APPEAL TO CONTRIBUTE NEWS/ ARTICLES FOR ISTE NEWSLETTER

The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in the country with the motto of Career Development of Teachers and Personality Development of Students and overall development of our Technical Education System. ISTE publishes monthly Newsletter which was earlier circulated to all life members, institutional members, Central & State Government Officials, Industry Associations and Corporate Offices.Considering the commitment towards going green, ISTE has stopped printing of Newsletter since a few years and serving readers by providing soft copy of the same on the official website "www.isteonline.in"

ISTE has been receiving innovative suggestions from all members for further enhancing the eminence of the Newsletter by introducing theme based articles from its members, corporate world, success stories of Industrial engineers, best practices at Institutions, technological innovations worldwide, etc. so as to benefit the readers. The Newsletter shall continue to include information of activities conducted under ISTE faculty chapters, students chapter, notifications related to schedule of ISTE various programs/ activities, national/regional awards, etc.

ISTE hereby solicits articles not exceeding 300 words based on the theme from its members & stakeholders in word file only along with good quality photo (preferably 6 cms x 4 cms) in JPG format. Institute members can send success stories of their students, staff who have made excellent, outstanding and exemplary strides in technical/industrial field. The success stories should be in a word file and should not exceed 400 words and should be accompanied by a good quality photo (preferably 6 cms x 4 cms) in JPG format.

All articles, information with caption should be sent in a word file and photo (in JPG format) to **istenewsletter@ gmail.com**. Selected articles/ information with good quality photos will be published in the ISTE Newsletter. The correspondence address is as follows:

The Executive Secretary
Indian Society for Technical Education
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IJTE is a peer reviewed Journal devoted to different aspects in technical education. This journal is published by the Indian Society for Technical Education since 1978 with its high reputation in the field of publication. IJTE publish the latest research based articles on various issues of technical education for the overall development and advancement of engineering education in the country. The Journal has a wide spectrum of readers in the technical education arena.

IJTE solicits paper and articles of original, principled research papers dealing with theoretical, methodological, empirical and application-related aspects of technical education. Papers must clearly demonstrate relevance to pedagogical techniques in the field of engineering and technology, Management studies, Pharmacy, Hotel Management and Information Technology.

All submissions should describe original and unpublished work. Research papers should describe results of systems development and/or empirical or theoretical analysis. A small number of "review paper", "survey paper" and "theme papers" will also be accepted. These should synthesize and examine broad issues in the field. Authors are encouraged to submit reports on work-in-progress as short papers.

Please follow the "Guidelines for submitting the papers" which can be downloaded from our official website "www.isteonline.in". All papers must be submitted electronically to ISTE along with an undertaking for the originality, IPR and copyright issues. The full details of the author and their home institution (if any) should be given for correspondence. All the full papers and review papers will be peer reviewed or double blind refereed. For any further clarifications regarding the submission of the papers kindly contact us at the following address:

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As you are aware that the Indian Journal of Technical Education (IJTE) is a peer reviewed Journal devoted to different aspects in technical education. IJTE is published by the Indian Society for Technical Education on quarterly basis with the aim to provide an appropriate platform presenting well considered, meaningful, constructively thought provoking, non-political and non-controversial but critically analyzing and synthesizing present and future aspects of Technical Education System with particular reference to our country.

Periodicity : Quarterly

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NEW E-MAIL Id FOR ISTE

It is requested to all the esteemed members of ISTE to kindly note the change of new e-mail - id for ISTE i.e. **"istedhq@isteonline.org"** for future correspondence. The old e-mail id of ISTE is deactivated by the service provider for operational reasons and not in use.

Executive Secretary, ISTE

QUOTE FOR THE MONTH

A satisfied life is better than a successful life. Because our success is measured by others, but our satisfaction is measured by our own soul, mind and heart.

WIT AND WISDOM

- Faith is of no evil in the absence of strength. Faith and strength, both are essential to accomplish any great work.

  — Sardar Vallabhbhai Patel

- The biggest obstacle to happiness is undervaluing what you have and overvaluing what others have.

- Learning is about building on the knowledge, skills and wisdom we gain from others. With humility. Keep learning. Keep sharing. Keep striving. Keep succeeding.

- The price of greatness is responsibility, there are no limits on what we can achieve in our life except the limit we accept in our minds.

- Respect is mirror, the more you show it to other people, the more they will reflect it back.

- Overthinking is the biggest cause of our unhappiness. Keep yourself occupied. Keep your mind off things that do not help you. Think Positive.

