ANNUAL REPORT
B.P. Poddar Institute of Management and Technology
(September 2012 – September 2013)
“Alone we can do so little; together we can do so much.” –Helen Keller

Like the first and second year of SPIE Student Chapter, the third year also witnessed a number of highly successful educational and entertaining events. Let’s have a look on all the events organized this year.
## EVENTS THIS YEAR...

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>NAME OF THE EVENT</th>
<th>DATE</th>
<th>PLACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABHIGYAN 2013 :- A QUIZ AND SCIENCE MODEL MAKING COMPETITION</td>
<td>23&lt;sup&gt;RD&lt;/sup&gt; MARCH, 2013</td>
<td>KOLKATA</td>
</tr>
<tr>
<td>2</td>
<td>EAPE 2013 :- NATIONAL CONFERENCE ON EMERGING AREAS OF PHOTONICS &amp; ELECTRONICS</td>
<td>30&lt;sup&gt;TH&lt;/sup&gt; &amp; 31&lt;sup&gt;ST&lt;/sup&gt; AUGUST, 2013</td>
<td>KOLKATA</td>
</tr>
<tr>
<td>3</td>
<td>SPIE BIRTHDAY CELEBRATION :- COMPLETION OF THIRD YEAR OF SPIE</td>
<td>18&lt;sup&gt;TH&lt;/sup&gt; AUGUST, 2013</td>
<td>KOLKATA</td>
</tr>
<tr>
<td>4</td>
<td>INDUSTRIAL TOUR :- A TOUR FOR GATHERING PRACTICAL KNOWLEDGE AND EXPERIENCE</td>
<td>23&lt;sup&gt;RD&lt;/sup&gt; SEPTEMBER, 2013</td>
<td>KOLKATA</td>
</tr>
<tr>
<td>5</td>
<td>KHET 2013 :- A LAZER GAME</td>
<td>28&lt;sup&gt;TH&lt;/sup&gt; &amp; 29&lt;sup&gt;TH&lt;/sup&gt; SEPTEMBER, 2013</td>
<td>KOLKATA</td>
</tr>
</tbody>
</table>
ABHIGYAN 2013
DATE: 23RD MARCH
VENUE: COLLEGE PREMISES, SEMINAR HALL
ABHIGYAN 2013, another successfully organized event after ABHIGYAN 2012. This time it was a huge success with even more participation and good response from all the students. Nearly 60 students were on the prelims part out of which only 6 were selected for final.
OUR QUIZ MASTER PROF. ESHE BOSE (OF PHYSICS DEPARTMENT) CONDUCTED THE QUIZ IN A SMOOTH FLOW AND AFTER GOING THROUGH AUDIO-VISUAL AND SOME OTHER TECHNICAL ROUNDS, WE HAVE HAD A WINNER AND TWO RUNNERS UP.
At the end of the quiz session we had our winners...
AUDIENCE PRESENT AND SOME LIGHT MOMENTS AFTER THE EVENT...
POSTERS OF ABHIGYAN...

B. P. PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY

SPIE STUDENTS CHAPTER ORGANIZES

ABHIGYAN 2013

EVENTS: QUIZ AND MODEL MAKING
DATE: 23RD MARCH
VENUE: SEMINAR HALL, B-BLOCK

DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING
2

EAPE 2013

NATIONAL CONFERENCE ON EMERGING AREAS OF PHOTONICS AND ELECTRONICS

DATE: 30TH & 31ST AUGUST
VENUE: COLLEGE PREMISES, SEMINAR HALL
A NATIONAL CONFERENCE ON EMERGING AREAS OF PHOTONICS AND ELECTRONICS (EAPE 2013) WAS ORGANISED BY SPIE STUDENT CHAPTER OF BPPIMT ON 30\textsuperscript{TH} & 31\textsuperscript{ST} OF AUGUST, 2013. THIS CONFERENCE AIMS TO PROVIDE A PLATFORM TO THE YOUNG SCIENTISTS AND ENGINEERS TO SHARE THEIR IDEAS WITH INDUSTRY PROFESSIONALS AND OTHER ACADEMICIANS GLOBALLY.
This was the second national conference organized by SPIE Student Chapter at BPPIMT. Eminent persons from USA, topmost national universities & telecom industries delivered lecture on optical communication & network, laser electronics & telecommunication system etc.
INAUGURATION SONG PERFORMED BY SPIE MEMBERS AND STUDENTS
INVITED SPEAKERS:

