



FACULTY OF ENGINEERING AND TECHNOLOGY

GURUKULA KANGRI VISHWAVIDYALAYA, HARIDWAR





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April- June 2012

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IN THIS ISSUE

Vimal Verma, ECE IV Sem

Meritorious Students Placement **Faculty News** From Vedas and Archives Tips for Extending Battery Life OLED'S: Future Display Tech.

Meritorious Students

(Even Semester Exam 2012)



Alok Kumar Maurya CSE, II SEM.





Abu Khalid Al Mohd EE, II SEM.



Vijay Kumar Savita ME, II SEM



Kumar Saurabh CSE, IV SEM



Shashank Shekar



ECE, IV SEM



EE, IV SEM





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Abhay Agarwal CSE, VIII SEM



Piyush Prakash ECE, VIII SEM



Aman Gupta EE. VIII SEM

Meritorious Students with Hon'ble VC, GKV & Dean FET



Editorial

During April-June, 2012, practical as well as theory examinations were conducted smoothly at FET and results were declared in the month of June. FET is implementing a number of initiatives to enhance the quality of education being imparted and to bolster the success of FET students and teachers. The outgoing batches of various Engineering branches were bid farewell. They have made us proud by their academic achievements and placements. FET wish them all success in life and career.

The new session shall commence at FET from 16th July, 2012. I would take this opportunity to urge the senior students to treat the newcomers as their brothers and help them in all ways and not to indulge in any sort of ragging activities. They should never forget that raging is a punishable offence and our Anti-ragging squad are on round all time and Anti-ragging committee is always prompt in taking action against the culprits.

As usual, from 16th July onwards, each day shall start with Yajna at FET. All teachers, non-teaching staff members and students are expected to attend Yajna. It will definitely help them in moral upliftment and achieving the mental peace which are necessary for concentrating on studies.

Looking forward for another smooth, fruitful and successful academic session at FET.

Prof. R. D. Kaushik Chief Editor

Prof R. D. Kaushik, Dean FET visits Universitat Poletecnica de Valencia, Valencia (Spain)









Student's Achievements



Vishan Kumar from B. Tech IV year, CSE, got selected in All India Entrance of University of Allahabad for pursuing MBA in Motilal Nehru Institute of Research and Business Administration with AIR-28(Gen) & AIR-4(SC). we congratulate him for a Bright future.

Recent Placements



Anupam Gupta of CSE VIII Sem got placed in Samsung Technologies on a package of 5.8 lacs. We wish him a successful future ahead!!

