



**GANDHI INSTITUTE
FOR EDUCATION & TECHNOLOGY**
BANIATANGI, BHUBANESWAR, KHURDA



Campus Focus

A Quarterly News Letter
Volume - 6, Issue - III, Aug. 2016

From The Editor's Desk

The third issue of the Campus Focus (May-July of Volume : 6) comes with vibrant activities in academics from our students as well as teachers - writing on different issues of Science, Engineering and Socio-behavioral concerns. Readers would certainly find them interesting and educative.

The issue also includes information on our students and faculty attending International/National Seminars/workshops. We congratulate each one of them!

Our faculty has also published research articles in various National/International journals. We congratulate each one of them in their qualitative endeavor.

Quite a number of new faces, both teaching and non teaching are inducted to serve GIET on its onward journey. Friends ! we expect a lot from each of You. We congratulate each one of you.

The new academic session has begun. Odd Semester classes are in full swing. Our students and faculty are going good. When Life is throbbing with energy and activity in the Institute, One visualizes nothing but success everywhere. From here on, we need to move ahead. Long term perspective

is the single most accurate predictor of upward mobility. Successful people make sacrifices in the present and work hard that pays off only years later. They look beyond the obvious. They are guided by their intellect. They are steady and focused. In fact, they are visionaries. Thus, the primary step to success is to develop intellect.

All leaders had vision. M.K.Gandhi worked for truth and justice. Nelson Mandela dreamt of South Africa without apartheid. Martin Luther King fought for equal rights for blacks.

Dear Readers! What is your guiding force? Develop your long term vision .What do you want most in the next twenty-fourty years? How do you want to spend your life? How do you want to establish yourself? Your goal should be collective, not individual. You should dream big. Work for world welfare. Remove obstacles .Be open to suggestions. Selfishness restricts you . Rise above such limitations. Expand your mind. The default setting in the mind should change from "Me First "to "After You." Be compassionate to others. Wonder at the marvels of Nature.



Who or what divine force created this wonderful universe? a place where You are securely posted. Self control is very important. Think afresh, think differently. Keep your mind open. Go to the basics. Question, Enquire and Reflect. Most importantly look within. Dear Readers! Real long term vision comes only when you understand everything. And success comes to a visionary only. So work hard to be successful.

Friends! Campus Focus of the Institute records activities of its students and all other members. So I request all of you to work hard and exhibit your potential. We would certainly record / report them. This much is for today. Thank You.

S. N. Pathi
snpathi@gietbbsr.com

Contents

- Publications
- Awards & Recognitions
- Farewell Ceremony : Pass Out students
- Summer Training
- Special Coaching for GATE
- Pre-Placement Training Programme
- Placement : B.Tech & Diploma
- Article by Staff & Students
 - Application Multi Objective... - Dr. A.K. Mishra
 - Virtual Machines... - Dr. S.K. Mishra
 - Cryogenic Treatment - Mr. S.N. Sahu
 - Landfills : An Issue - Ms. L. Upadhyaya
 - Carbon Nanotube... - Mr. S.K. Panda
 - Digital India - Mr. Nishant Kousar
 - Demand-Side Management - Ms. S. Sahoo
 - Solar Power Shines - Mr. S.K. Parida
 - Students and Community Service - Ms. S. Mohapatra
 - Welcome Conflict - Dr. M.P. Sahoo
 - Response - Ms. S. Tripathy
 - Wake up - Ms. Jagruti Naik
- Poems :
 - Searching My Way -Mr. Ansuman Dash
- Faculty Development Programme (FDP)
- Innovation : Family Robot - Pharmacist
- New faces
- Health Tips
- Jokes
- Study Tips

Words from successful people

To be a good professional engineer, always start to study late for exams because it teaches you how to manage time and tackle emergencies. - Bill Gates

Meeting the deadline is not good Enough, Beating the deadline is my Expectation. - Dhirubhai Ambani

PUBLICATIONS :



Dr. M.P. Sahoo

1. Sahoo M P, Kalyni Muna, "Socio-Psychological Correlations with Tribal Entrepreneurships in the SC & ST Community Development of Mayurbhanj and Rayagada district of Orissa (India)", International Journal of Application or Innovation in Engineering & Management (IJAIEM), ISSN: 2319-4847 , Vol. 3, (p-193-203), Issue. 1, January 2014
2. Sahoo M P, Kalyni Muna, "Socio-Economic Development and Use of Productive Potential of SC People on the Changing Business Scenario of Mayurbhanj and Rayagada District of Odisha (India)- An Empirical Analysis", International Journal of Application or Innovation in Engineering & Management (IJAIEM), ISSN: 2319-4847, Vol. 3, (p-315-333), Issue. 1, January 2014
3. Sahoo M P,"Socio-Economic Development and Use of Productive Potential of ST People on the Changing Business Scenario of Mayurbhanj and Rayagada District of Odisha (India)- An Empirical Analysis", International Journal of Managerial Studies and Research (IJMSR), ISSN 2349-0330 (Print) & ISSN 2349-0349 (Online) Vol.3 (pp-96-112), Issue 5, May 2015



Mr. Suresh Ku. Sahu

IEEE sponsored three days national workshop under TEQIP phase-II. "Approach for Research in Power Electronics, Power and Control Systems Engineering" in the College of Engineering (AUCE(AU) from 28th to 30th June 2016.



Mr. Deepak Kumar Mhapatro

Er. Deepak Kumar Mhapatro of department of EEE had attended international training programme at Paris France on 6th June 2016 organized by the International Energy Agency (IEA).