- ALOK KUMAR DAS (Ex-Professor, Department of Electronics & Communication Engineering, Jadavpur University, Kolkata, India)
- ARUN K. MAJUMDAR (Senior Scientist, Ridgecrest, California 93555)
- DEBABRATA CKAKRABARTI (Vice-President-Technical, Simoco Communications (South Asia) Ltd., Kolkata, India)
- SOURANGSHU MUKHOPADHYAY (Professor, Department of Physics, The University of Burdwan, Burdwan, West Bengal, India)
- ABHIRUP DAS BARMAN (Associate Professor, Institute of Radio Physics and Electronics University of Calcutta, 92 Acharya Prafulla Chandra Road, Kolkata, India)
Topics Covered in the Conference:

- Global Communication Network in 21st Century
- Retrocommunications in Presence of Atmospheric Turbulence
- Recommended Digital Communication Technologies in Present Indian Scenario
- Trends of Photonics in Computing, Cryptography and Quantum Computing
- Optical Access Network
- Expression Recognition Using Local Binary Pattern
- Content Based Retrieval of Malaria Positive Images from a Clinical Database via Recognition in RGB Colour Space
Communication Performance of Free Space Optical Link Using Wavelength and Spatial Diversity in Atmospheric Turbulence

Phase Response of Coupled Plasmonic Structure Using Asymmetrically Clad Bimetallic Nanofilm

Input/Output Beam Analysis for Efficient Excitation of Surface Plasmon Resonance using Cylindrical Dielectric-Metal-Dielectric Structure

Calculating Density of States of One-Dimensional Photonic Crystal under S-Polarized Electromagnetic Wave Incidence

Investigating Band Nonparabolicity Effect on Electron Energies of Multiple Quantum Well in presence of Transverse Electric Field

Variable Achromatic Retarder Using Crystalline Quartz
Existence of Multiple Shrimp Structures in a Simple Nonlinear Chaotic System

A Cascade Model of Continuous Wavelet Transforms Filters and Neural Networks for Detection of Indian Currency Notes

Modification of Fourier Spectrum Caused by Affine Transformation in the Function Domain

Study of Mobility-Temperature Characteristics of 1D GaAs Nano-Scale FETs

Sensing and Link Model for Wireless Sensor Network: Coverage and Connectivity Analysis

Performance of Optimum Power Based BCH Coded Data Transmission in WSN over Rayleigh Fading Channel
- Reduced Size Multiband Slotted Microstrip Patch Antenna with Modified Ground Plane for Wireless Applications
- Particle Swarm Optimisation Method Based Texture Image Retrieval
- BER Analysis of OCDMA System with Unipolar Walsh Coding
- A High-Speed Chaotic Optical Communication System with Rolling Key
- Tunable OPO Based on Second Order Cascaded Nonlinear Interaction for display devices
- Audio Steganography

Dr. Arun Kumar Majumdar delivering the lecture.
Overall EAPE 2013 was once again a grand success after EAPE 2011. Association of Teachers and Students for giving this conference a national level was beyond words.