FACULTY NEWS

- 1. Prof. R.D. Kaushik, Dean FET was invited by Universitat Poletecnica de Valencia, Valencia (Spain) for research collaboration under the project funded by the European Union through MC-IRSES International Research Staff Exchange Scheme (IRSES) for one month. He undertook research work there during the month of June, 2012. He has visited six countries so far for international research collaboration.
- 2. Semester Examinations were conducted smoothly at FET in the month of April- May, 2012 and the results were declared in the month of June, 2012.
- 3. Organising the workshop on "Scientific Computing: Theory and Practice" during 8-13 October, 2012 was announced at FET.
- 4. Holding the National Conference on "Progress in Electronics & Allied Sciences", during 3-4, November, 2012 was announced at FET.
- 5. The dress Code has been changed to Black trousers and white shirt from the upcoming semester.
- 6. Department of CSE has allied with Microsoft Technologies to teach the students on latest technologies.
- 7. Mr. Vipul Sharma and Mr. Mayank Agarwal delivered an invited talk in DST Sponsored National Conference on "Future Aspects of Artificial Intelligence in Industrial Automation" on 20 May, 2012 organised by Graphic Era University, Dehradun.
- 8. Mr. Manoj Kumar Patel attended a National Workshop on "Cryptography and Number Theory" organized by Centre of Mathematical Sciences, Banasthali Vidhyapeeth, during 3rd may 2012 to 6th may 2012.
- 9. Dr. M. M. Tiwari and Dr. Vivek Goel attended the Central Council Board meeting organised by NIT, Raurkela held on 6 June, 2012 for the Admissions in B. Tech courses.
- 10. Mr. Mayank Agarwal submitted his Ph.D. thesis entitled "Security issues in Mobile Agents" in the month of June, 2012.
- 11. Mr. Vipul Sharma presented a paper entitled "A Review of Bacterial Foraging Optimization and Its Applications" in National Conference on Future Aspects of Artificial intelligence in Industrial Automation (NCFAAIIA) conducted by GE University, and the Proceedings were published by International Journal of Computer Applications.
- 12. Mr. Vipul Sharma presented a paper entitled "A Bacterial Foraging Optimized Finite Difference Time Domain Method" in National Conference on Future Aspects of Artificial intelligence in Industrial Automation. Published by Foundation of Computer Science, New York, USA, May 2012, pp. 1-4.
- 13. Mr. Suyash Bhardwaj published a paper entitled "A Novel approach for optimization in Mathematical calculations using Vedic Mathematics Techniques" in Mathematical Journal of Interdisciplinary Sciences, Vol. 1, No. 1, July 2012, pp.23-34.
- 14. FET received the letter of approval for B. Tech courses by AICTE for the current session.
- 15. Dr. S. Panwar, Head, Department of Physics visited Varanasi as observer for AIEEE entrance exam conducted by C.B.S.E. on 29 april, 2012.
- 16. Students of Uttarakhand College of Science and Technology, Dehradun visited various Labs of FET. Mr. Mayank Agarwal, Mr. Sanjeev Lambha, Mr. Suyash Bhardwaj, Mr. Apoorv Kaushik, Dr. Dharmendra Baliyan interacted with the students and briefed them about FET.
- 17. Admission committee is working under the convenor Mr. Vipul Sharma. The other members are Dr. M. M. Tiwari, Dr. Vivek goel, Mr. Sanjeev Lambha, Mr. Tanuj Garg, Mr. Anuj Kumar Sharma and Mr. Gaurav Malik.
- 18. Online counselling for admission to B. Tech courses was started by CCB from june 2012
- 19. FET, GKV will have counselling against vacant seats on 24th August after the end of last round of CCB counselling.
- 20. Labs in summer vacations were held in the Department of Mechanical Engineering with enthusiasm. Students from IInd & IIIrd year Mech. Engg. Attended the Practical labs sincerely. Mr. Sanjeev lambha, Mr. Praveen Pandey & Mr. Rishi Prajapati conducted these labs.
- 21. Toppers of every branch will be given Kulpita Green card and Certificate of Appreciation.





From Vedas



ग्रो०सत्यदेव निगमालंकार, अध्यक्ष-श्रद्धानन्द वैदिक शोध संस्थान, गु०कां०वि०वि०,हरिद्वार

पूर्ण आयु को प्राप्त होने वाले मनुष्य

अग्नीषोमा य आहुतिं यो वां दाशाद्धविष्कृतिम्।

स प्रजया सुवीर्यं विश्वमायुर्व्यश्नवत्॥ ऋग्०१.९३.३

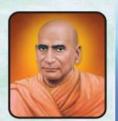
जो सबके हित को चाहने वाला और यज्ञ का अनुष्ठान करनेवाला मनुष्य है तथा वह भौतिक अग्नि और पवन इन दोनों के बीच होम करने के योग्य पदार्थ का कारणरूप घृतादि उत्तम-उत्तम सुगन्धित आदि पदार्थों से युक्त आहुति को देवे, वह उत्तम-उत्तम सन्तानयुक्त प्रजा से श्रेष्ठ पराक्रमयुक्त समग्र आयु को प्राप्त होवे।

From Archives



......वर्तमानकाल का कोई चित्रकार यदि भगवान ईसा की मूर्ति बनाने के लिए जीवित माडल लेना चाहे तो मैं इस भव्यमूर्ति स्वामी श्रद्धानंद की ओर इशारा करूंगा.....

रैम्जे मैकडानल्ड पूर्व ब्रिटिश प्रधानमंत्री



सौजन्य : हेमन्त आत्रेय

OLEDs: Future of Display Technology

Transparent OLED

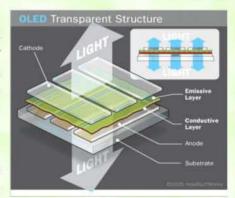
Transparent OLEDs have only transparent components (substrate, cathode and anode) and, when turned off, are up to 85 percent as transparent as their substrate. When a transparent OLED display is turned on, it allows light to pass in both directions. A transparent OLED display can be either active- or passive-matrix. This technology can be used for heads-up displays.

