

On August 10, 2015, Technical Lecture on “A billion Gate System on Chip(SoC) Design Challenges at Nanometer Technologies” was delivered by Mr. Anuj Rathi, Director, Technical Field Operations for India and South East Asia region at Atrenta-India where he covered he focussed on following aspects of billion gate SoC Design: Need of a billion gate SoC Design, A typical SoC Design Flow & brief description of each design stage, Key Challenges associated with designing of complex SoC Design and Methods & Techniques used to overcome these challenges.

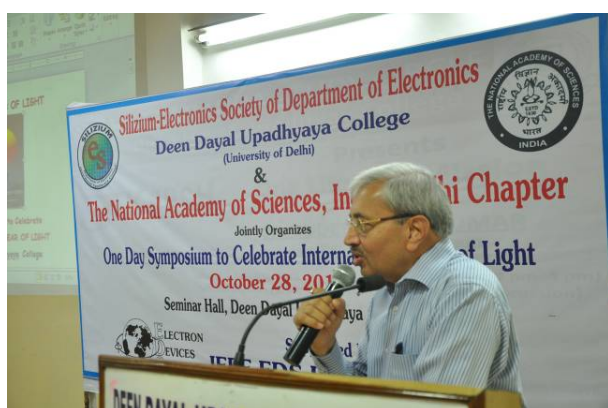


On September 04, 2015, the department organized Technical Visit to Air Traffic Control (ATC), IGI Airport. The main objective of the visit was to make B. Tech Electronics students aware about the air traffic management.

On September 12, 2015, the department organized one day workshop on VHDL programming and Digital Circuit Designing in which 15 students participated. The workshop was conducted by faculty members of the department - Dr. Poonam Kasturi, Mr. Naveen, Mr. Ajit Singh and Ms. Neha who carried out hands-on-session related to structural, data flow and behavioral modeling.



The UN General Assembly 68th Session proclaimed 2015 as the International Year of Light and Light-based Technologies (IYL 2015). To celebrate IYL, On October 28, 2015, the department organized One Day Symposium to Celebrate International Year of Light. The symposium was supported by The National Academy of Sciences, India – Delhi Chapter and IEEE EDS Delhi Chapter. Professor Ajoy Ghatak, (Formerly Professor of Physics @ IIT Delhi) delivered his keynote talk on “The Year of Light & Fiber Optics”. The talk will give a very brief history on the development of the optical fiber and a few fiber based devices. Professor K. Thyagarajan, Department of Physics, IIT Delhi in his talk on “Quantum Photonics”. He discussed the concept of Entangled photon pairs having application in quantum key distribution, quantum imaging, quantum metrology, quantum teleportation, etc. The talk introduced some experiments exhibiting the quantum nature of light and after a brief introduction to nonlinear optics and the concept of entanglement, he described a method to generate entangled photon pairs using second order nonlinearity in optical waveguides. Some applications of entangled photon pairs were also presented. Mr. Mohammad Yasir Abbas, Senior Application Engineer- Industrial Metrology Business Unit, Nikon India Private Limited shared his experience on “Effectiveness and Adaptability of High Resolution Optical Data Acquisition Techniques for Industries using fundamental Optics and Image Processing”. He discussed Fundamental digital microscopy combined with image processing Techniques having a key role to play in ultimate product delivery and its ergonomic adaptability by the target consumer. Apart from brief description of products, he gave hands-on-session on description of smart Optical Technologies (like thru the lens Laser, EDF image Stitching) prevalent in the industry to achieve the desired objects. 10 student groups made technical presentations like Modeling Optical waveguides using VHDL, Development of Mercury Cadmium Telluride Epitaxial Layers using Molecular Beam Epitaxy for Infrared Detector Applications, Homemade low-cost Spectrometer: A teaching aid for undergraduate optics, Acoustic Laser Dancing : Studying standing wave patterns through acoustic vibrations of circular membrane, Wireless Load Control Using DTMF Technology, Persistence of Vision (POV) based displays. The Symposium was attended by over 150 students and faculty members from Maharaja Agrasen College, Sri Venkateswara College, Dyal Singh College, Shaheed Rajguru College of Applied Sciences, Bhaskaracharya College of Applied Sciences, University of Delhi, National Physical Laboratory and Acharya Narendra Dev College, Delhi Technological University, New Delhi, The NorthCAP University, Gurgaon (Formerly ITM University, Gurgaon) and Miranda House College.