- Never limit yourself, we live in a limitless world with endless possibiliies, never say you can not and never give up.

- Treat your relations and money with equal respect. Because both are hard to make and easy to loose.

- Lovely times of life will not return back but the lovely relation and missing memories of loving people will stay in the heart forever.

- Acknowledging the good that you already have in your life is the foundation for all abundance.

  — Eckhart Tolle

- Lack of direction, not lack of time, is the problem. We all have twenty-four hour days.

  — Zig Ziglar

- Your future is created by what you do today, not tomorrow.

  — Anonymous

- Do not ever save anything for a special occasion. Being alive is the special occasion.

ACTIVITY FOR THE MONTH

TOPIC FOR DISCUSSION

Student-Centered Learning

All the Chapters/Student Chapters may conduct Seminars/Workshops on the above topic and send the recommendations to the Headquarters for the needful.

NEWS FROM ISTE FACULTY AND STUDENT CHAPTERS

ANDHRA PRADESH

- **Lakireddy Bali Reddy College of Engineering, Mylavaram, Krishna Dist.** organised hands on training on **Electronic Design Automation Tools** from 21st to 23rd November, 2019. The resource person for the program was Mr. Venkata Rao, Mr. V.V. Ramakrishna, Mr. BVNR Siva Kumar and Mr. P. Rakesh Kumar.

Dignitaries and Faculty during the training programme.

GUJARAT

- **BVM Engineering College, Vallabh Vidyanagar** organised a workshop on **Matlab-Beginners** on 28-12-2019. The aim of the workshop was to give hands-on experience to the students for getting familiarize with the software. The scope of use of software was demonstrated in the workshop with small programming modules by the expert.

Student participants during the workshop.

- **Sigma Institute of Engineering, Vadodara** organised National Seminar on **Recent Trends in Welding Technology** and Two Day National Workshop on **Computer Vision and Deep Learning with Python Programming** on 20-21 December, 2019.

Dignitaries during the inauguration of the programme.

- **Sardar Vallabhbhai Patel Institute of Technology, Vasad** organised an expert talk titled **Teacher as Influencers : The Transforming Power of NLP (Neuro-Linguistic Programming)** on 28-12-2019 delivered by Ms. Esha Bhavin Shah, a certified NLP Practitioner.

Faculty of all departments attended the programme. Dr. S.D. Toriwal, Principal also presented in the session.

KARNATAKA

- **Vivekananda College of Engineering & Technology, Puttur** organised a talk on 20-11-2019 to the faculty members. sri Belvai Vinaya Kudva (USA) was the speaker for the programme and shared his life time experience as teacher amongst the members. Sri Radhakrishna Bhakta, Correspondent, VCET presided over the function.

Dignitaries on the dais during the pogramme.

- The chapter also organised one day session on **First Aid Management** by the Youth Red Cross Cell on 6-12-2019 to create an awareness on first aid requirements among the students.

Dignitaries on the dais during the pogramme.

> **Only sharp and well focussed photographs with ISTE Logo and Banner in the background shall be considered for publication.**
>
> **Editor**

NEWS FROM ISTE FACULTY AND STUDENT CHAPTERS

- **Sri Siddhartha Institute of Technology, Tumkur** organised technical talk on **Solid Modeling using CATIA V5 Software** on 25-10-2019. The speaker of the talk was Mr. Lohith, Product Design Engineering, Edu CADD discussed with students that CATIA provides the capability to visulaize designs in 3D.

Speaker Mr. Lohith, Product Design Engineer interacting with students.

MAHARASHTRA & GOA

- **Cummins College of Engineering for Women, Nagpur** organised two days Intercollegiate Tech Fest **TECTONIC 2020** on 17th & 18th January, 2020. Various technical events were organised for different branches. More than 10 different colleges and around 200 students participated in the competition. The workshop on **AI Shastra** was conducted by Dr. Pooja Jain, IIIT Nagpur and an expert talk on **Cybernetics** was delivered by Cyber Security Expert Mr. Mahesh Rakheja. Prize distribution was done by the hands of Chief Guest Dr. Adinath Kulkarni, Retd. Scientific Officer (H), BARC and Guest of Honour Dr. Rajashree Raut, ISTE Executive Council Member. Dr. Raut addressed the students focused on character building along with technical knowledge.

Dr. Rajashree Raut, ISTE Executive Council Member addressing the students during the programme.

Dignitaries on the dais during the prize distribution to the winners.

