



ISP-SPIE Student Chapter ,
International School of Photonics
Cochin University of Science and Technology,
Cochin -22,Kerala,India.

Semi-Annual Report of ISP-SPIE Student Chapter
January 07-June 07

The ISP-SPIE Student chapter has held two General Body Meeting (GBM) and two executive meetings since January 2007. The annual GBM was held on January 18. The annual GBM was presided over by the chapter president Mr. Thomas K.J. The chapter Vice-president, Mr. Dann V.J, welcomed all the chapter members to the GBM. Annual report was presented by the chapter secretary Mr. Lyjo K Joseph. Ms. Jayasree V.K., the chapter treasurer, presented the financial report. The reports were approved by the chapter members.

Elected office bearers

The meeting elected the following office bearers for the coming academic year.



The chapter advisor [second left], president, vice president, and the secretary at the first meeting

- President : Mr. Praveen Cherian Ashok [praveencashok@gmail.com] { Mem # 03031331}
- Vice President : Mr. Nitish Kumar[nitish@cusat.ac.in] { Mem # 03031326}
- Secretary : Mr. Jemy James[jemyjames@cusat.ac.in] {Mem # 03031208}
- Treasurer : Ms.Parvathi M.R.[parvathi82@cusat.ac.in] { Mem # 03080876}

The **executive members** are as follows:

Mr. Thomas K.J. [former president]

Mr. Lyjo K Joseph [former secretary]

Ms. Jayasree V.K.[former treasurer]

Ms. Gopika Ramanandan[Semester V]

Mr. Yedhu Krishna [Semester III]

Mr. Vineeth Benyamin[Semester I]

Current Strength

47-[including PhD research Scholars and M.Sc Students]

The list is included the end of the report.

The new chapter advisor is Prof.V.M.Nandakumaran

The different committees were formed to execute the activities of the chapter in an easier way

Publicity Committee

Jenu Varghese Chacko
Vinneeth Benyamin

Programme committee

Vice President
Varun Kas
Yedhu Krishna

Membership committee

Sreeparvathy Warriar
Gopika Ramanandan

Placement Committee

President
Adil Masood
ThomasK.J.

Amendment of the bye law

One of the most important decisions taken was the amendment of the bye law

of the Chapter: The bye law is as follows

“Membership shall be limited to the students and staff of International school of Photonics herein after known as ISP, and Centre of Excellence in Lasers and Optoelectronic Sciences herein after known as the CELOS. The ISP-SPIE student chapter can give provisional membership to pre-college students to encourage the optics activity in Schools”

Activities

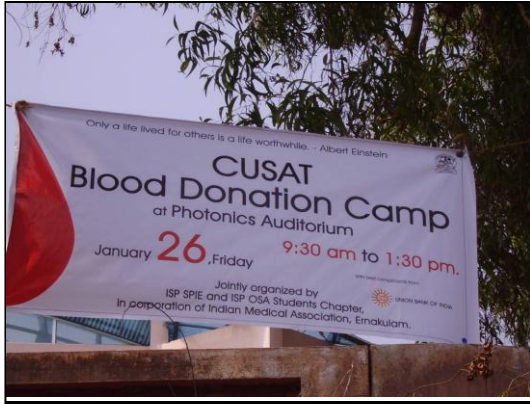
1. Annual Photonics Workshop



The inaugural meeting of the Annual Photonics Workshop 2007

The chapter joined hands with the International School of Photonics and ISP-OSA student chapter in organizing a two day National ‘Annual Photonics Workshop’ on 27th and 28th of February, 2007. About 50 participants comprising of University and college teachers, researchers, scientists took part in the workshop which had its focal theme as ‘Nonlinear optics’.

2. Blood Donation Camp



Blood is precious these days and voluntary blood donation camp has increased the awareness among the student community to donate blood. The ISP-SPIE student chapter in association with the Indian Medical Association Ernakulam branch and ISP-OSA Student Chapter organized the voluntary blood donation camp on 26th January 2007. This was done as part of the social out reach programme of the chapter

3. Optics to School.



Highlight of the Chapter is the Optics to School programme. This programme constitutes visits to various schools by students of **ISP SPIE Student Chapter**. The aim of this programme is to create awareness about optics. The basic principles of Optics will be explained through simple experiments. The students will get an exposure to those experiments which they have read only in their text books. Thus they can have a real taste of science.