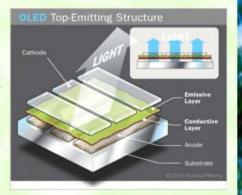
Top-emitting OLED

Top-emitting OLEDs have a substrate that is either opaque or reflective. They are best suited to active-matrix design. Manufacturers may use top-emitting OLED displays in smart cards.

Foldable OLED

Foldable OLEDs have substrates made of very flexible metallic foils or plastics. Foldable OLEDs are very lightweight and durable. Their use in devices such as cell phones and PDAs can reduce breakage, a major cause for return or repair. Potentially, foldable OLED displays can be attached to fabrics to create "smart" clothing, such as outdoor survival clothing with an integrated computer chip, cell phone, GPS receiver and OLED display sewn into it.







White OLED

White OLEDs emit white light that is brighter, more uniform and more energy efficient than that emitted byfluorescent lights. White OLEDs also have the true-color qualities of incandescent lighting. Because OLEDs can be made in large sheets, they can replace fluorescent lights that are currently used in homes and buildings. Their use could potentially reduce energy costs for lighting.

Suyash Bhardwaj

Department of Computer Science

Historic Milestone to the Discovery of God Particle

Physicists working at CERN'S Large Hadron Collider discovered a new subatomic particle that looks for all the world like the Higgs boson, a potential key to understanding why elementary particles have mass & indeed to the existence of diversity & life in the universe.

Rolf Heuer, the director general of CERN in an interview said that it was too soon to know for sure whether the new particle which weighs in at 125 billion electron volts, one of the heaviest subatomic particles yet, fits the simplest description given by the Standard Model, the theory that has ruled physics for the last half century or whether it is an imposter, a single particle or even the first of many particles yet to be discovered. According to the Standard Model of physics, the Higgs boson is the only visible & particular manifestation of an invisible force field, a cosmic molasses that permeates space & imbues elementary particles that would otherwise be massless with mass. Particles wading through it would gain heft.

Without this Higgs field, or something like it, physicists say all elementary forms of matter would zoom around at the speed of light. There would be neither atoms nor life. "It's great to discover a new particle but you have to find out what its properties are", said John Ellis, a theorist at CERN, the European Organization for Nuclear research. Peter Higgs, the British theorist on whom the boson is named, congratulated to the two teams of about 300 physicists for their achievements.

Physicists said they would probably be studying the new Higgs particle for years. Any deviations from the simplest version of the boson could open a gateway to deeper theories that answer questions left hanging by the Standard Model, what is the dark matter that provides the gravitational scaffolding of galaxies? And why is the universe mode of matter instead of antimatter. The whole world thinks there is one Higgs but there could be many of them.

NYT News Service

Dr. Sunil Panwar Dept. of Physics

Tips for Extending Battery Life

Laptops tend to lose their charm quickly when you're constantly looking for the nearest power outlet to charge up. How do you keep your battery going for as long as possible? Here are 15 easy ways to do so.

- 1. **Defrag regularly** The faster your hard drive does its work less demand you are going to put on the hard drive and your battery. Make your hard drive as efficient as possible by defragging it regularly. but not while it's on battery of course!
- **2. Dim your screen** Most laptops come with the ability to dim your laptop screen. Some even come with ways to modify CPU and cooling performance. Cut them down to the lowest level you can get that extra minute of battery when required
- **3. Cut down on programs running in the background -** Itunes, Desktop Search, etc. All these add to the CPU load and cut down battery life. Shut down everything that isn't crucial when you're on battery.
- **4. Cut down external devices** USB devices & WiFi drain down your laptop battery. Remove or shut them down when not in use. It goes without saying that charging other devices with your laptop when on battery is a sure way of quickly wiping out the charge on your laptop battery.
- **5. Add more RAM** This will allow you to process more with the memory your laptop has, rather than relying on virtual memory. Virtual memory results in hard drive use, and is much less power efficient.
- **6. Run off a hard drive rather than CD/DVD** As power consuming as hard drives are, CD and DVD drives are worse. Even having one in the drive can be power consuming. They spin, taking power, even when they are not actively being used.
- 7. Keep the battery contacts clean Clean your battery's metal contacts every couple of months with a cloth moistened with rubbing alcohol. This keeps the transfer of power from your battery more efficient.
- **8. Take care of your battery** Exercise the Battery. Do not leave a charged battery dormant for long periods of time. Once charged, you should at least use the battery at least once every two to three weeks. Also, do not let a Li-On battery completely discharge.
- **9. Hibernate not standby** Although placing a laptop in standby mode saves some power and you can instantly resume where you left off, it doesn't save anywhere as much power as the hibernate function does. Hibernating a PC will actually save your PC's state as it is, and completely shut itself down.
- **10. Keep operating temperature down** Your laptop operates more efficiently when it's cooler. Clean out your air vents with a cloth or keyboard cleaner.
- 11. Set up and optimize your power options Go to 'Power Options' in your windows control panel and set it up so that power usage is optimized (Select the 'max battery' for maximum effect).
- **12. Don't multitask** Do one thing at a time when you're on battery. Rather than working on a spreadsheet, letting your email client run in the background and listening to your latest set of MP3's, set your mind to one thing only.