- **SIES Graduate School of Technology, Nerul** conducted AICTE-ISTE approved SF-STTP on **Antennas and RF Components Design, Fabrication and Testing** from 6th to 21st December, 2019.

Dignitaries and faculty during the programme.

TAMIL NADU

- **Nandha Engineering College, Erode** organised one day ISTE Industrial Seminar on **Total Quality Management and Industry 4.0** on 30-9-2019. The resource person for the seminar was Mr. B. Thennarasu, Senior Management, Ashok Leyland, Chennai. Thiru V. Shanmugan, Chairman, Sri Nandha Educational Trust presided over the function.

Dignitaries during the inauguration of the programme.

- **SRM Valliammai Engineering College, Kattankulathur** organised one day workshop on **Robotics - Learn The Bot** on 16-10-2019. The Presidential address given by the Vice Principal and interact with the school students and teachers.

Student participants during the workshop.

- **Kings College of Engineering, Puttukottai** organised seminar on **Planning Concept of Housing** on 2-1-2020 by Ms. K. Jeyashankari, Assistant Professor, Dept. of Civil Engg., A technical quiz comptition was also organised on 8-1-2020 in which students have actively participated in the competition. Another seminar on **Why Python is Familiar?** organised on 23-1-2020 by Mr. M. Arun, Assistant Professor, Dept. of CSE, KCE.

NEWS FROM ISTE SECTIONS

GUJARAT SECTION

- **24th ISTE State Annual Faculty Convention** and State Conference on **Current Engineering Education : Threats, Challenges & Opportunities** was conducted at SAL Education Campus, Ahmedabad on 27th December, 2019. The Chief Guest for the function was Dr. Navin Sheth, Hon. Vice Chancellor, GTU and Dr. Jigar Inamdar, Regional Director, ICCR, Govt. of India graced the function as Guest of Honour. Prof. K.M. Bhavsar, Chairman, ISTE Gujarat Section; Dr. Rajendra Shah, Chairman, SAL Education Campus; Dr. Rupesh Vasani, Campus Director; Prof. Bhasker Bhatt, Hon. Secretary and Prof. P.M. Raval, Principal was also present during the function.

Inauguration of Annual Faculty Convention by the dignitaries.

Distribution of certificates during the Veledictory Function.

ORISSA SECTION

- **22nd ISTE Odisha Section Faculty Convention** and National Seminar on **Recent Innovation and Challenges in Renewable Energy for Nation Building** was conducted on 7th & 8th December, 2019 at National Institute of Science & Technology, Berhampur. The Chief Guest for the function was Shri A.J. Janarthanan, CGM, IREL and Guest of Honour of the function was Prof. Bimal Krushna Mishra, Director, Tiki Engineering Pvt. Ltd., Bait Logitech Pvt. Ltd. Dr. S.M. Ali, Chairman, ISTE Orissa Section; Dr. Mihir Hota, Coordinator and Prof. Ajit Kumar Panda, Principal, NIST were also graced the occasion.

Reasing of Conventin Souvenir by the dignitaries on the dais.

Presentation of Award to the faculty members by the dignitaries.

KERALA SECTION

- **30th Annual State Faculty Convention of ISTE Kerala Section** was conducted at JDT Islam Polytechnic College, Calicut on 7th December, 2019. Hon. Minister for Higher Education Dr. K.T. Jaleel was the Chief Guest for the function and inauguraed the Convention.
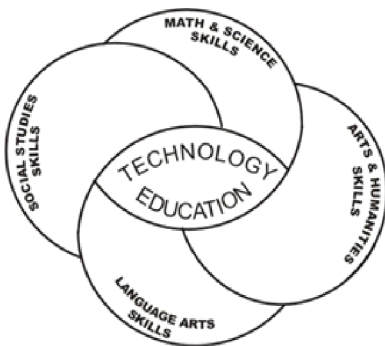

Hon'ble Dr. K.T. Jaleel , Minister for Higher Education delivering the inaugural address during the convention.

ENGINEERING EDUCATION IN INDIA - VISION 2035

The year 2035 marks 200 years of Macaulay's Minute on Education and TIFAC (an autonomous body under DST) has undertaken an exercise to create Technology Vision 2035 for the country. TV $_{2035}$ exercise gives us an opportunity to assess where are and would be, in terms of both education and technology. Earlier Technology Vision 2020 under the leadership of Dr A P J Abdul Kalam laid a road-map to make India a developed country by 2020.