Dr. Sambit Mishra

"Case Study and Analysis of Complex Queries of Cloud Database Using Firefly Algorithm"

Authors :

1. Mohanty Anita, Department of MCA, ABIT, Cuttack (Ph.D. Scholar of Dr.Sambit Kumar Mishra)
2. Prasad Suman Sourav , Department of MCA, ABIT, Cuttack (Ph.D. Scholar of Dr. Sambit Kumar Mishra)
3. Mishra Sambit Kumar, Department of Computer Sc.& Engg., G.I.E.T ,Baniatangi

Journal Name : JECET, Published : June 2016 (Vol-5, Issue-3)



Mr. Shiba Narayan Sahu

'Metallurgical Approach towards Explaining Optimized EDM Process Parameters for Better Surface Integrity of AISI D2 Tool Steel', Transactions of the Indian Institute of Metals, Springer India, pp: 1-9. (2016)



Dr. Anil Kumar Mishra

"PSO based swarm intelligence technique for Multi-Objective classification rule mining" Vol-137 No.2, March 2016, International Journal of Computer Applications(IJCA).Indexing- EBSCO,PROQUEST, UNIVERSITY OF WASHINGTON

AWARDS & RECOGNITIONS FOR EXCELLENCY



Gandhi Institute for Education and Technology Baniatangi, Bhubaneswar has acquired 15th position for its excellent Industry exposure amongst its students.



Gandhi Institute for Education and Technology Baniatangi, Bhubaneswar has been recognized for its grand interface with industry by the students.

Farewell Ceremony for the pass out students

To give an unforgettable feeling of leaving an institution after four years of study, different departments of GIET have organized farewell functions for their respective departing 4th year students during 1st week of May in the college auditorium. All the final year students and faculty members were present on the auspicious moment making it stunning and remembered. After a formal meeting, each of them were given an opportunity to share the feelings during the four years of being with GIET in relation to their all round development,



academics, extracurricular activities or more importantly getting placed in good companies. The moment was very touching and nostalgic for both the students and the institute at large. Towards the closer, they were presented with mementos by the college. The Vice-chairman, the Director, the Principal and the Faculty members wished the outgoing students great career ahead in both personal and professional life. There was a bond established between the institute and the students of getting united all through the path coming ahead.

Summer Training

The students of all branches have availed nice opportunities of being trained by the reputed industries like HAL, NALCO, SAIL, VISA STEEL, PARADEEP PORT, BHEL, OPGC, CRS East Coast Railway, VEDANTA, OPTCL, NINL, NTPC, IFFCO and many more during summer vacation. They were trained on various practical aspects of each industry as far as their functioning and other details of mechanism concerned. This training will definitely help the students in getting started with their professional carrier and will add values to their skills over a long period.

Special Coaching for GATE

On the initiative of Prof. J.P. Mishra, Vice Chairman, the Institute has started special coaching classes for Graduate Aptitude Test in Engineering (GATE). The students are quite enthusiastic and have joined the programme in large numbers.

[Note : GATE is an all India Examination that primarily tests a comprehensive understanding of various undergraduate subjects in Engineering and Technology. The examination is conducted jointly by the Indian Institute of Science and Seven IITs (Mumbai, Delhi, Gawahati, Kanpur, Khargpur, Chennai & Rookee) on behalf of the National Coordination Board - GATE, Dept. of Higher Education, MHRD, Govt. of India. It helps in admission to Post graduate Courses & getting jobs in some public sector undertaking. The score of GATE is valid for three years.]

Pre-Placement Training Program

at GIET, Baniatangi, Bhubaneswar

A two days "Pre-Placement training Program" was held at "Gandhi Institute for education & Technology" (GIET), Baniatangi, BBSR by the department of CIVIL engg. in association with Ultratech Cement on 18th & 19th of July 2016. The regional head (Tech.) of Ultratech Cement Sri Saktipada Santra was present on the occasion as chief guest and delivered a talk on Cement and Concrete. He clarified the doubts of young civil engg. Students regarding the concrete structure. Er. Shyamsundar Mishra of Ultratech cement was the chief speaker on the occasion and he gave the tricks for getting the placement in good companies.



The Vice-Chairman Prof. J.P. Mishra, Director Prof. B. Pradhan, Principal Prof. N. Sutar and HOD, CIVIL Prof. B.K. Panigrahi were present on the said program and highlighted the present scenario of Civil Engg. All the Professors of civil Engg. Dept. and students are present on the occasion and made the programme a grand success.

Placement of Diploma and B.tech students

GIET Baniatangi Kurdha has a record placement of its students of the 2012-2016 batches. They are of the Diploma and of the B.Tech Programme and the records of placement by the month of July 2016 is as follows. For details of the company in which our students are placed could be seen in the Web Site: www.gietbbsr.com.

Students placed from B.Tech programme:

BRANCHES STUDENTS PLACED	CIVIL	CSE	ECE	EEE	MECH	AUTO
	106	38	39	93	112	17

Students placed from Diploma programme:

BRANCHES STUDENTS PLACED	CIVIL	MECH
	13	40

Article by Staff and Student

Application of Multi-Objective Artificial Bee Colony Optimization for CBIR System



Dr. Anil Kumar Mishra
Associate Professor : CSE

Content-based image retrieval is a method which expenditures visual contents to search images from bulky scale image databases according to users interests, it is also known as query by image content. Since 1900s Content-based image retrieval has been an active and fast advancing research area. CBIR comes to picture when many applications with large image database, traditional methods of image indexing have recognized to be unsatisfactory. Finger print scanning system, Automatic face recognition system, Medical image database, Trademark image registration are the application of Content-based image retrieval (CBIR). The process of CBIR consists of three stages namely Image acquisition, Feature Extraction and Similarity Matching. In CBIR first query image undergoes the three stages as mentioned above. The query image is then compared with the images in the image database. All the images in the database undergo feature extraction so that the resultant feature vector can be compared with the feature vector of the query image. The closest image in comparison with the query image from the feature database is return.