Our ex-President sharing light moments and with our present President
2nd National Conference on
Emerging Areas of Photonics & Electronics
(EAPE-2013)

Jointly Organized by
Department of Electronics & Communication Engineering
&
SPIE Student Chapter,
B. P. Poddar Institute of Management & Technology

Date: 30th & 31st August, 2013
Venue: B.P. Poddar Institute of Management & Technology
137, V. I. P. Road, Poddar Vihar, Kolkata -52
3
THIRD BIRTHDAY CELEBRATION
SPIE
DATE: 18TH AUGUST, 2013
VENUE: SPIE ROOM, COLLEGE PREMISES
FROM INFANT TO THREE YEARS OF AGE;
WITH ‘SPIE STUDENTS CHAPTER’,
ITS BEEN A GOLDEN AGE...

Happy Birthday
TEACHERS PRESENT IN THE CELEBRATION:
CELEBRATION CAKE
NEW FACES OF SPIE
SENIOR MEMBERS OF SPIE
CUTTING THE CAKE...

BY DR.(PROF) SHILA GHOSH AND SPIE PRESIDENT

BY SENIORS
INDUSTRIAL TOUR

SIMOCO TELECOMMUNICATIONS

DATE: 23\textsuperscript{RD} SEPTEMBER, 2013
VENUE: KOLKATA
This was the 3rd industrial visit organized by the SPIE student chapter, BPPIMT since its birth in 2010. Once again special thanks goes to Prof. (Dr.) Shila Ghosh for taking an authorized permission from the concerned authority for this industrial visit. The visiting team consisted of 60 students and 5 faculty members. As decided, the entire visited team reached our college campus at 11 A.M. and from there, we started our journey.
IT WAS ANOTHER EXPERIENCE FOR ALL THE SPIE MEMBERS AND INDEED A MEMORABLE ONE. THE ACTUAL WORKING OF A TELECOMMUNICATION INDUSTRY HELPED US A LOT FOR ALL THE ELECTRONICS DEPARTMENT STUDENTS. GUIDANCE FROM THE EXPERIENCED WORKERS OF THE PLACE, PRACTICALLY HANDLING OF VARIOUS INSTRUMENTS WHICH TILL DATE WE USED TO READ IN OUR BOOKS ONLY MADE THE VISIT A EVER CHEERISHING EXPERIENCE.
SOME OF THE PRODUCTS OF SIMOCO TELECOMMUNICATIONS:
KHET- A LASER GAME

DATE: 28TH & 29TH SEPTEMBER

VENUE: SPIE ROOM, COLLEGE PREMISES
This is a laser game, more or less like chess where the primary aim is to illuminate the Pharaoh with laser beam by reflecting through mirror pieces.
THR PROGRAMME...

DECORATION

TEACHERS AND PRINCIPLE CAME TO SEE THE GAME

PLAYERS PLAYING THE GAME
## TOTAL EXPENDITURE:

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>NAME OF THE EVENT</th>
<th>EXPENDITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABHIGYAN 2013 :- A QUIZ AND SCIENCE MODEL MAKING COMPETITION</td>
<td>$ 256.167</td>
</tr>
<tr>
<td>2</td>
<td>EAPE 2013 :- NATIONAL CONFERENCE ON EMERGING AREAS OF PHOTONICS &amp; ELECTRONICS</td>
<td>$ 512.334</td>
</tr>
<tr>
<td>3</td>
<td>SPIE BIRTHDAY CELEBRATION :- COMPLETION OF THIRD YEAR OF SPIE</td>
<td>$ 58.552</td>
</tr>
<tr>
<td>4</td>
<td>INDUSTRIAL TOUR :- A TOUR FOR GATHERING PRACTICAL KNOWLEDGE AND EXPERIENCE</td>
<td>$ 292.762</td>
</tr>
<tr>
<td>5</td>
<td>KHET 2013 :- A LAZER GAME</td>
<td>$ 36.595</td>
</tr>
</tbody>
</table>

**AMOUNT GRANTED:**  $1197.43  
**AMOUNT SPENT:**  $1156.41
CONCLUSION:

WHEN ENTHUSIASM AND DETERMINATION IS BUOYED, SUCCESS SHOWES ITS EXISTENCE.
THANK YOU...

REPORT PREPARED BY SOURAV MAJUMDER