

History of SPEED

Science and technology are the magical words which blends the basic knowledge in science with the applications. Research and industry has to be always proceeding with hand in hand. It should not only be beneficial to researcher but also to the society. In order to bridge the gap between the two many efforts are going on and many people are strongly recommending it in syllabus at undergraduate level as well. Therefore one has to inculcate the habit of thinking scientifically and applying it in different scenarios.

From the number of resources available a pool of knowledge can be established. This will be beneficial for students, researchers, professors and industries as well. The idea comes in to the mind to establish a group of such people in the form of society. The primary goal of the society is to promote the electronic knowledge base to students in the form of competitions, examinations, exhibitions etc. It was decided that the members of the society must be professors from Science and Engineering colleges, research institutes and industries. These people specifically work for promotion of excellence in electronics.

Starting from a small offshoot of the Physics, Electronics as a subject has grown into a full-fledged discipline engrossing different aspects of life. The popularity of Electronics is due to consistent efforts by all the stakeholders including the teachers, students, technocrats and industry, consumers not to be excluded. With growing necessity and the then requirement of expertise in the field of Electronics, Pune University has started **Electronic Science** as a separate branch at graduate level from the academic year 1985-86. In the last *twenty five years* the seed sown has grown in to a big tree. Across the state, there are graduation and post graduate programs being conducted by almost all the Universities. Exponential growth has been observed among the industries and business opportunities. As active members of the Electronics fraternity, a group of likeminded people felt the need to come together and promote excellence. During the interactions/discussions the idea of establishing the **Society for Promotion of Excellence in Electronics Discipline (SPEED)** was originated and it came into being through continued efforts. The organization is nonprofit making and working on voluntarily basis. The fundamental aim of the Association is to exchange information, knowledge and expertise among members of the association. It is being done through organizing competitions, symposia, workshops and conferences, group meetings, lectures from eminent scientists and collaborating with other international bodies with common interests, Promoting educational and industrial collaboration and other relevant activities is also among the primary objects of the Association. **The SPEED is a legal registered Association active from December 2010. Necessary fund are being generated through memberships, participation fees for the workshops seminars etc. Though the organization is initiated by some enthusiastic teachers of Electronic Science, it is aimed to be inclusive of students, teachers and professionals who are associated in one way or the other with the Electronics Discipline.**

Looking back and thinking philosophically, it is realized that **LIFE** is Living In Fulfillment and Enjoyment - fulfillment in our professional careers and enjoyment in our personal lives. This balance is the core of a quality life and carries with it the great benefits of clear thinking, effective decision-making, creativity and a sense of belonging and relatedness. These essential qualities enable the individual to function more effectively and productively. These qualities also enable any individual whether a Teacher, Businessman, Doctor, Engineer, Company Executive, Student or Housewife to excel in their lives. Times change but one thing that constantly determines success, which is EXCELLENCE.

Excellence is a talent or quality which is unusually good and so surpasses ordinary standards. It is about going a little beyond what we expect from ourselves. There is nothing more satisfying than overcoming a challenge that was previously deemed insurmountable; nothing more satisfying than looking back at who you are now and realizing that you have grown much more than you thought you could. To be human is to live to our highest potential. Excellence is not so much a battle you fight with others, but a battle you fight with yourself, by constantly raising the bar and stretching yourself.

Dr. A. D. Shaligram, HOD, Dept. of Electronic Science, University of Pune, came forward with the idea of establishing such a society in year 2009. Later it was discussed with professors from the different colleges. First meeting of all the professors from different colleges was organized in the A. V. Hall of Abasaheb Garware College, Pune in 2011. Dr. P. B. Buchade, HOD, Dept. of Electronic Science, Abasaheb Garware College, Pune and Dr. N.M. Kulkarni, Associate Professor, Dept. of Electronic Science, Fergusson college, Pune were the founder members of this society along with Dr. A. D. Shaligram.