Multi-objective optimization has been a challenging area and focus for research. This article presents an optimization algorithm based on artificial bee colony (ABC) to deal with multi-objective optimization problems in CBIR. We have introduced a multi-object ABC algorithm which is based on the intelligent scavenging behavior for content base images. It uses less control parameters, and it can be efficiently used for solving multi object optimization problems. In the current work, MOABC for discrete variables has been developed and implemented successfully for the multi-objective design optimization of composites. The performance is estimated in comparison with other nature-inspired techniques, which includes Multi-objective Particle Swarm Optimization (MOPSO) and Multi-objective Genetic Algorithm (MOGA). The performance of MOABC is better as par with that of MOPSO, MOGA and ABC for all the loading con?gurations.

Virtual Machines and strategies

It is understood that the virtualized data centre model sometimes may be considered with multiple cloud users. The cloud environment usually consists of a number of hosts as well as nodes present physically. The Physical Machines used as hosts sometimes may be homogeneous. The capacity of every individual physical machine sometimes may also be identical.

Usually a data centre consists of a control manager and several local managers local to each physical host. The control manager may be responsible for deciding a request generated by the virtual machine and similarly the cloud manager may be present in the controller and with data collected from the local managers. Each of the physical hosts consists of a local manager responsible for continual monitoring



Dr. Sambit Kumar Mishra
Professor : CSE

of all the Virtual Machines on the host and handling resource allocation to the virtual machine.

Each terminal per location may be defined by the CPU performance, amount of RAM available as well as the network bandwidth. The resource management system may not be aware of the type of the applications it is managing. Various cloud service users independently submit their requests of handling a number of heterogeneous virtual machines. The Virtual Machines may have constantly changing demands of resources. To

provide fast cloud services, it depends on the utilization of resources that are utilized in the data centre. Virtual machines to the most suitable Physical Machine usually based on the requirement of virtual machine characteristics. A Virtual Machine placement problem is typically a combinatorial optimization problem and NP-hard. There are several approaches to this problem to achieve near optimal solution.

Cryogenic treatment of Cutting Tool



Mr. Shiba Narayan Sahu
Assistant Professor : ME

The thermal treatment to improve mechanical properties of metal components is a trend that is being followed until today. But, the first attempts to perform subzero treatments were investigated at the beginning of the 20th century. Cryogenic treatment also known as cold or sub-zero use extreme cold to strengthen metals. It is a supplementary process to conventional heat treatment, involves deep freezing of materials at cryogenic temperatures (-190 °C) to enhance the mechanical and physical properties. In general, unlike surface treatments, the cryogenic treatments influence the core properties of the materials. Some of the benefits of cryogenic treatment include longer part life, less failure due to cracking, improved thermal properties, better electrical conductivity, reduced coefficient of friction, less creep and walk, improved flatness, and easier machining.

Enhancing the performance of cutting tools is an important factor in reducing production costs. Cutting tools are subjected to processes such as heat treatment and coating in order to improve their performance. The concept of cryo-treatment (CT) when applied to tool produced interesting results. Tools treated cryogenically showed better performance than thermal treated and Non CT tool and this was due to some significant micro-structural changes in CT tools.

Figure 1. Liquid nitrogen used in cryogenic treatment of cutting tool

Bryson (1999) attributes the improved wear resistance, and hence the increase in tool life of cryogenic treated carbide tools to the improvement in the holding strength of the binder after cryogenic treatment. Seah et al. (2003) reported that, cryogenic treatment improved the wear resistance and overall tool lives of tungsten carbide tool inserts in turning. Thakur et al. (2008) showed that, controlled cryogenic treatment improved the wear resistance, is due to the densification of the cobalt metal binder which holds the carbide particles firmly and uniform distribution of tungsten carbide particles. Ramji et al. (2010) concluded that, cryogenic treatment can enable significant improvement in both productivity and product quality and hence overall machining economy, offsetting the cost of cryogenic cooling due less flank wear and



improved surface finish of CT inserts. Kalsi et al. (2010) reviewed that, Cryogenic treatment (CT) of materials has shown significant improvement in their properties, like increase in wear resistance, reduced residual stresses, increase in hardness, fatigue resistance, toughness imparted by transformation of retained austenite to martensite, precipitation of carbides, eta-carbide formation, perfect distributed/homogenous crystal structure, better thermal conductivity, and reduced chemical degradation. The mode of application of cryogenic treatment and the type of cutting tool both affect tool performance. Therefore, it is necessary to examine the way cryogenic treatment is applied to cutting tools and its effects on their performance.

References:

- B.R. Ramji, et al, "Analysis of Roughness and Flank Wear in Turning Gray Cast Iron Using Cryogenically Treated Cutting Tools", *Research Journal of Applied Sciences, Engineering and Technology* 2(5): 414-417, 2010.
- K.H.W. Seah, M. Rahman, K.H. Yong, "Performance evaluation of cryogenically treated tungsten carbide cutting tool inserts", *Proc Inst Mech Eng, Part B: J Eng Manuf* 2003; 217:2943.
- Bryson W E 1999 *Cryogenics* (Ohio: USA Hanser Gardner Publications), 81.
- Thakur D, Ramamoorthy B and Vijayaraghavan L 2008 *Mater. Lett.*, 62, 4403.
- Kalsi N S, Sehgal R and Sharma V S 2010 *Mater. Manuf. Process*, 25, 1077.

LANDFILLS: AN ISSUE



Ms. Lopamudra Upadhyaya
Asst. Professor : CE

Waste is a by-product of human activity. Landfills means a land filled with solid wastes. Solid waste is transported to the location in trucks, trains, ships or conveyor belts. In some cases, the waste is mixed with water and transported through pipelines in the form of slurry. Landfill causes environmental problems such as ground water contamination, surface water contamination, local air contamination, etc.

