

**Report on UCD Ireland Student Chapter Activity**  
(during Jan - May 2005)

*The member list of SPIE Student Chapter in this period year is the following:*

- |     |     |         |           |
|-----|-----|---------|-----------|
| 1.  | Mr. | Ciara   | Close     |
| 2.  | Ms. | Damien  | Kelly     |
| 3.  | Mr. | David   | Monaghan  |
| 4.  | Mr. | Gavin   | Mulvihill |
| 5.  | Mr. | James   | Egan      |
| 6.  | Mr. | John    | Ging      |
| 7.  | Mr. | John    | Kelly     |
| 8.  | Mr. | John    | White     |
| 9.  | Mr. | Kenneth | Fahy      |
| 10. | Mr. | Kenneth | Jackson   |
| 11. | Mr. | Lucy    | Liu       |
| 12. | Mr. | Lynn    | Gaynor    |
| 13. | Ms. | Michael | Gleeson   |
| 14. | Mr. | Michael | Lysaght   |
| 15. | Mr. | Patrick | Hayden    |
| 16. | Mr. | Paul    | Sheridan  |
| 17. | Mr. | Robert  | Patten    |
| 18. | Mr. | Sean    | O'Duill   |

*List of officers:*

- |    |                        |   |
|----|------------------------|---|
| 1. | President,             | Mr. David Monaghan<br><a href="mailto:david.monaghan@ucd.ie">david.monaghan@ucd.ie</a>    |
| 2. | Vice-President,        | Mr. Damien Kelly<br><a href="mailto:mgleeson@ee.ucd.ie">mgleeson@ee.ucd.ie</a>            |
| 3. | Secretary,             | Ms. Michael Lysaght<br><a href="mailto:michael.lysaght@ucd.ie">michael.lysaght@ucd.ie</a> |
| 4. | Treasurer              | Mr. John Kelly<br><a href="mailto:john.Kelly@ucd.ie">john.Kelly@ucd.ie</a>                |
| 5. | Women's Officer        | Ms. Ciara Close<br><a href="mailto:Ciara.close@ee.ucd.ie">Ciara.close@ee.ucd.ie</a>       |
| 6. | Entertainments Officer | Damien Kelly<br><a href="mailto:Damien.Kelly@ucd.ie">Damien.Kelly@ucd.ie</a>              |

## ***Chapter Activities:***

### **1. Guest Lecturers:**

We had no guest lectures for this have of the year.

### **2. Attendance at SPIE events:**

- I. “SPIE Europe International Symposium Opto Ireland 4 to 6 April 2005 Dublin Ireland”

Royal Dublin Society, Dublin Ireland.

All chapter members attended this event and the following members, along with members from the DCU chapter, worked at the conference and in doing so received free fees for the conference and a years membership to SPIE.

Ciara Close  
Damien Kelly  
David Monaghan  
Gavin Mulvihill  
James Eagan  
John Kelly  
Lynn Gaynor  
Michael Gleeson  
Michael Lysaght  
Patrick Hayden  
Sean O'Duill

View the newsletter :

[http://spie.org/Membership/pdfs/OptoIre\\_Student.pdf](http://spie.org/Membership/pdfs/OptoIre_Student.pdf)

All of the following students gave an oral or poster presentation or both during the course of the conference. Below is a list of the presentations.

*Optical Information Systems II*  
*Thursday August 5<sup>th</sup> 2004*  
*Session 6*

- “Control and Measurement of the Physical Properties in Acrylamide Based Photopolymer Materials,” C. E. Close, M. R. Gleeson, F. T. O’Neill, J.V. Kelly, J. T. Sheridan
- “Scaled Optical Fourier Transform in Cylindrical Coordinates” D. P. Kelly, J. T. Sheridan, W. T. Rhodes
- “Applications of Spatial Light Modulators in Optical Signal Processing Systems” D. S. Monaghan, U. Gopinathan, B. M. Hennelly, D. P. Kelly, T. J. Naughton, J. T. Sheridan
- “A New Data Diffraction Method for Digital Signal Analysis and Optoelectronic-Fiber System-Digital Design” N.D. McMillan, J. Egan, D. Denieffe, S. Riedel, K. Tiernan, D.G.E. McMillan, G. Farrell, D. Kennedy, G. Doyle, G. McGowanA. Augousti, J. Mason
- “Applying New Data-Entropy and Data-Scatter Methods for Optical Digital Signal Analysis”, N.D. McMillan, J. Egan, D. Denieffe, S. Riedel, K. Tiernan, G. McGowan, G Farrell
- “A practical numerical theory for light propagation in Erbium-Doped Waveguide Amplifiers”, J.A. Ging, R.F. O’Dowd
- “Temporal and non-ideal behaviour in photopolymers”, J.V. Kelly, M. R. Gleeson, C. E. Close, F. T. O’Neill, J. T. Sheridan, S. Gallego, C. Neipp

- “EUV Spectroscopy of Xenon Ions Created Using an Electron Beam Ion Trap”, K. Fahy, E. Sokell, G. O. Sullivan, A. Cummings, A. Aguilar, J. D. Gillaspay, J. M. Pomeroy, J. N. Tan.
- “Linear Canonical Transforms, and Speckle Based Metrology”, L. Liu, D. P. Kelly, B. M. Hennelly, J. E. Ward, R. F. Patten, J. T. Sheridan
- “The evolution of 4d photoabsorption in tellurium with increasing ionisation”, L. Gaynor, N. Murphy, A. Cummings, G. O'Sullivan, M. Lysaght, P. Hayden, D. Kilbane, J. T. Costello, E. Kennedy, P. van Kampen
- “The Impact of Inhibition Processes during Grating Formation in Photopolymer Materials”, M. R. Gleeson, J. V. Kelly, C. E. Close, F. T. O'Neill, J. T. Sheridan
- "EUV laser produced plasma source development for lithography", P. Hayden, P. Sheridan, G. O'Sullivan, P. Dunne, L. Gaynor, N. Murphy, A. Cummings
- "Photoabsorption spectra of a laser produced Sn plasma", M. Lysaght, D. Kilbane, A. Cummings, N. Murphy, P. Dunne, G. O'Sullivan, L. Gaynor, P. van Kampen, J. T. Costello, E. T. Kennedy
- "FM response of a tunable laser incorporating thermal effects," G. Mulvihill and R. O'Dowd
- "Effects of fiber cross phase modulation in wavelength division multiplexed systems which employ simultaneous amplitude and frequency modulation", S. O'Duill, R. F. O'Dowd

3. *Financial Information:*

As of yet we have claimed no money from SPIE and we have raised no money.

A travel scholarship of 1000 dollars was obtained for David Monaghan to attend the 50<sup>th</sup> SPIE International Conference in San Diego

We Received 700 dollars for chapter funding which we spend during the course of Opto-Ireland on student activities.