There were number of discussion on deciding the name of the society, but finally in the year 2010 it was decided as **Society for Promotion of Excellence in Electronic Discipline(SPEED)**. This society was registered under registration act 1860 R. No. Maha. 2683/2010/PUNE on 30/12/2010. The fundamental aim of the Association is to exchange information, knowledge and expertise among members of the association. The organization will be non profit making and working on voluntarily basis. It shall in particular, be capable of organizing competitions, symposia, workshops and conferences, collaborating with other international bodies with which it has common interests, finding the necessary financial resources, encouraging the introduction of advanced techniques, promoting educational and industrial collaboration, undertaking all other activities relevant to the object of the Association. **Society for Promotion of Excellence in Electronics Discipline (SPEED) is a legal registered Association for this purpose.**

Membership Drive:

1. An appeal to everyone to contribute to enhance the **SPEED** activities by increasing number of memberships, leading role in conducting the above activities, promoting our registered society to various areas related to Electronics Academics, Industries, Research Institutes, Other Universities, and Our College Alumni etc. The executive body members for SPEED are **Dr. P.B. Buchade Dr. M.L. Dongare, Dr. N.M. Kulkarni, Dr. V.B. Gadkar, Prof. S.D. Upalekar and Prof. S.R. Chaudhari.**

Activities decided for Students and teachers were as listed below:

1. Monthly issue of E-NEWS letter highlighting the activities conducted during the month and activities planned
2. **Electronic Excellence Examination** - for F.Y. /S.Y. B.Sc. students
Examination center: All colleges where enrollment of examination is greater than 10 for each class.
3. **Quiz competitions**- for UG and PG students at College level (**in December**),
District level (**in January**) &

University level (in February)

4. **Project competitions**- UG/PG level (in February)
5. **Teacher Empowerment Program (TEP)** – (Every month)

Activities during the year 2011

1. First activity was project exhibition organized at Balgandharva Rang Mandir on December 2010 from 9.00 a.m. to 6.00 p.m.
2. **Electronic Excellence Examination** - for F.Y. /S.Y. B.Sc. students
F. Y.B.Sc. and S.Y. B.Sc. Electronic Science and Computer Science Students
3. It was decided to conduct on Saturday 03rd December 2011 from 1.00 pm to 2.00 pm.

Eligibility:

F. Y.B.Sc. and S.Y. B.Sc. Electronic Science and Computer Science Students

Examination pattern:

The examination will be of multiple choice questions type to be attended in 1 hour.

Multiple choices: 50 questions 100 marks

The **SPEED** will confer a **CERTIFICATE OF MERIT** to every successful student.

A center topper will be given a **SPECIAL PRIZE**

More than 1050 students of FYBSc/SYBSc from different colleges participated. This year EEE examination was conducted in the various colleges in following districts - Pune, Nagar, Nashik, Nagpur, Nanded, Amaravati, Solapur, Kolhapur, Jalgaon etc.

4. **REFRESHER COURSE IN ELECTRONIC SCIENCE** for Teachers between **8th to 28th November,2011**
5. **ELECTRONIC EXCELLENCE EXAMINATION** - for F.Y. /S.Y. B.Sc. students **on 03rd December 2011**
6. **HOBBY PROJECT COMPETITION** for FYBSc students **on Friday, 23rd December 2011**

Activities during the year 2012

1. **CPLD Workshop at Nagpur University**

A two-day workshop on Digital System Design using VHDL on CPLD boards (13th and 14th December 2011) for students of M.Sc. Electronics and Computer Science organized by RTM Nagpur University, Department of Electronic Science, Nagpur.



2. **Intercollegiate Electronics Quiz Competition**
(For FYBSc/SYBSc – Electronics & Computer Science students)
Date: Saturday, February 4, 2012
Place: Department of Electronic Science, Symbiosis College, Pune
3. Modern college of Arts and Science, Shivajinagar, Pune has organized state level workshop on “Digital System design using VHDL on CPLD board” on 10th and 11th February 2012.