The harmful impact of a waste dump on the atmosphere can be minimized by containing the waste, that is, by isolating it from environment. The liner at base and cover on the top together prevent the escape of leachate, dust, gases, etc. Methane and carbon dioxide are generated from these wastes. Drainage pathways are provided to collect these leachate and gases. These pathways regulate the expulsion of liquids and gases and enable to collect and send them for treatment. These waste containment can not be ensured forever, it is

designed for a specific design life of 50 to 100 years. By the end of the design life of the landfill, all components of the landfill would have deteriorated. At this stage, the landfill can be abandoned. If this does not occur, it may become necessary to continue post-closure care.

Landfilling is a low-cost option, but disposal of solid waste in landfills is not a sustainable solution. With time, sites for waste disposal will become scarce. The long-term solution lies in minimization of waste produced.

Carbon Nanotube Finding Could Lead to Flexible Electronics with Longer Battery Life

University of Wisconsin-Madison materials engineers have made a significant leap toward creating higher-performance electronics with improved battery life and the ability to flex and stretch.

Led by materials science Assoc. Prof. Michael Arnold and Prof. Padma Gopalan, the team has reported the highest-performing carbon nanotube transistors ever demonstrated. In addition to paving the way for improved consumer electronics, this technology could also have specific uses in industrial and military applications.

In a paper published recently in ACS Nano, Arnold, Gopalan and their students reported transistors with an on-off ratio that's 1,000 times better and a conductance that's 100 times better than previous state-of-the-art carbon nanotube transistors.

“Carbon nanotubes are very strong and very flexible, so they could also be used to make flexible displays and electronics



that can stretch and bend, allowing you to integrate electronics into new places like clothing,” says Arnold. “The advance enables new types of electronics that aren't possible with the more brittle



Mr. Subrat Kumar Panda
Professor : ECE

materials manufacturers are currently using.”

Carbon nanotubes are single atomic sheets of carbon rolled up into a tube. As some of the best electrical conductors ever discovered, carbon nanotubes have long been recognized as a promising material for next-generation transistors, which are semiconductor devices that can act like an on-off switch for current or amplify current. This forms the foundation of an electronic device. However, researchers have struggled to isolate purely semiconducting carbon nanotubes, which are crucial, because metallic nanotube impurities act like copper wires and “short” the device. Researchers have also struggled to control the placement and alignment of nanotubes. Until now, these two challenges have limited the development of high-performance carbon nanotube transistors. Building on more than two decades of carbon nanotube research in the field, the UW-Madison team drew on cutting-edge technologies that use polymers to selectively sort out the semiconducting nanotubes, achieving a solution of ultra-high-purity semiconducting carbon nanotubes.

Previous techniques to align the nanotubes resulted in less-than-desirable packing density, or how close the nanotubes are to one another when they are assembled in a film. However, the UW-Madison researchers pioneered a new technique, called floating evaporative self-assembly, or FESA, which they described earlier in 2014 in *Langmuir*. In that technique, researchers exploited a self-assembly phenomenon triggered by rapidly evaporating a carbon nanotube solution. The team's most recent advance also brings the field closer to realizing carbon nanotube transistors as a feasible

replacement for silicon transistors in computer chips and in high-frequency communication devices, which are rapidly approaching their physical scaling and performance limits.

"This is not an incremental improvement in performance," Arnold says. "With these results, we've really made a leap in carbon nanotube transistors. Our carbon nanotube transistors are an order of magnitude better in conductance than the best thin film transistor technologies currently being used commercially while still switching on and off like a transistor is supposed to function."

Digital India

Digital India campaign is run by the government of India to make our country a digitally empowered country. The aim of launching this campaign is to provide Indian citizens electronic government services by reducing the paper work. It is very efficient technique which will save time and manpower to a great extent. This initiative was started on 1st July in 2015 to connect people of rural areas with high speed internet network to access any information needed. Three important elements of digital India are creation of digital infrastructure, digital literacy and delivering services all over the country. This project has been aimed to be completed by 2019. It is a programme which will benefit both service providers and consumers. There is an arrangement of digital India discovery group (chaired by ministry of communication and IT) in order to monitor and control this programme.



Mr. Nishant Kousar
Diploma 1st year

Demand-Side Management

Conventionally there are four types of resources of electrical energy- hydro, thermal, nuclear and renewable. Another source is now a day added to these four, which is DSM. The demand-side management (DSM) refers to conducting the load management activities by taking effective measures to promote the users to use power energy in a scientific and rational way, save energy, improve energy efficiency, optimize resources and protect the environment to achieve the electrical services at the lowest cost. The position of DSM in the modern power industry is very important, and its main goal is to reduce the load demand and decrease power consumption and at the same time to improve the load characteristics which can be seen in a the load curve. By transferring some of the load in those time periods, much more load demand can be saved. And that saved amount power is seen as a potential virtual power plant. The DSM has three functions: (1) Reduce the peak load, therefore reducing the demand for the installed capacity (2) Save energy (3) Peak electricity will be transferred to the off-peak periods.

DSM have been successfully implemented in more than 30 countries and regions including the United States, France, Germany, Korea, Canada and so on, saving the investment in grid construction, improving the economy and reliability of power system, bridling

the increase of electricity bill, reducing the expenditure on the electricity bill for the user, saving energy resources and improving environment quality. Since the 1990s with the changes in energy market, IEA's missions have changed to the "3E" principle, namely Energy Security, Economic Development and Environmental Protection. And DSM is its new child.