Dr. S. K. Garg, Principal, Deen Dayal Upadhyaya College
addressing the Delegates



Professor Ajoy Ghatak, Secretary-NASI Delhi Chapter

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April 01, 2015 – March 31, 2016



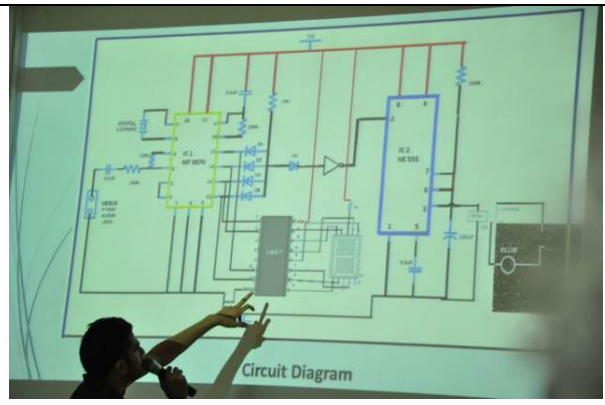
Mr. Mohammad Yasir Abbas, Senior Application Engineer- Nikon India Private Limited demonstrate digitally integrated high accuracy Optical Data Acquisition system



Dr. Poonam Kasturi, Co-Convener-Symposium presenting memento to Professor K. Thyagarajan, IIT Delhi



Student presentations..



Student presentations..



Professor K. Thyagarajan and Professor Ajoy Ghatak inspecting demonstrative student projects



Audience..

On January 15, 2016, a technical talk on “Asynchronous Circuit Design and CAD Tool Design for Asynchronous Circuits” was delivered by Ms.Tannu Sharma, Graduate Research Assistant at University of Utah, Vice Chair-IEEE Student Chapter University of Utah and Formerly Senior Application Engineer, Cadence Design Systems.



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During January 22-23, 2016, the department organized its annual Techfest 'URJASVA'16 in which over 200 students participated from different colleges of University of Delhi. It was a mega event with a plethora of technical events like SWEEP THE WIRE-Circuit making event, GAME OF SAPIENTS-Technical quiz as well as fun filled activities and competitions like STALKRUSH-Treasure hunt, EXPRESSIONS-Dumb charades and INSOMANIA-Lan gaming. The Event was jointly organized with IEEE Electron Device Society (EDS) Delhi Chapter and DU Times as media partners. On January 23, 2016, Electronics Alumni Meet was organized in which more than 40 alumni participated.



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During March 13-14, 2016, the department organized Third Workshop On “Quantum Mechanics: Theory and Application” Jointly with IEEE Electron Device Society-(Delhi Chapter) and The National Academy of Sciences, India (NASI) -Delhi Chapter. The lectures covered Evolution of quantum theory. Wave particle duality. Heuristic derivation of the Schrödinger equation. The Dirac delta function and Fourier transforms. Free particle solution of the Schrödinger equation: Propagation of a Gaussian Wave packet; Uncertainty Principle. Particle in a one-dimensional box, Extension to a three dimensional box. Free electron theory. Measurements in Quantum Mechanics. Angular momentum matrices. Basic ideas of quantum optics and quantum communication - linear algebra, some simple phenomena of quantum optics that establishes the existence of photon, uses of photon in the designing of schemes of quantum communication, how can we implement these schemes using linear optical elements, role of nonlinear optical components and how can we circumvent the use of nonlinear optical elements and applications of quantum mechanics in Nanoscale Electronics.