4. Evening Lectures

In order to increase the scientific discussion in the chapter, the evening seminar series has been introduced in the chapter, in which the chapter member get a venue to present Seminars on any topic related to physics. It is held on every second and fourth Tuesdays of the month and starts at 5.30 pm in the evening. The list is as follows.

- | | | |
|-----------------------|-----------------------|------------|
| 1. Yedhu Krishna | Spatial Light filters | 24/04/2007 |
| 2. Nishant Kumar | Crystal Optics | 08/05/2007 |
| 3. Sanjay Priyadarshi | Solid State Lasers. | 12/06/2007 |

5. Theodore Maiman Memorial Lecture



To remember the Father of Laser, Theodore Maiman who passed away on May 5th 2007, the commemorative talk was held on the 22nd May Tuesday, evening lecture, by Prof. V. P. N. Nampoori, Director, International School of Photonics and, former staff advisor of the chapter.

6. World Environment Day.



The chapter members celebrated the world environment day on June 5th by planting a tree, by Prof.V.M.Nandakumaran, in the campus and there by invoking a sense of care and passion for Mother Nature.

7. Seminars held

Special Seminar

“Laser based technologies for detection of traces”

by Dr.Jaipul Dudeja-“Laser Science and Technology Centre New Delhi on 19/01/207

“Optical Network”

by Mr.George Mathew Deputy General Manager Southern Telecom Region, BSNL, Ernakulam on 02/02/07

“Fibre Optic Sensors for Structural applications”

by Dr.P.A.M.Basheer, on 04/04/07

“Neuro Linguistic Programming”

by Prof.Thomas Ninan on 07/06/07

 **Lecture Series by**

Prof M.Lakshmanan,
Centre for Nonlinear Dynamics,
Bharatidasan University, Thiruchirappaly.

- 13/03/07-Linear & Nonlinear Dispersive Waves, Solitary waves
- 14/03/07-Theory of Solitons and Optical Solitons
- 15/03/07-Computing via Optical Solitons.

 **General Seminar**

'Polymer optical fiber Bragg Gratings based Fibre Sensors'

by Ms.Sheeba M., Research Scholar 11/01/07

'Diode Pumped solid state lasers'

by Prof P.Radhakrishnan 01/02/07

'Control and Synchronization of Chaos in Various Laser Systems'

by Prof.V.M.Nandakumaran 22/02/07

'Identification of Spectral lines of elements via artificial neural networks'

by Ms.Sarita M., Research Scholar, on 17/05/07

"Nonlinear dynamics of multiple quantum well lasers-chaos and multistability"

by Mr.Jijo P.U Research Scholar and ex-president of the Chapter
on 24-05-2007

"Laser produced Plasma"

by Mr.Dann V.J,Research Scholar and ex vice president of the
chapter on 31/05/07

Achievements



The Chapter member Rose Mary Abraham receiving the Nalanda Endowment Award

The **Nalanda Endowment Award** instituted by Prof. N. G. Devaki for the student who attains highest mark in the first semester of M.Sc Photonics course was awarded to the chapter member Ms. Rose Mary Abraham

Best Poster award

The chapter member Mr. Jinesh Mathew was awarded the Best Poster award for the paper

“Agarose based Humidity sensor” by Jinesh Mathew and Prof P. Radhakrishnan at the National Conference on smart Electro ceramics 2007 held at C-MET Thrissur, Kerala

Papers to be presented

“Laser Emission from dye mixture doped polymer optical fiber”

by Sheeba M, Thomas K.J ,Rajesh M, Nitish K, Praveen C Ashok, VPN Nampoori, Radhakrishnan P accepted at the SPIE conference **Optics + Photonics 2007 San Diego**

“Speckle metrology based study on the effect of chatter on machined surface”

by Praveen Cherian Ashok, Usha Nair, Varun K.A.S, V.N.N.Nampoothiri and Prof.V.P.N.Nampoori accepted at the SPIE conference at **Optics + Photonics 2007 San Diego**

“A Comparative Study of Fiber Optic Humidity Sensors based on Chitosan and Agarose”

by Jinesh Mathew , Thomas K J , and Radhakrishnan P accepted at the 7th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/Pacific Rim 2007), Seoul, Korea

Summer Projects

The Chapter member has shown interest in the summer internship

And following is the list of students who have gone for the summer projects

Rajesh Kumar –Indian Institute of Technology Chennai
Praveen Cherian Ashok - RRCAT Indore
Varun KAS - Institute of Mathematical Science Chennai
Nitish Kumar -BARC Mumbai
Varun Gupta-Indian Institute of Technology Kanpur

Placement cell

The placement cell for the 2003-2008 batch of CELOS has started working to look into the placement of the chapter members.