Demand-Side Management (DSM) refers to leading power users to scientifically and rationally use power and save power by taking effective measures to improve power energy utilization efficiency, optimize resource allocation, protect environment, and accomplish power consumption management activities carried out with power service at the lowest cost. DSM is a kind of important energy conservation and emission reduction path, which mainly includes Energy Efficiency Management (EEM), Load Management (LM), and Orderly Power Utilization (OPU). It aims at accomplishing energy conservation and environmental protection and promoting sustainable economic and social development through effective utilization of power energy. To



Ms. Smitarani Sahoo
Assistant Professor : EE

accomplish its target, it is required to design corresponding incentive mechanism and policy for consumers and they need to be persuaded and well educated about the current energy scenario. Mechanism design is the core of DSM. A good mechanism can arouse the enthusiasm of every participant, actively exploit energy conservation

potential, improve energy efficiency and accomplish scientific power consumption. Under the precondition of establishing a scientific and effective mechanism and with corresponding supporting incentive means, the DSM work can be successfully developed in INDIA. This will bridge the huge gap between generation and consumption.

SOLAR POWER SHINES !

The Earth receives an incredible supply of solar energy. The sun, an average star, is a fusion reactor that has been burning over 4 billion years. It provides enough energy in one minute to supply the world's energy needs for one year. In fact, the amount of solar radiation striking the earth over a three-day period is equivalent to the energy stored in all fossil energy sources. Solar energy which is a combination of light and heat is produced by sun. Solar energy is a free, inexhaustible resource.

A solar cell or photovoltaic cell is an electrical device that converts the energy of light directly into electricity by the photovoltaic effect, which is a physical and chemical phenomenon. The first solar cell was constructed by Charles Fritts in the 1880s. In 1931, the German engineer Bruno Lange developed a photo cell using silver selenide in place of copper oxide, although the prototype selenium cells converted less than 1% of incident light into electricity. India's first 5 MW of installed capacity solar power project was registered under the Clean Development Mechanism in Sivagangai Village, Sivaganga district, Tamil Nadu in the year 2011. Solar cells are used due to its low maintenance and long lasting sources of energy. It provides cost-effective power supplies for people remote from the main electricity grid. It is non-polluting and silent source of electricity. Solar cells are convenient and flexible source of small amounts of power.

It is a form of photoelectric cell defined as a device whose electrical characteristics such as current, voltage, or resistance varies when exposed to light. The operation of a photovoltaic (PV) cell requires 3 basic attributes:

- ? The absorption of light, generating either electron-hole pairs or exactions.
- ? The separation of charge carriers of opposite types.
- ? The separate extraction of those carriers to an external circuit.



Mr. Sanjaya Kumar Parida
Assistant Professor : BSH

It is especially unique because no large-scale installation is required. Remote areas can easily produce their own supply of electricity by constructing as small or as large of a system as needed. Solar power generators are simply distributed to homes, schools, or businesses where their assembly requires no extra development or land area and their function is safe and quiet. As communities grow, more solar energy capacity can be added. Solar cells are used in toys, watches, calculator, and water pumping and so on.

Do you know?

The average homeowner saves over 1000 dollar a year on electricity by installing solar panels on their roof. That's including the cost of solar panels. The most common way to go solar today is by leasing which essentially means instead of paying the utility you pay less to produce your own energy.

Recent News in India

- ? The Indian Government significantly targeting 100 billion US dollar of investment and 100 GW of solar capacity by 2022.
- ? The West Bengal state government is planning to set up rooftop grid connected Solar PV power plants in 1000 schools.
- ? Cochin International airport becomes the first airport in the world that completely operates on solar power. It is a 12 MW solar power plant and is producing 50000 to 60000 units of electricity per day.
- ? The Chinnaswamy cricket stadium in Bengaluru has become the first cricket venue in the country to have a rooftop solar power plant. The plant is designed to generate 5.90 lakh units per year which is equivalent to powering 200 AEH (All Electric Homes) households.

STUDENTS AND COMMUNITY SERVICE



Ms. Snigdha M. Mohapatra

Assistant Professor : CSE

Man is a social being. Man lives in a society, depending on team work and mutual cooperation. This cooperation lends a hand to him to tide over the adversity that overtake him off and on.

So, Every man must consider his responsibility to stand by his fellow men in their misery and learn to serve and help when he is occupied in his studies. So, a student life is the most suitable time for social work.

Students individually or in a group can assist ease the sufferings of the underprivileged and impoverished. Then the question arises that what and how our young students can contribute to society? The following are some of the ways to do the job.

1. Donating clothes: Every single one of us likes to shop every now and then, but do we even keep track on where our old clothes go? Sometimes in a dustbin, or sometimes used as a napkin, or as mopping cloth. So, why not donate one cloth to a poor kid every time we buy a new one. We can simply do it too. It takes less effort and time also.

2. Role-playing and awareness campaigns: The students may have a role to play in awakening public opinion against social evils like casteism, dowry system, drug addiction etc by different awareness programmes like. Donating Blood and helping the distressed.

3. Starting free tuition: Knowledge multiplies when it is shared. In our spare time we can teach at

least one poor child. Teaching a middle school kid is not a big job for us, but it is a huge task for his construction worker parents. Think over it!

4. Sing for them: If you are a music lover and you are fed up of the less encouraging remarks from your comrades, find new listeners. You can go to a slum and single out some random children and play for them. You will get at least one interested kid whom you can guide. Who knows, you might get a full rock band out of them.

5. Visiting orphanage and old age homes: Who is more unfortunate than a child without parents and a parent without their children? You can visit these places on Sundays and holidays to spend time and share some casual moments with them. This will not only make the needy feel happy but also it will inculcate the sense of responsibility towards parents within you.