4. Department of Electronic Science, University of Pune and CMET has organized the international conference ISPTS-1 on 8th to 10th March 2012
5. Project competition for F. Y. /S. Y. and T. Y. B. Sc. students at S. P. College, Pune



6. One day workshop on Revision of syllabus for T.Y. B.Sc.(Electronic Science) paper II: Microcontrollers at T. C. College, Baramati on 14th Jan 2012



7. Inter-collegiate project competition at N. Wadia college on 23rd December 2011.



8. **One day seminar on Academic Performance Indicators of Electronic Science Teachers**

Date: Thursday, March 17, 2012

Place: Department of Electronic Science, Abasaheb Garware College, Pune

9. Publication of lab manuals specially prepared for two days state level on **Digital system design using VHDL on CPLD board** workshop at Modern College.
10. Different activities such as project competitions, quiz competitions were organized by Department of Electronic Science, Symboisis college, Pune



Prize Distribituion



Circuit Building competition

11. AGM was called on 12/02/2012



12. A panel discussion on Research methodology was organized on 27th March 2012 in Department of Electronic Science, Fergusson College, Pune. The panel of experts consisted of Prof. S. Ananthkrishnan, Adjunct Professor and Raja Ramanna fellow, Prof. A. D. Shaligram, Head, Dr. D. C. Gharpure, Associate Professor of Electronic Science Department, University of Pune and Mr. Sharad Pustake, Advisor, Science and Technology Park, Pune. Dr. N. M. Kulkarni welcomed all the guests, participants and presented the theme of Panel discussion. Prof. R. G. Pardeshi, Principal, Fergusson College, Pune highlighted the importance of the panel discussion. There were around 60 participants/ researchers from different colleges in Pune. This activity was organized under financial assistance of UGC and also sponsored by SPEED (Society for Promotion of Excellence in Electronics Discipline). Prof. Shaligram, also a founder chairman of SPEED, moderated the whole panel discussion. The panel discussions were organized in two sessions. In the *First session*, discussions regarding *Research Planning* were conducted. The focus of this session was on Topic identification, preparation of background, literature survey, looking for best methodology, planning for instrumentation and measurements, best practices in theoretical/experimental research work and how to prepare a good research plan. The second session highlighted research documentation methods which included writing research proposal, maintaining research record, writing research reports and paper alongwith documentation of thesis. A brief summary of the discussions by the panelist and participants is given below. This is a summary of the key Concepts in Scientific Research.



13. Brain storming session with a select group of young students of a few colleges towards **Technology Vision 2035** exercise regarding “**Future Prospects of Information & Communication Technologies (ICT)**” Prof. R. K. Shevgaonkar, Director- IIT, Delhi (former

VC, University of Pune) and **Dr. Mukti Prasad**, Scientist, DST, Delhi were experts for the session.



14. One day seminar on “**Academic Performance Indicators of Electronic Science Teachers**”

Department of Electronic Science Abasaheb Garware College Pune organized a one-day seminar on “*Academic Performance Indicators (API) for Electronic Science Teachers*” on Saturday 17th March, 2012. This seminar was jointly organized by the Department and **SPEED (Society for Promotion of Excellence in Electronics Discipline)**. Dr. A. D. Shaligram, Head, Dept. of Electronic Science, University of Pune delivered a keynote address. Dr. R. K. Kamat, Associate Professor, Shivaji University and Prof. J.V. Khedkar, Head, Dept. of Electronic Science, Fergusson College and Dr. P. B. Buchade were the resource persons and delivered the lectures on various aspects of API. The seminar continued from 11 am in the morning till 6 pm. In all 25 participants attended the seminar.



15. Report of Electronics Excellence Examination (EEE) for the year 2011-2012

The SPEED is conducting EEE examination every year. In the academic year 2011-2012 the (EEE) examination was conducted in various centre through all over Maharashtra . The examination was controlled at college level, whereas the Centers which are involved in the

SPEED pre-examination activities. College centers process the filling of examination forms and data of the eligible candidates and also finalize exam center based allotment of roll numbers. The examination pattern was of multiple choice questions type; to be attended in 1 hour duration. Multiple choices: 50 questions 100 marks and **CERTIFICATE OF MERIT** was awarded to every successful student.

Electronics Excellence Examination (EEE) for F.Y./ S.Y.B.Sc. (General) & F.Y./ S.Y. B.Sc. (Computer Science) students) which was held on Saturday, December 3, 2011. There was a overwhelming response from all over Maharashtra, The Examination was conducted with proper planned and as per scheduled. At the beginning SPEED coordinators were identified at a various colleges where the EEE exam was planned. For the proper communication their mobile number and e-mail address were collected. The main role of these coordinators was to create the awareness among the students regarding such type of examination. The registration forms were filled up by them along with Rs. 50/- as registration charges. Roll number were allotted to the students for the Examination. Selected expert teachers with SPEED were asked to send Questions and Question Bank was formed accordingly. The Question papers were set from this Question Bank. These Question papers were sent to various centers through **e-mail** on 1st December 2011. Coordinators were instructed to make necessary Xerox copies of the Question papers. The expenditure incurred to conduct examination at actual along with Rs. 100/- for the conduct of examination was allowed. These expenses were done through the examination fees collected.