FINANCIAL STATUS

(As on 12/6/2007)

Chapter bank account	:	A/c No: SB 684 at Union Bank of India Kalamassery, Ernakulam
Balance brought forward As on 18-01-07	:	23151.88
Annual grant from SPIE	:	59021.00
Total (as on 23-05-07) (1USD=40.14 INR approx)	:	82172.88 Rupees (2047.15 USD approx)
Sponsorship from Union Bank of India	:	Rs.1500.00

Expenditure (Indian Rupees)

Seminar	:	802.10
Student chapter GBM	:	534.56
Invited Talks	:	940.00
Travel	:	10.00
Sponsorship for membership of 1 st year M.Sc students	:	3710.00
Placement Cell	:	1000.00
Stationery & Printing charges:	:	227.58
Furniture	:	5000.00
Social outreach programme	:	975.00
Total	:	13199.24 Rupees (328.83 USD approx)
Balance	:	68973.64 Rupees (1718.32 USD approx)

‘A credit card was obtained to make the membership of the chapter members’

Future Activities

1. Website:

A Website with knowledge portal, FAQ section and an exclusive interactive part is to be created by the 1st week of August.

2. Weekend labs

To attract youngsters in the field of Optics the Secondary School students will be invited to the department on Saturdays to have a feel of experiments. They will be asked to setup the experiments and it will be a wonderful experience for them.

3. Finishing School

Finishing school will be established to equip the students passing out from the chapter, in fields like problem solving, experiment setup etc. This will be formed with the help of eminent teachers from the department.

4. Educational films

With the help of available audio-visual facilities, it is proposed to produce and distribute educational films in order to make optics simpler and interesting for the students

5. Sky watch

As the saying goes '**the sky is not the limit**' the chapter is going to establish sky watch programme to help the public as well as the students to have a complete picture of the stars.

6. Optics Seminars

Professors from the field of Optics are to be invited to give the 'Optics seminars' in the coming months.

List of members and their expiry date as on 12/06/07

Name	Expires
Henna Abdulla	30 November 2007
Praveen Ashok	31 January 2008
Harikrishnan Balachandran	30 November 2007
Nithyaja Balan	31 March 2008
Vineeth Benyamin	30 November 2007
Audrey Berrier	31 July 2007
Bishwajeet Bhardwaj	30 November 2007
Ozguncem Bozkulak	31 January 2008
Davids Bruneel	31 January 2008
Jenu Chacko	31 March 2008
Varun Gupta	31 May 2008
V. M. Hadiya	30 November 2007
Ti-Abasi Ifut	31 March 2008
Jemy James	31 August 2007
Thomas Johny	29 February 2008
Siddharth Joshi	30 November 2007
Madanan Kailasnath	31 March 2008
Varun Kas	31 January 2008
Sreeprasad Kezhakedathu	30 November 2007
Kiran Krishnan	30 November 2007
Nitish Kumar	31 December 2007
Saroj Kumar	30 November 2007
J. Linesh	31 May 2008
Jijo Lukose	30 November 2007
Adil Masood	29 February 2008
Jinesh Mathew	30 November 2007

Aasif Mohammed	31 March 2008
Reshma Mohandas	30 November 2007
Krishna Murari	30 November 2007
Sheeba Nambiar	29 February 2008
Vadakedathu Nampoori	30 September 2007
V. Nandakumaran	31 May 2008
Prabhathan Patinharekandy	30 November 2007
Vianney Piron	31 July 2007
Sanjay Priyadarshi	31 March 2008
Deep Punj	30 November 2007
Sujitha Puthukodan	31 March 2008
Gopika Ramanandan	31 December 2007
Parvathi Ramanani layam	31 March 2008
Bikas Ranjan	30 November 2007
Ranjini Reghunandan	31 January 2008
Shafeek Samad	30 November 2007
Deepthi Sasikumar	30 November 2007
Gaurav Sharma	30 November 2007
Urania Van Applebaum	30 April 2008
Sreeparvathi Warri er	29 February 2008
Rajesh Kumar	31 May 2008

Conclusion

The chapter expresses extreme gratitude to all those who have lent a helping hand in the chapter activities.

“Light on the move....

.... Lead Kindly Light”

ISP – SPIE Student Chapter