We have the energy, we have the will, but we do not know how to channelize it for developing a better nation. So, if we follow these points we can contribute to the society and feel the happiness within. Let us come together and do something for our society. "It is not only for what we do that we are held responsible, but also for what we do not do. Moliere"

WELCOME CONFLICT



Dr. Mahima Prakashan Sahoo

Professor : BSH

One day evening, I was playing with my kid. My kid asked me, "Papa! Why are you late today"? My answer was very simple that, "I had certain important work". Suddenly she reminds me regarding the discussion with her in early morning for giving her the MMR vaccine. My answer was "Sorry". Next day early morning, I have to reach office by 8 AM for continuing my incomplete job, which must be cleared by 1 PM. Suddenly next day I was assigned with some different types of jobs which required a time bound execution. I would like to share with you, that my job has a direct relation to my personal factors (individual behavioural factors). To be specific, my family background does not permit me to discontinue such a fire fighting job which also very difficult to adjust with my fundamental psychological factors. With such perennial problems, one day in my fine journey, suddenly I put a glimpse on my busy schedule.

I felt, "I am in stress which arises out of conflict & reflects in form of frustration". This type of behavior is aimed at protecting one self from failure, damage to the ego or loss of self-respect. Frustration may erupt in several awkward forms like aggression, rationalization, fixation, regression & lastly resignation.

I applied my gained knowledge from academics to resolve the situation. I personally feel, building an improved positive perception and some techniques of conflict resolution, may be resulted in sorting out the situation to bring balance.

In connection to this I would like to hint the readers about the realistic approach of conflict. **Normally conflict is not an abnormality rather it is a normal aspect of social intercourse. It is a fact of life**

which must be understood rather than fought. It is an inherent structural component in all social relations & very much inevitable, some times also desirable. Conflict is neither bad nor good for organizations. Perfect organization health is not free from conflict. It is an integral part to the nature of change of organization.

Also I want to emphasize on understanding the level of conflict for resolving it. They are specified as:

- 1) Individual level of conflict; subdivided as
 - a) Intra-individual conflict
 - b) Inter-individual conflict
- 2) Group level conflict; subdivided as
 - a) Intra-group conflict
 - b) Inter-group conflict
- 3) Organizational level of conflict; subdivided as
 - a) Intra-organizational conflict
 - b) Inter-organizational conflict

In this article my focus is to solve the intra-individual conflict & up to certain extent of inter-individual conflict. In the starting of the solution I want to put the example of "Bighneswar" (The Lord Ganesh). He is the god of solving "Bighna", that is "The conflict". I understand only one big think from his physical structure. His big ear justifies & suggests us to listen more & the small mouth with a covered trunk emphasizes on talking less. But to the deviation we perform the reverse. I swear, if we could practice this small ideology, more than 60% of our intra-level conflict will be resolved with immediate effect.

We should also understand the reality of Social Transaction (TA), Human Ego States in more detail to resolve conflict in a stable manner. I want to present another framework of understanding of all aspects of everybody's personality that is the so-called Johari Window System. Normally all human being fall in these four quadrants of self understanding. The below continuum (figure) indicates clearly:

Any person clearly knows about him/herself also about others. Open Self	Any person knows about him/herself but ignorant about others. Hidden Self
Any person unknown about him/herself but knows about others. Blind Self	Any person neither understand him / herself nor about others. Undiscovered Self

This system helps us in communicating with others. It is to everybody's surprise that, "if a proper positive communication could be established, conflict would not be aroused at all".

Positive Stroking has also very high impact on resolving intra & inter-individual level of conflict. Stroking refers to recognition of one's presence by others.

I want to present; human **Life Position**, an effective thought system to resolve the above conflict. Life Positions combined with two very important view of human life. Those are first, how people view themselves & second, how they view other people in general. The thought process of "**I am OK & you are OK**"; solved all sorts of conflict in general.

Last but not the least suggestion I will put forth to solve the conflict in a way that will benefit both the parties. Parties must be open, honest in sharing of information. They should be seen as mutual problem solver & pursue joint outcomes. **Flexibility is the ornamental for conflict resolution.** The best ways of resolving intra-individual conflict are to develop compatibility between organization goals & one's personal goals & to cultivate **Sattwic Guna**. Sattwic is to maintain purity, serenity, poise, calmness, discrimination, compassion, clarity, goodness, altruism, dispassion, contentment etc. Inter-personal conflict may be resolved by Lose-Lose, Win-Lose or Win-Win strategies. **Win-Win strategy is the most effective one.**

Conclusively, it can be said one should enjoy his personal and job life by finding appropriate answers to his problem. All my readers are requested to adopt the usable techniques from the story and minimize their conflict level & enjoy the life.

RESPONSE

Response to stimulus is a natural phenomenon. From the psychological point of view, it is purely a cognitive process, over which, human beings do not have any control. But response to different situations is quite different. We all respond/react to various situations in our daily lives. Sometimes we react and sometimes over react. Over reacting to situations is caused due to over sensitivity, which is also considered as an ailment of human brain and needs to be taken care of. Though reacting/responding to situations is very obvious. But over reacting, a sign of



Ms. Sangita Tripathy
Assistant Professor : BSH

high sensitivity, is a mental disorder, which can be controlled over. We are all sensitive beings to some extent, but an over sensitive person exhibits sensitivity in an exaggerated way.

It is a personality trait in which a person is extremely sensitive to influences from the external environment. An over sensitive person is overly affected by the things that would hardly have any impact on others and even feels emotions more strongly than the others. Due to this very nature of over sensitivity sometimes we lose confidence and forget to use our common sense. The one, with this trait over react in every situation. A short story of the CEO of a company can narrate well, how this trait stops people using their common sense and arouse laughter sometimes.