The terms Human Resource Development (HRD), Human Resource Management (HRM) and Human Resource Planning (HRP) have originated during the past few decades and all these have almost the same objectives i.e. to plan form and exploit human capital for better socio – economic growth as such development of a nation. The concept of human capital refers to the abilities and skills of human resources of a country which needs qualitative improvement by rapid advances in technology. A new ministry was created under a suggestive name, Ministry of Human Resource Development, on 26th September, 1985, through 174th Amendment to the Government of India Rules 1961. Technical education plays an important role in human resource development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life.

1. Growth of Technical Education

Technical education in India has made significant contribution to the overall development of the country. Today the country has dipped into 21st country is faced with new challenges imposed by emerging technologies and liberalization of economic and industrial policies. With liberalization introduced in the early nineties, India entered the global industrial society and which was catalyzed in the new millennium. As of 2019, India has 49 central universities, 367 state universities, 130 deemed universities and 282 private universities.

The first engineering college was established in 1847 for the training of Civil Engineers at Roorkee, *Thomason College* (which later become IIT Roorkee). Growth of technical education depends on the need of the economy and the socio-economic and industrial base of a country. After independence India was faced with the challenges of rapid industrialization and it was necessary to set up new institutions to supply technical manpower. In 1947, there were only 38 engineering colleges with an intake of 2940 students. By 1980 the number of colleges increased up to 216 with intake of about 35000. These were mostly Govt. run colleges .Privately managed colleges came up to keep pace with the demand of technocrats. By 1990 total number of engineering colleges increased to 330 including 135 private colleges with student in take 62,000.By 2000 there were about 700 colleges with student intake of 1,70000. By 2007, there were1522 engineering colleges all over India with student intake of 5, 82,000. Presently the number of engineering colleges in India are nearly 3300 with students intake of 16, 34,596.

2. Technical Education and TQM

By virtue of the act of Parliament, technical education includes all kinds of engineering oriented fields of study, computer applications, architecture, town planning, pharmacy, management education and catering technology. The technical institutions should follow TQM (Total Quality Management) approach to sustain in the global competitive environment. TQM is an assurance in itself for high quality management being pursued in the organization .This deals with an effective and comprehensive management technique based on participation and having aim for long term success through customer satisfaction. Total Quality Management system Consists various steps like quality planning, quality training, quality control, quality assurance quality audit and quality improvement .An institute while trying to apply TQM must adhere to these prerequisites for successful accomplishment of the mission.
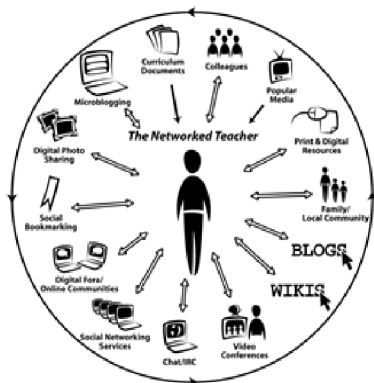
3. Approval & Accreditation

The new education policy of 1986 had recognized the need for a statutory body at the national level responsible for approval of technical institutions and overseeing the growth and quality of technical education in the country .Accordingly the All India Council for Technical Education (AICTE) was established by an act of the parliament in 1987. Approval of AICTE for new institutions for starting new programmes is based on credibility of Institutional Management with assurance of compliance to AICTE norms and prior approval by the state Government and University.

Accreditation means recognition and minimum quality assurance. National Board of Accreditation (NBA) was constituted by the All India Council for Technical Education as an autonomous body under section10 (u) of the AICTE act 1987 to periodically conduct evaluation of technical institution or programmes in the basis guidelines.

4. Industry –Institute Interaction

Confederation of Indian Industries (CII) has realized that a close and continued interaction between academic institutions and industries is vital for achieving excellence both in imparting education and training in engineering disciplines and in manufacturing technologies. Close industry – Institute Interaction will benefit both industry as well as institutions, with Govt. of India Insisting on generations of funds and continuously reducing the grant. Institutions have no choice but to go in for interaction with industries .Some countries of west have gained immensely from this interaction programme. In India major industries like TISCO, TELCO and L&T have also collaborated in a big way for training of their manpower in IITs and for carrying out R&D activities sponsored by them. Some of the relevant areas of Industry-institute interaction are sponsored research, consultancy, vocational training. Project work, industrial visits etc.

