



TECHNIQUE POLYTECHNIC INSTITUTE

Approved by AICTE & Affiliated to WBSCTVESD

(A 3 yrs. Diploma Engineering Institute)

Campus : Panchrokh, P.O.- Sugandhya, Dist : Hooghly, W.B. , Pin- 712 102

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Editorial

We are glad to bring out the departmental newsletter this year and privileged enough to write editorial column. This newsletter provides an insightful view of the departmental

academic and co-curricular activities along with global innovative scientific ideas. We feel proud for the outstanding performance of the first year students in council's examination. We sincerely thank our Chairman (Governing Body), Executive Director, Principal and Coordinator for their valuable advice that motivates us for this publication. We convey our heartiest thanks to our colleagues for their cooperation. We wish for the best achievements of this newsletter in coming days.

From the Desk of Coordinator

The pace of hiring in the information technology industry, one of India's largest job creators, is set to slow in the coming years. Industry body NASSCOM estimates the sector to create 30,000, or 13%, less jobs in fiscal 2016 compared with this year, as new technologies make many roles redundant and companies improve efficiency as clients demand more bang for the buck. And, this is expected to be the beginning of a trend. India's IT outsourcing companies traditionally billed clients on the basis of staff working on their projects, linking revenue directly to headcount. That is changing with the industry increasingly adopting automation to do repetitive and low-level jobs. The new focus is on niche areas such as artificial intelligence and cloud, and disciplines like Computer Science & Technology, Electronics, Mechatronics (technology combining electronics and mechanical engineering) will produce the skilled people which fulfil the latest demand of the companies and the job market. Others, especially fresh graduates, may find it tougher to find job. According to the NASSCOM Chief the companies are focusing on increasing utilization levels and reducing bench strength. They are also adopting automation in a big way and re-skilling their employees so as to increase the net productivity per employee. With rapidly changing technologies and demand for skilled workforce, around 5-10% of existing jobs could be automated in the next 10 years. While fresh hires might take a hit, there is demand for skills in domains such as robotics, artificial intelligence and social media, among others. On one end automation is leading to loss of jobs, India is also witnessing demand from offshore jobs due to emerging technologies such as biotech, nanotech, smart technologies, etc. India's market share in global market has been on a rising trend year on year, touching 56% currently. 60-70% of the current workforce will be need to be re-skilled in technology, domain, social and thinking. Domain specialization and greater need for soft skills have become the new patterns that all are witnessing throughout the sector. In this new world order, technology and automation have taken the centre stage, and companies are deploying them at a rapid pace to enhance productivity. This trend will bring in a sea change in talent restructuring and deployment, creating healthy competition and re-skilling opportunities. However, the students need not get disheartened. New players, start-ups and companies that create apps and work in areas like artificial intelligence, business analytics, Big Data and Internet of Things are likely to look for high-quality freshers. However, usual education or academics alone will not suffice; they need to add value with competency-based certification in these new areas of growth.

Climate change was one of the year's hottest stories, literally and politically. By early December, meteorologists had determined that the average global temperature in 2015 was already destined to be the highest on record, by a significant margin. The ongoing heat may have helped to produce the strongest El Niño the planet has experienced. Water temperature in the central Pacific was the highest ever measured in association with the atmospheric-ocean circulation pattern, which alters weather across North America in particular as well as other parts of the world. Although strong El Niño conditions can sometimes amplify precipitation in California—much needed for the state's ongoing drought—new research showed that the phenomenon does not necessarily enhance snowpack in the Sierra Nevada mountains, which the state relies on to

recharge groundwater each spring.

A warm Pacific Ocean also provided energy for the most powerful hurricane seen anywhere on earth. On October 23, as Hurricane Patricia approached Mexico's west coast, its peak winds topped 200 mph. That

Record Climate Change



NASA's award of a contract for the preliminary design of a "low boom" flight demonstration aircraft brings the return of supersonic passenger air travel is one step closer to reality. This is the first in a series of 'X-planes' in NASA's New Aviation Horizons initiative, NASA Administrator Charles Bolden said "NASA is working hard to make flight greener, safer and quieter – all while developing aircraft that travel faster, and building an aviation system that operates more efficiently,".



NASA to Build a Quieter Supersonic Passenger Jet

Namami Ganga projects for cleaning river Ganga launched

Union Government of India has launched various projects under Namami Gange programme for cleaning of river Ganga and its tributaries from Haridwar, Uttarakhand. It was launched by Union Water Resources Minister Uma Bharti. Besides, simultaneous projects were also launched at over 103 locations in seven states for cleaning of river Ganga and its tributaries from Gangotri to Howrah.