In a company: A man standing on the floor, not doing any work and looking aimlessly, CEO of that company came and asked, "How much is your salary?" Man replied "Five Thousand Sir!" CEO took out his wallet and gave him fifteen thousand rupees and told him, "I pay people here to work and not to waste time. This is your three months salary. Now get out of here. Never come back." That guy left, The CEO asked workers, "Who was that guy?" To his utter surprise, Workers replied, "Pizza delivery boy sir!" What we learn from the story? There is a need to understand every situation before reacting to

it. Further, over reacting/sensitivity may lead to nervousness and anxiety and we get easily hurt by what others say about us. It affects our relationships and friendships.

Sometimes it can be a good trait exhibiting loyalty and compassions. But the bad sides of this trait are many. Over sensitivity may drive the one and others crazy. With this trait, a person cannot handle criticism and takes things too seriously, getting overly upset, over thinking things and cutting people out of his/her life. This is a problem with which millions of people across the world struggle on a daily basis.

But struggling with this problem will enhance the chance of getting more upset with self; rather it should be handled very carefully. This ailment of brain, though considered a mental disorder and the one, with this problem, a psychopath, is most unlikely other mental diseases. If handled carefully it can be brought back to its original state. The person with this problem needs to be more vigilant on his/her behavior and act in a proper way. A little meditation and Yoga can be very helpful in this regard and develop a good state of mind.

(Note: The article is written for a book on Human Behavior)

WAKE UP

Students in India, especially the engineering students, don't study or don't want to study. They have lost their faith in the education system as well as themselves. Any reasons? Yes, there are many. Some of the important ones according to me may include: naivety, lack of guidance, over-confidence, insufficient information, loser's attitude, demoralised persona and some unrealistic notions.

I'll try to shed some light on some of the interesting and absurd notions that lead to the career-damaging acts done by the students.

The primary notion that "Our Education System is corrupt and it won't help them", is getting more and more concrete in the minds of these techies of the future. Which is though true to some extent, is a total nonsense for a student to care about.

Education System has nothing to do with your own studies, abilities, interest or concentration. While smart, pro-active and not-so-interested students try to find the faults in the system and fight them, the intelligent, interested ones sneak-off to their world of books and knowledge to go one step closer to



Ms. Jagruty Naik

Assistant Professor : ECE

their dreams. This doesn't mean we shouldn't raise our voice against the wrong, but we must know our priorities.

Another belief that this generation of engineers have adapted is things can be easily done by "Jugaad". For students Jugaad is the word for copying assignments, and test papers. No-one is interested in actually learning what is being taught. And almost every student has at least one subject in which (s)he has given up all hopes.

But unlike common beliefs, Jugaad is not cheating or just getting a work done. In fact, as per wikipedia: "Jugaad is increasingly accepted as a management technique and is recognised all over the world as an acceptable form of frugal engineering at peak in India. Jugaad also applies to any kind of creative and out of the box thinking or life hacking, which maximises resources for a company and its stakeholders.

What students fail to realize is that the 'Companies and Management' have already gotten there where they can afford to use these techniques. Noone sets up a company with 'Jugaads'. The hardwork, knowledge, critical thinking and effort put in together helps them reach that level.

Copying in exams might just get you some good grades if not expulsion but never knowledge. Out there in the world outside these college gates, where everyone is trying to get the best possible thing in minimum possible value, jobs are abundant. Not everyone aspires to get into Microsoft, Intel, Apple, Google, Facebook, etc.. But for those who do, you must know that every one of those companies have openings for freshers. But sadly, these crème de la crème of companies are more interested in your in-depth subject knowledge than your grades. Luckily, when you have knowledge, it's easy to score grades. Unluckily, the vice-versa is not true.

One more idea that students have is 'Assignments are not important'. Ask an IITian. Or a student from a top Govt. institute. It takes infinite amount of time to research and write an assignment that is original, complete and worth the time of a teacher to read. When given an assignment, good students copy it down from one book. To add to the misery, most of the students copy the assignments from one which seems the most correct. This not only deminishes the main motive of giving assignment (which is to get students to study from different sources and have their own ideas and doubts), it also takes away the zeal to check all the assignments thoroughly.

And last but not the least, What will the University or colleges probably gain by pushing students to classrooms? For this answer, interested students have take 15-20 mins out from their busy life schedule and use the internet to look for the answers by top researchers as to 'Why classroom teaching, attention in the class and focus on the subject being taught is so important?'

POEM

SEARCHING MY WAY

*What I do at this moment.
Finding myself helpless
Trying to squeeze out the statement
That can erase my empty fact.
My heart is burning a rare
But I want to burn myself
So trying to burn the fear
So can be knotted up in desire.*

*Want to dream the dreams
Because I wanna be broaded
So by resting rest in my mind
I'm deeping into a storm by wind
So many dreams I have broken
Left behind many also
Yet those taking me closer again
Can't find why do they return?*

*So I'm taking a flight again
Trying to let the world below
And submitting me into a pain
For searching the way with a passion*

*Don't want to be stopped at any place
Also not to meet even myself
so by leaving my native surface
Want to Go towards an embrace.
Want to clear the confusion
by roaming here and there
What's real?what's illusion?
Hope the breeze wil show the direction.*

*Even being known I'm ignorant
so still searching my way
now I'm being passionate
want to run the moment
I know you have brought me
I'm a shadow of yours
I dwell in you ,you dwell in me
I can feel you in every breeze*



Mr. Ansuman Dash
4th year ECE

FACULTY DEVELOPMENT PROGRAMME AT GIET, BANIIATANGI

In the forenoon of 20th July, 2016 (Wednesday), a **Faculty Development Programme** was organized in the college auditorium, by the BSH department. It was basically a motivational talk session. The objective of the session was to enhance the faculty as well as other staff members' inner self and help them creating a better work environment by improving their own self.