Suyash Bhardwaj

Workshop on Scientific Computing: Theory and Practices 8-13 October, 2012

ABOUT THE WORKSHOP

The Government of India has declared 2012 as NATIONAL MATHEMATICAL YEAR to commemorate 125 birth year of the great mathematician SRINIVASA RAMANUJAN. To celebrate the same, Dept. of Applied Mathematics is organizing a one week workshop on "Scientific Computing: Theory & Practices" at Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar, Uttarakhand for both Faculty and Research Students of different disciplines. The thrust will be to provide domain knowledge in basic areas of Scientific Computing Techniques through theory and problem solving. The workshop is planned to explore recent developments and new horizons in Scientific Computing. There will be lectures by renowned academicians on scientific computing, as well as their application on various branches of engineering & applied sciences as of today. The main objective of workshop is to generate the awareness of soft computing techniques. The instructors will comprise of the experienced faculty of IIT's and other elite institutions of India. Lecture wise schedule of each day will be given at the beginning of the workshop and will be strictly adhered to.

OBJECTIVE

It is entirely oriented towards problem solving. The morning sessions will be devoted to theory and afternoon sessions for tutorial work and computer lab. Participants will be provided with tutorial sheets in advance and they are expected to work out problems and present them in the tutorial sessions with the help of the instructors. There will be continuous evaluation in tutorial sessions. At the end of the Workshop, each Participant will be awarded a grade. Good performance will be rewarded and nonperforming participant will not be selected for the subsequent workshops. Since the workshop is highly specific and rigorous. The selection will be on first come first serve basis. However, background areas of the participant will also be taken into consideration.

TOPICS

Introduction and application of MATLAB, Neural Networks, Fuzzy Logic, Numerical Analysis, Wavelet Theory, Fourier Transform, Engineering Optimization, Application in Science & Engineering

SELECTION PROCEDURE

Since the workshop is highly specific and rigorous. The selection will be on first come first serve basis. However, background areas of the participant will also be taken into consideration.

INVITED SPEAKERS

Prof. Virendra Arora

Prof. Shobha Madan, IIT Kanpur

Prof. M. C. Joshi, Kumaun University, Nainital

Prof. Mohan C Joshi (Retired), IIT Bombay

Prof. Harish Pathak, B.H.U, Varanasi

Prof. U. C. Gairola, Garhwal University

Prof. Madhu Jain, IIT Roorkee

Prof. C S Bisht, Kumaun University, Nainital

Prof. N Sukavanam, IIT Roorkee

Prof. Vijay D Pathak, MS University, Baroda

Prof. Anil Kumar, BITS, Goa Campus

People taking care of FET



A National Conference On "Progress in Electronics & Allied Sciences" 3-4 Nov,2012

About The Conference

The last few decades have seen unprecedented growth in the field of Science and Technology. New information, new discoveries and innovative applications make us wonder about the potential of human beings. The National Conference on Progress in Electronics & Allied Sciences aims to bring together leading academicians, scientists and frontline researchers in the field of Science & Technology to share a common platform wherein they can exchange their ideas and work with each other.