Technical Programme

Sunday	March 13, 2016
09:15 – 10:00	Registration
10:00 – 10:45	Lecture –I Professor Ajoy Ghatak
10:45 – 11:30	Lecture –II Professor Ajoy Ghatak
11:30 – 12:00	High Tea
12:00 – 12:45	Lecture –III Professor Anirban Pathak (quantum optics and quantum communication)
12:45 – 13:30	Lecture –IV Professor Anirban Pathak (quantum optics and quantum communication)
13:30 – 14:30	Lunch
14:30 – 15:15	Lecture –V Professor Ajoy Ghatak
15:15 – 16:00	Lecture –VI Professor Ajoy Ghatak
Monday	March 14, 2016
09:30 – 10:15	Lecture –VII Dr. Manoj Saxena (Application of Quantum Mechanics in Nanoelectronics)
10:15 – 11:00	Lecture –VIII Dr. Manoj Saxena (Application of Quantum Mechanics in Nanoelectronics)
11:00 – 11:30	High Tea
11:30 – 12:15	Lecture –IX Professor Ajoy Ghatak
12:15 – 13:00	Lecture –X Professor Ajoy Ghatak
13:00 – 13:30	Valediction

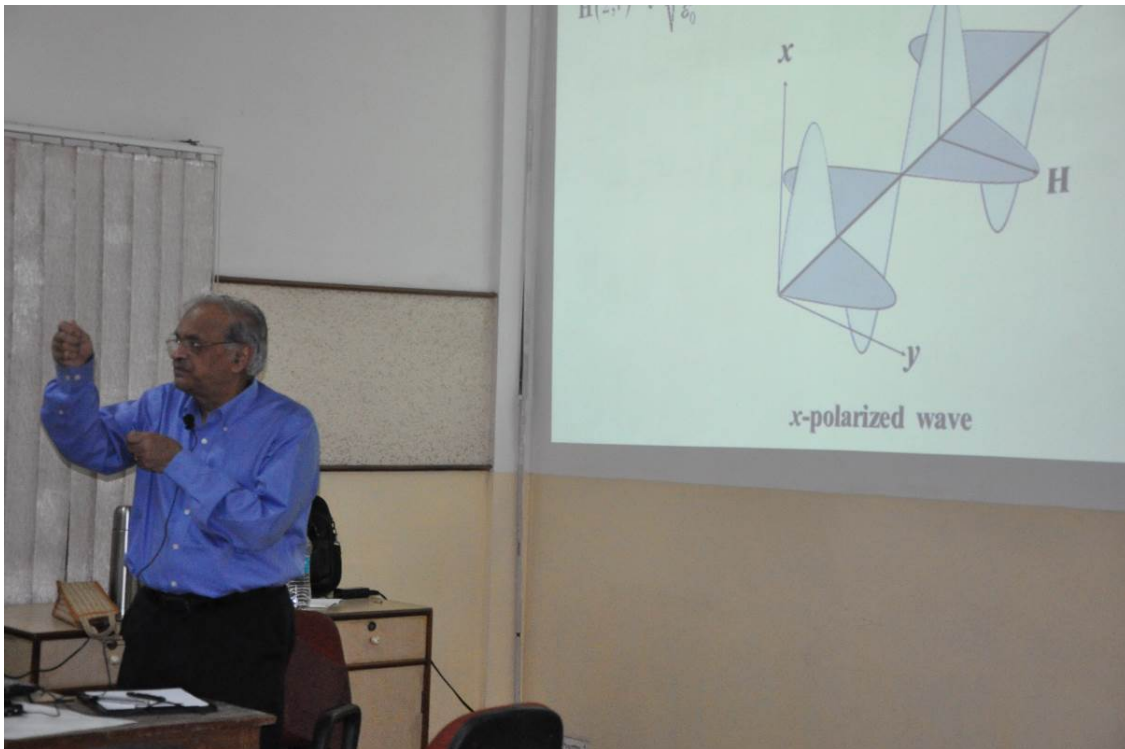
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Audience



Professor Ghatak with Innovation Project Students



Professor Ajoy Ghatak delivering his lecture



Group Photograph