5. Faculty Accountability

Teaching faculty is the most important component of technical education system .The quality of education depends on the quality and performance of its faculty .This needs a right combinations of dedication and a sense of responsibility .Accountability in the form of strict adherence to-time, academic schedule ,course coverage ,regular knowledge updating etc. is essential feature of any well established institutions. The teachers should feel accountable to their intrinsic sense of commitment, responsibility and competence. Training and orientation to faculty is the most important requirement to expect and change in the system institution .Resource institutions like TTTI & NITTTR take steps to improve quality of technical education through training of teachers.

6. Research and Development:

The progress of R&D activities in Engineering and Technology has not kept pace with the ever-changing national and global requirements. 57% of college professors lack either a master's or PhD degree. The technical institutions should make best efforts to develop the infrastructure through various AICTE funded R&D schemes like MODROBS, TAPTEC etc. Research

Publication, Patents, Consultancy etc by the concerned faculty is the asset of any institute.

7. ISTE

The major objective of the Indian Society for Technical Education is to assist and contribute in the production and development of top quality professional engineers and technicians needed by the industries and other organizations. Under the dynamic leadership of President of ISTE Dr. Pratapsinh K Desai and supported by all EC members ISTE is marching ahead to fill the gap between quality and quantity in technical education.

8. Conclusion

Technical Education plays a vital role in human resource development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life of its people. It is required that all the technical institutions should take steps to redefine their quality policy to achieve excellence in academic and other activities to survive in the competition. **Human Resource Development (HRD) Minister Ramesh Pokhriyal highlighted the importance of quality education and the need to create as many vocational courses as possible in order to push the youth into the employment stream.** New innovations in the teaching learning methodology can help to establish technical institutions with a healthy environment. The planners of the technical education system and the managements of the private institutions must take stock of the entire scenario to upgrade the quality. There is a long road ahead to compete in the global market.

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HIGHLIGHTS OF PROCEEDINGS

A book on **'Highlights of the Proceedings : ISTE National and International Seminars (2016 - 2019)'** authored by Dr. S.V. Vaishnav (Honorary Fellow ISTE) was brought out by ISTE during the 49th ISTE National Annual Faculty Convention at SOA University, Bhubaneswar on 28th November, 2019. Copies of the book were distributed to the ISTE Executive Council Members .

This is the second book on the subject by the author. The first book of the proceedings (1999 -2014) was published in 2014 at Amaravati during the National Convention.

Those desirous a copy of the book, may kindly send their postal address to the e-mail id : **svvaishnav@hotmail.com.**

(copies are available free of cost on request)

INAUGURATION OF ISTE FACULTY & STUDENTS CHAPTER

ANDHRA PRADESH

- **KKR & KSR Institute of Technology and Sciences, Guntur** ISTE Faculty and Students Chapter were inaugurated on 21-01-2020 by Dr. G. Raghavendra, Assistant Professor, NIT, Warangal. He highlighted the various activites done by ISTE for the benefits of students and faculty members in the field of technical education. He further delivered a technical talk on the topic **Recent Advances in Composite Materials**. The membership cards were distributed to the student members. After the inaugural ceremony. Two days workhop was also conducted on the theme **Heat Transfer Problems using ANSYS Fluent**. The speaker of the programme was Er. G. Raja Mahendra, Simulation Engineer, YUCAn Technologies, Bangalore. These two days, the hands on training provided to the students to solve the one dimensional and two dimensional heat transfer problems using the ANSYS Fluent software.

Dignitaries on dais during the inauguration of ISTE Students Chapter.

inauguration of ISTE Faculty and Students Chapter by the dignitaries.

Workshop at a glance.

GUJARAT

- **GMB Polytechnic, Rajula** ISTE Faculty Chapter and Students Chapter was inaugurated on 10-1-2020. The District Collector and Superintendent of Police with District Education Officer inaugurated and unveiled the Chapter. A meeting was conducted with faculty members regarding ISTE activities. Prof. Bhasker V. Bhatt, Secretary-cum-Treasurer ensured of necessary support fo technical activities at GMB Polytechnic and he delivered an informative talk on **ICT in Education and Engineering Career** to the students on this occasion.

Dignitaries during the inauguration of ISTE Faculty and Students Chapter.

TAMIL NADU

- **Lakshmi Ammal Polytechnic College, K.R. Nagar, Kovilpatti** ISTE Faculty Chapter was inaugurated on 27-12-2019 by the Chief Guest Prof. (Dr.) D. Ravindran, Dept. of Mech.Engg., National Engineering College, K.R. Nagar and former Executive Council Member. Dr. D. Ravindran distributed the life membership certificates and ID cards to all the newly enrolled life members.

Dignitaries on the dais during the inauguration of ISTE Faculty Chapter.