Long-Term Global Warming Needs External Drivers

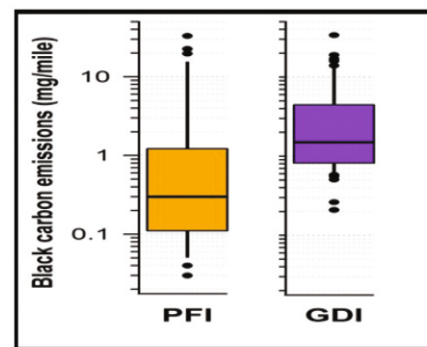
A study by scientists at NASA's Jet Propulsion Laboratory in Pasadena, California, and Duke University in Durham, North Carolina, shows, in detail, the reason why global temperatures remain stable in the long run unless they are pushed by outside forces, such as increased greenhouse gases due to human impacts.

Scientists have long known that as Earth warms, it is able to restore its temperature equilibrium through a phenomenon known as the Planck Response. The phenomenon is an overall increase in infrared energy that Earth emits as it warms. The response acts as a safety valve of sorts, allowing more of the accumulating heat to be released through the top of Earth's atmosphere



Could more fuel-efficient engines lead to more global warming?

Auto industry experts predict that more than 50 percent of cars on the road by 2020 will use a relatively new type of fuel-efficient engine. This transition, however, has raised questions about its ultimate effect on the climate. A study published in ACS' journal Environmental Science & Technology has found that because the newer engines emit higher levels of the climate-warming pollutant black carbon than traditional engines, their impact on the climate is uncertain.



Seminar and Workshop Details

Date	Topic of Discussion	Speaker
05.04.2016	GENERIC ISSUES OF SELF ANALYSIS	Prof. P. K. Bhattacharya, Unesco (Fellow) Former Director, NITTR, Govt. Of India, Kolkata Former Adviser, Govt. Of India , New Delhi Vice Chairman, IPHE Chennai-Poudicherry Regional Centre
18.04.2016	Application of Applied Chemistry – Green House Effect & Global Warming	Dr. Sudipta Modak Associate Professor, KPS

DETAILS of Paper Publication

Name of the Faculty	Topic	Name of Journal
Mr. Ayan Ghosh	Detection Of The Background Suppressed Compton Scattered Peaks For The 180° Reflected 511 Kev γ -Ray By The $\gamma\gamma$ Coincidence Technique	IJESM
Mr. Jeet Dutta	Study The Anomalous Behavior Of VLF Signal During Earthquake By D-Layer Preparation Time (DLPT) And D-Layer Destruction Time (DLDT) Method	IJSRC (Ijournals)
Mrs. Preetha Banerjee	A Study On The Importance Of Skill Education For Workforce In 21 st Century	IJSRD
Miss. Soumi Das	Human Resource Management In Technical Education: Status In India	IJSRD
Mr. Sanjib Mukherjee	Iodometric Method For The Determination Of Malonic Acid By Vanadium (V) In Perchloric Acid	IJSRC (Ijournals)
Mr. Suranjan Dhar	Applications Of Fuzzy Logic Approach In Image Segmentation	IJDR
	A Comparative Study On Population Explosion In India With Respect To Global Scenario	IJSRC (Ijournals)

Students' Achievements

"Srinivasa Ramanujan Mathematics Competition 2015-16"
organised by "Indian Society for Technical Education"



RESULTS of 2nd Sem : 2014-15

Stream	Name of the Student	% of Marks
DCE	SHANU SHAW	91.4
DSE	RITWIK MANDAL	86.5
DME	SOURAV DHARA	91.9
DEE	MANIK SAHA	92.2
DETCE	SANGITA MOITRA	83.9
DCST	MITHU LAHA	84.8
OVERALL TOPPER OF THE SEMESTER : MANIK SAHA (DEE)		

RESULTS of 1st Sem : 2015-16

Stream	Name of the Student	% of Marks
DCE	SOURAV KHANRA	82
DSE	SUROJIT MODAK	76.4
DME	SHAYAN KUMAR	86.5
DEE	DIBAKAR PATRO	82.9
DETCE	DEBKANTA DAS	80.5
DCST	NAGMA PARWEEN	77.4
OVERALL TOPPER OF THE SEMESTER : SHAYAN KUMAR (DME)		

NOBEL PRIZE WINNERS 2015

SUBJECT	NAME	CONTRIBUTION
Physics	Takaaki Kajita and Arthur B. McDonald	For the discovery of neutrino oscillations, which shows that neutrinos have mass
Chemistry	Tomas Lindahl, Paul Modrich and Aziz Sancar	For mechanistic studies of DNA repair
Physiology or Medicine	William C. Campbell and Satoshi Ōmura	For their discoveries concerning a novel therapy against infections caused by roundworm parasites
	Youyou Yu	For her discoveries concerning a novel therapy against Malaria
Literature	Svetlana Alexievich	For her polyphonic writings, a monument to suffering and courage in our time
Peace	National Dialogue Quartet	For its decisive contribution to the building of a pluralistic democracy in Tunisia in the wake of the Jasmine Revolution of 2011
Economic Sciences	Angus Deaton	For his analysis of consumption, poverty, and welfare