari* Dr. B.R.Gupta
4.	Publicity and Publication	Mr. P.K.Srivastava	Dr. Ram Nath Mr. Harish Tejawani Mr. P.V.Ekande
5.	Intersociety Relations	Mr. R.K.Asthana	Dr. R.G.Gupta Dr. S.S.Jamuar Dr. S.Mukhopadhyay
6.	Section History	Mr. M.M.S.Puri	Dr. R.Balasubramanian Mr. Harjiwan Vyas*
7.	Finance	Dr. S.S.Jamuar	Dr. S.Mukhopadhyay Mr. Dinesh P. Gupta
8.	Technical and Professional Activities	Dr. S.Mukhopadhyay	Mr. P.V.Ekande Dr. R.Balasubramanian Dr. S.S.Jamuar Dr. K.Subramanian Mr. Harish Tejawani
9.	Nomination	Dr. S.Mukhopadhyay	Mr. P.K.Srivastava Mr. M.M.S.Puri
10.	Electronic Communications Coordinator	Dr. S.Mukhopadhyay	Mr. Harish Tejawani (in assistance)
11.	Audit	Mr. P.V.Ekande	Dr. (Mrs.) Devi Chadha (alternate)

* representation from outside Executive Committee

Editrial Committee Mr. P.K. Srivastava, Dr. Ram Nath, Mr. Harish Tejawani, Mr. P.V. Ekande