Actual examination was conducted on Saturday **3rd December 2011 between 1.00 pm and 2.00 pm.** On the next day i.e on 4th December 2011 Answer Key was sent to coordinators. The answer papers were assessed with taking guidelines through Answer Key. The result was declared and communicated to centers on 9th February 2012. Centre-wise number of candidates and their mark list as well as gradation was properly worked under able guidance of Prof. A.D.Shaligram. The grades were awarded as given below

- 28 to 44 awarded as grade "C"
- 45 to 69 awarded as grade "B"
- Above 70 were awarded as grade "A"

Absent Fail Grade C Grade B Grade A Pass Graphical analysis of EEE Examination 2011-2012 0.857% 5.19% 23.3% 21.8% 1.86% 47% Pass Grade A Grade B Grade C Fail Absent
EEE Report of year 2011=2012 1114 18 109490 45839 987 Pass Grade A Grade B Grade C Fail Absent Total

The SPEED CERTIFICATEs of the successful candidate were sent to the concern centre after the declaration of result.

16. Launching of official website of SPEED (www.excellentspeed.org)

SPEED organized the function for launching its official website www.excellentspeed.com on 24th July 2012. The function was arranged in Audio Visual Hall of MES'S Abasaheb Gaware College, Karve Road, Pune 411 004 at 4.00 p.m. Dr. R. N. Karekar was the Chief Guest for the function. Dr. A. D. Shaligram, Chairman SPEED, Dr. P. B. Buchade Vice Principal and Head Dept of Electronic Science, Abasaheb Garware college, Dr. S. G. Gupta, Principal, Abasaheb Garware College were also present for the function. Students from the Electronics and computer science discipline from different colleges, staff members from different colleges and university and HODs of Electronic Science departments of different colleges and SPEED members were present for the function. Dr. P. B. Buchade delivered the introductory speech. In this he explained about the different activities of the SPEED and purpose of the function. He also mentioned about the honor to be given to Dr. R. N. Karekar on the occasion. Dr. S. G. Gupta addressed the audience and delivered the welcome speech. Prof. J. P. Gadre introduced the Chief Guest of the function Dr. R. N. Karekar. Prof. J. V.

Khedkar, Head Dept. of Electronic Science, Fergusson College, Pune read the citation for the Chief Guest. Dr. R. N. Karekar was the felicitated by the bouquet, coconut, shawl and the citation. He was also felicitated by honorary membership for the SPEED on the occasion. After this Dr. R. N. Karekar was requested to launch the official website of SPEED as www.excellentspeed.org . Dr. Karekar spoke about the ways and methods of studying the Physics and Electronics. He also encouraged the students by asking few questions. After the interesting interactions with students and other staff members Dr. A. D. Shaligram talked about the SPEED , its activities like various competitions organized for the undergraduate students of colleges and its future plans and encourages the audience to be part of this activity. SPEED organized various competitions for the year 2011-12. Number of students from the Electronic Science and computer science discipline participated in it. The prize distribution was done on this occasion. Ms. Chugani announced the prizes for the competitions. Winners were felicitated at the hands of Chief Guest Dr. R. N. Karekar, Dr. A. D. Shaligram and Dr. P. B. Buchade. Dr. M. L. Dongare delivered the vote of thanks for the function. Mrs. Supriya S. Patil was the presenter and coordinator for the function.



17. (SPEED) conducted **Electronics Excellence Examination (EEE) for F.Y./ S.Y.B.Sc. (General) & F.Y./ S.Y. B.Sc. (Computer Science) students** on **Saturday, December 15, 2012** at various centers.