The meeting was graced by the valuable talks of Prof. (Dr.) Himadri Ranjan Mishra, who, basically is an educationist and worked in various capacities by heading departments in various institutions; in the presence of Principal Prof. (Dr.) N. Sutar, Director Prof. (Dr.) B. Pradhan and heads of all departments.

After a psycho test, he spoke on various issues like health, stress management, handling difficult class room situations, setting goals and focusing on them etc..

He also insisted everybody on sharing their problems with others so as to make them less burdensome and



find easy solutions. He reiterated on being focused on goals while having a proper balance between IQ, MQ and EQ. Almost all the faculties as well as staff members participated in the programme with full enthusiasm. The programme was educative and interesting. The programme ended with a vote of thanks by Prof. (Dr.) S. N. Pathi.

INNOVATION: Family robot-pharmacist

Robots are starting to become more present in our daily lives, and some experts believe the future will be filled with helpful AI.

Now a new robot is aiming to tackle one of the most important parts of our lives - our health. **Pillo robot** just endowed with the appropriate functionality. Thanks to the Face Detection system and specially developed software, he is able to remember all the family members, and to find an individual approach to each, displayed in the voice and emotional communication. Inside the robots are provided containers for storage of up to 250 tablets, and they are different for each household. Pillo timely reminds one or another person, whether it be a child, teenager, adult or elderly people, for the next reception of medicines. If appointed, liquid medication, the robot will inform the audible and visual signals. The system keeps statistics on each reception of preparations and, if for some reason people do not take them, a notification is sent to the attending physician or responsible relative.

Data is transmitted via Bluetooth and Wi-Fi. When medicines in containers left too little, Pillo reminds you to buy them. It is necessary to contact a doctor or a relative? Not a problem, it can be done with the help of a robot. To do this, there are wireless modules, HD screen, a microphone and a camera.



WHAT CAN PILLO DO?



Built by Pillo Health, the robot will recognise each user's face and voice, dispense the proper pills at the appropriate time, and automatically reorder medicine before it runs out.

The company claims the robot can have a conversation with its owners, and will learn as he goes along.

The robot can store up to 250 pills at one time.

source: <http://itechfuture.com/>
But can we say that it Holds Your Life in Its Hands? Any Ideas or comments.
Let us know at :

<http://gietbaniatangi.blogspot.com/2016/07/innovation-coloumn-july-16-family-robot.html>

PHOTOS FROM PAST MEMORY



Health Tips

Drink Safe Water

Waterborne illness are on higher side in rainy season.

Drink Boiled water. Specially for Kids / elderly and ailing people.

Make use of Alum to get purified water.

Do not drink uncovered water



Jokes



Engineering Students True Story

Our Exam Syllabus : 80GB

We Read : 80 MB

Keeps on Mind : 80 KB

Write on Exam Hall : 80 Bytes

And The Exam Result Will Come On Binary Digit

00, 01, 10, 11.....



EDITORIAL BOARD

Dr. S.N.Pathi - Editor

Mr. Deepti Ranjan Sabat - Co-ordinator

Ms. Snigdha Mahapatra - Member

Mr. Shushil Pati - Member

Mr. Bishal Dash - Member

Ms. Jagruti Nayak - Member

Ms. Deepika Mishra - Member

New Faces in GIET



Dr. M. P. Sahoo
Professor : BSH



Dr. Anil Ku. Mishra
Associate Professor : CSE



Ms. L. Upadhyaya
Asst. Professor : Civil



Mr. S. K. Parida
Asst. Professor : BSH



Mr. Ranjit Jena
Asst. Professor : EE



Md S. Maqsood
Asst. Professor:EE



Mr. P. K. Sahoo
Professor : EE



Mr. J.R. Acharya
Asst. Professor : ME



Mr. S. K. Sahoo
Asst. Professor:ME



Mr. Shibajee Behera
Asst. Professor:ME



Mr. Jangyadatta Pasa
Asst. Professor:ME



Mr. Sunanda Ku. Sahoo
Asst. Professor : CSE



Mr. Milan Swain
Asst. Professor : EE



Mr. Rashmi R. Behera
Asst. Professor : CSE



Raghunath Dash
Giet Office: HR

Study TIPS

STUDY HABITS OF SUCCESSFUL STUDENTS

- Plan your study
- Try not to do too much of studying at one time
- Programme a specific time for study.
- Normally, keep study time fixed each day.
- Set specific goals for your study time
- Work on the assignments or materials those are the most difficult first
- Review notes before beginning an assignment
- Eliminate distractions during study time
- Never hesitate to take the assistance of your co-student, senior students or your teacher.
- Review work daily, weekly, monthly, before your semester examination.

Corporate Mentors



FEEDBACK:

To improve the quality of the Newsletter "Campus Focus", your views and suggestions are highly solicited. Please send the same to the Editor, through mail id. : cf@gietbbsr.com

Courses Offered :

B.TECH :

Civil Engineering
Electrical Engg.
Mechanical Engg.
Computer Sc. & Engg.
Automobile Engg.
Electronics & Comm. Engg.
Electrical & Electronics Engg.

M.TECH :

Structural Engg.
Power Electronics & Drives Engg.
Mechanical System Design
Communication Systems Engg.

DIPLOMA:

Civil Engineering
Electrical Engineering
Mechanical Engineering



GANDHI INSTITUTE FOR EDUCATION & TECHNOLOGY

Baniatangi, Bhubaneswar, Khurda - 752060, Ph : 06755 243 600-604, email : info@gietbbsr.com
Office : HIG-33, Infront of PAL Heights, Jayadev Vihar, Bhubaneswar - 751013, Ph. : 0674 2301562
WWW.GIETBBSR.COM