Major Themes

Papers in the following and related fields are welcomed but not limited to:

Microwave, Antennas, Solar Cells, Optical Communications, Embedded Systems, Signal & Image Processing, Mobile Communication, Wireless Sensor network, VLSI, Satellite Communication, Neural Networks, Renewable Energy Technologies, Modern applications of

composite materials, Computational fluid Dynamics (CFD), MEMS, Industrial Automation, Electric Power Generation, Application in Physical, Chemical and Mathematical Sciences

Electric Traction, Power Electronics, Electromagnetic Compatibility, Electrical Engineering

Material, High Voltage Insulation Technologies, Lightning Detection and Protection, Power System Analysis, Electrical Measurements, Computer Network, Mobile Computing, Data Compression and Data Encryption, Automated Software Engineering, Artificial Intelligence

Database Systems, Cloud Computing, Green Computing, Green Electronics, Mechatronics

Submission of Abstracts

There will be scientific sessions on various topics identified for the conference in the form of invited lectures and poster presentations. Abstracts are to be submitted by email as attachment file to peasfet@gmail.com on or before 1 September 2012. One page (A-4) abstract should be submitted in camera ready form using MS word, Times New Roman, Font Size 12,Line Spacing 1.0 in black color. The title of the paper should be in bold and centered, followed by names of authors marked with asterisk for paper presenter/corresponding author. Key words and the email address of the corresponding author should be clearly mentioned. For details Please visit: www.gkvharidwar.org

Guidelines for Preparing Posters

Poster size should be preferably 1m x 1m.

Publication of selected full Length papers

The proceedings in the form of the souvenir, consisting of the accepted abstracts, will be released during conference. Selected peer reviewed research papers will be published in a journal bearing ISSN Number.

Awards

Best poster and best oral presentation shall receive an award.

Registration Fee (Non-refundable/Non transferable)

The registration fee includes participation fee; conference kit; conference tea/coffee, local transport for conference, meals and free accommodation during conference days only in university guest house or economy guest houses in Haridwar on twin sharing basis. The free accommodation shall be offered only to the persons, who submit registration fee by 1, October, 2012. The registration fee can be paid by Demand Draft in favor of "Registrar, Gurukul Kangri Vishwavidyalaya, Haridwar".

Registration Fee

Persons from Industry	Rs.	2500
Academicians	Rs.	1500
Students / Research Scholar	Rs.	700
Accompanying person	Rs.	700

Additional 500 will be charged as the late registration fee after October, 1, 2012

Deadlines

Submission of abstract

Full Paper Submission

Registration

Inauguration of the Conference

1 September 2012
5 September 2012
1 October 2012
3 November 2012

Organizer and Venue

PEAS-2012 is being hosted by Faculty of Engineering & Technology, Gurukul Kangri University, Haridwar, Uttarakhand, India. The faculty buildings are located at 10 Kms. Haridwar-Delhi Road, Near Shani Dev Mandir, Bahadarabad-249402 (Uttarakhand), India.

Students Corner

WHO IS ME?

Things to develop for my set, is true war for me. But first and last the pre question. Who is me? Who is me? Got birth on the earth, Got name by the birth. But for what? I'am being on the earth. As the patriot and the poet. diverting nature to a new world. At few humorous for world But incredible for next world. Sometimes gone illogical, but after that become miracle. So, Learning the new book of those, Inspiring from them in two dose. I understand .I stood. What should so I could? New to men and new to world, You will be one, of that world. Today, I am not in the world But people are, turning my word.

> Alok Kumar Maurya CSE, IIIrd Sem

New Beginning

A reason to be something greater I wish to become an original creator A prospect of something to finally win A right to deluge previous sin A gift of hindsight to get things right the gift of future that shines so bright I wish to conclude the best of me I wish to stand so rest can see A future to visit the imaginations so far A bright day to come at par Wonderful thoughts and expectations are high Every time and moment to enjoy The new look new race has begin to follow To bring out the things from shallow I believe in what I think and what I do Things that matter to me and you I hope that my word will be healing I hope that more people will start feeling A time to do something previously planned A time to finally take that last stand A time to redefine the winning A time to start for NEW BEGINNING

Suyash Bhardwaj & Sanjeev Lambha

Upcoming Events @ FET

Workshop on Scientific Computing:
Theory and Practices
8-13 October, 2012

National Seminar on Electronics & Allied Sciences³⁰
3-4, November 2012
PEAS- 2012