Activities for the year 2013

1. Conference NCRIDGE-13 at Amaravati on 8th and 9th February 2013
2. (SPEED) conducted Electronics Excellence Examination (EEE) for F.Y./ S.Y.B.Sc. (General) & F.Y./ S.Y. B.Sc. (Computer Science) students) on _____ 2013 at various centers.
3. Conference on E waste management at Modern college, Shivajinagar
4. Release of first issue of Speed Journal

Activities of the year 2014

1. (SPEED) conducted Electronics Excellence Examination (EEE) for F.Y./ S.Y.B.Sc. (General) & F.Y./ S.Y. B.Sc. (Computer Science) students) on February 2014 at various centers.

2. National Conference on Advances in Electronics and its interdisciplinary Applications (NCAEIA-2014)

National Conference on Advances in Electronics and its Interdisciplinary Applications [NCAEIA-2014] was held on 19th -20th September 2014 at Fergusson College, Pune. The conference was organized in association with Society of Promotion of Excellence in Electronics Discipline (SPEED). This event was sponsored by UGC, Savitribai Phule Pune University and technical sponsors IEEE SSCS & CAS India Chapters and IEEE Pune section.

The national conference was inaugurated by the **Dr. Raghunath Shevgaonkar, Director IIT, Delhi** and delivered the key note address. He addressed the conference participants with his charming speech and highlighted the importance of electronics in all walks of life; it might be entertainment, security, health, telecommunications, computers, technology, agriculture, and transportation. He also focused on the future research directions in India.

The conference was organized in 9 different sessions. There were invited talks from some of the eminent scientists, academicians as well as industrial experts on Advances in Electronics and its interdisciplinary applications. The conference had a range of different kinds of presentation and talks in the form of oral presentations, poster presentations, industrial track presentations, panel discussion and future directions.

There were 5 invited talks delivered by (1) **Prof. Rajkamal**, Former VC, Devi Ahilya University, Indore on **Future Embedded System**, (2) **Dr. S. S. Sadistap**, Senior Principal Scientist, CEERI, Pilani on **Advances in Embedded Instrumentation Applications for Society**, (3) **Mr. Abhay Patwardhan**, GM, Mahindra Reva, Bangalore on **EV-The future of mobility** (4) **Dr. Mahesh Jiwani**, Dept. of Electronics, Saurashtra University, Rajkot on **S-MAD: Sensor based Mobile Application Development**, (5) **Mr. Prafulla Wadaskar**, Marvell India, Pune on **Smart IOT devices: Overview, Awareness & Project Ideas**.

In addition, there were 6 industrial track presentations from the industrial expert to share their expertise. There were 5 oral presentation sessions where 36 researchers presented their research work in the conference. There were 72 research papers presented in the form of poster in the poster exhibition. There were 6 experts from industry as well as from academia participated in panel discussion on Analog and Digital systems: Pros and cons.

Over 170 researchers, scientist, industrial experts and students attended the conference organized by Fergusson College, Pune. There were 6 IEEE members and 14 student members who participated in the conference actively. In the valedictory function, **three separate categories of awards/prizes sponsored by IEEE** were given at the hands of Dr. S. Anathkrishanan, Adjunct Professor, Pune university and Prof. Ghaisas, Director, School of Energy studies. These categories were

(a) **Best Robotics Explorer team-I** (Akhay Sande, Kishor Lande, Pooja Gawali, Purnata Badhe, Rutuja Kumbhar) and **Best Robotics Explorer team-II** (Vaibhav Khaldhone, Tushar Sant, Anand Ajabe, Anagha Purohit, Sonali Kulkarni, Pritesh Shah) – for preconference workshop on Robotics Exploration Workshop(18th Sept. 2014)

(b) **Three IEEE best oral presentation Awards** (**I prize**-shared: Dr. Supriya Patil and Mr. Vijay Labade, **II prize**: MR. Chetan Kasar, **III prize**: Manoj Kukade)

(c) **Three IEEE best poster presentation Awards** (**I prize**: Ms. C. G. Mokashi, **II Prize**-shared: Ms. Yogita Khandge, and Ms. Kalpana Kulkarni, **III Prize**: Dr. Neha Deshpande)

3. **Dr. Nitin Kulkarni**

4. Vice-Principal &

5. Head, Department of Electronic Science,

6. Fergusson College, Pune

