

**\*\*Deadline: 28 June \*\***

**2007-08 Annual Report for:** Lasers and Electro-Optics Society (LEOS) Benelux Chapter

**I. Basic Information:**

A. Reporting Chapter Chairman:

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B. Joint Chapter?  Yes  No

If joint, please list names of other participating societies.

C. Number of area LEOS members as of approximately May 30 (contained in geographical information of the LEOS Membership Directory):

	<u>Number</u>	<u>Percent</u>
Previous Year	Unknown	
Current Year	Unknown	
Change		

D. Total Number of Technical Meetings:

This Year: 20

Last Year: 21

E. Average Technical Meeting Attendance

	<u>This Year</u>		<u>Last Year</u>		<u>Number % Change</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
Total:	<u>44</u>	<u>98</u>	<u>45</u>	<u>100</u>	<u>-2</u>
IEEE:	<u>26</u>	<u></u>	<u>21</u>	<u></u>	<u></u>
LEOS:	<u>18</u>	<u></u>	<u>14</u>	<u></u>	<u></u>

F. Chapter funds at the beginning of the year: Eur 14164

G. Total Expenditures: Eur 2593

Total Income: Eur 3128

End of Year Balance: Eur 14682

H. Officers (new officer list)

On a separate sheet of paper list the Chapter Officers (name, address, phone, fax, email) This information will be used to update the Chapter web site on the LEOS Home Page. Include your URL if your chapter has a home page.

I. Check List:

- Sent L-31 forms to IEEE (minimum of 2/yr required)  
<http://www.ieee.org/organizations/rab/scs/L-31.html>
- Sent nomination for LEOS Awards -Tab 6 or  
<http://www.ieee.org/leos/awards>
- Nominated member for Senior Member grade  
<http://www.ieee.org/membership/upgrade.html>

II. Overview of Basic Chapter Activities:

List

Activity Type	Title/Speaker/Location/Date	Attendance LEOS/IEEE/Tot	Joint Activity Sponsors
Colloquium	"Some applications of optical processing in communications systems and networks"/Prof. Didier Erasme(Telecom Paris)/Eindhoven University of Technology, 6/13/07	8/12/29	
Colloquium	"Photonic Sensor Solutions for 21st Century"/Prof. Dr. Nabeel Riza (CREOL-University of Central Florida)/Eindhoven University of Technology, 07/18/07	12/18/34	
Colloquium	"Light output enhancement of GaN-based light emitting diode (LED) by using nano-imprint lithography and microfluidic technique"/Dr. Zhimin Wang (Peking University)/Eindhoven University of Technology, 07/11/07	7/11/19	
Colloquium	"Solid-state cavity QED, and Optical cooling of micro-mechanical systems"/Dr. Dirk Bouwmeester (UCSB, Leiden University)/Eindhoven University of Technology, 08/17/07	13/20/32	
Colloquium	"Circuits and materials research activities for use in OTDM network systems starting from 160 Gb/s"/Dr. Yoshiyasu Ueno (Univ. of Electro-Communications, Tokyo)/Eindhoven University of Technology, 09/07/07	15/23/29	
Colloquium	"Coherent Optical MIMO-OFDM"/Dr. William Shieh (University of Melbourne)/Eindhoven University of Technology, 09/24/07	13/20/30	
Colloquium	"High-Power, Wide Tuning Range External Cavity Lasers with integrated Functional Section"/Dr. Mads Loenstrup Nielsen and Dr. Shinya Sudo (NEC System Devices Research Laboratories, Japan)/Eindhoven University of Technology, 09/25/07	13/20/30	See below. *)
colloquium	"Nanowires and nanolasers: how small can a laser	20/30/40	

	be?"/Professor Cun-Zheng Ning (Arizona State University)/Eindhoven University of Technology, 10/25/07		
Colloquium	"Negative refraction at visible frequencies: towards a (nearly) perfect lens"/Jennifer Dionne (California Institute of Technology)/Eindhoven University of Technology, 11/14/07	4/6/20	
Symposium	"Nonlinear Fiber Optics and Supercontinuum Generation -- New Fibers, New Opportunities"/Prof. John M. Dudley(Université de Franche-Comté, Besançon)/Bruxelles, Belgium, 12/17/07	50/75/140	*)
Symposium	"VLSI Photonics: Visions, Challenges and Progresses"/Prof El Hang Lee (University Incheon City, South Korea)/ Bruxelles, Belgium, 12/18/07	50/75/140	*)
Symposium	"Solid State Lighting - The Road Ahead"/Dr. Hans Nikol (Innovation Philips Lighting B.V.) /Bruxelles, Belgium, 12/18/07	50/75/140	*)
Administrative	LEOS Benelux board meeting	10/10/10	
Colloquium	"Application-aware networking: why and how"/Dr Antonio Liotta (University of Essex)/Eindhoven University of Technology, 12/20/07	10/15/20	
Colloquium	"Recent progress at Alcatel-Thales III-V Lab in 1.55µm quantum dash and quantum dot lasers for direct modulation and mode-locking"/Dr Frédéric van Dijk (Alcatel-Thales III-V Lab)/Eindhoven University of Technology, 01/09/08	15/23/35	
Colloquium	"Is there a Future for Multimode Optical Fibre in Communications?"/Prof. dr. Ian H White (University of Cambridge)/Eindhoven University of Technology, 01/14/08	17/26/40	
Colloquium	"THz photonics"/Professor Alwyn J. Seeds (University College London)/Eindhoven University of Technology, 03/04/08	15/23/35	
Colloquium	"The New DTU Fotonik and Some Selected Telecom Projects"/Prof. Palle Jeppesen (COM DTU)/Eindhoven University of Technology, 03/19/08	12/18/30	
Workshop	"Many-Body Effects in Semiconductor Lasers"/Weng Chow (Sandia National Laboratories)/Vrije Universiteit Brussel, 05/30/08	15/15/15	*)
Workshop	"Fiber Bragg Gratings and Their Applications in Sensing"/Christophe Caucheteur (Faculté Polytechnique de Mons)/ Vrije Universiteit Brussel, 05/30/08	15/15/15	*)
Colloquium	"Trends in Si Process Technology"/Carel van der Poel (NXP)/Eindhoven University of Technology, 05/22/08	10/15/35	

\*) Organized in collaboration with IEEE/LEOS Benelux Student Chapter

### III. List most significant chapter improvements over last year (*Most Improved Chapter Award*)

### IV. List workshops, symposia, educational programs, consulting programs, job fairs etc. (*Most Innovative Chapter Award*)

1. The Benelux chapter organized a one and half day symposium in collaboration with the Benelux student chapter. A special session was devoted to the 30<sup>th</sup> LEOS anniversary.

2. A one day workshop was organized in collaboration with the Benelux student chapter.
3. A large number of colloquia were held (see the list above), with renowned speakers, about topics in the LEOS fields of interest.
4. This year, the LEOS Benelux chapter supported the organization of the 14<sup>th</sup> European Conference on Integrated Optics (ECIO'08).
5. A very successful half-day workshop on Industrial Manufacturing and Business Models for Photonic ICs was organized jointly by the European network of excellence ePIXnet and ECIO, with support of the LEOS Benelux chapter.

**V. Number of Members elevated to Senior-Member grade (New Award).**

**VI. Miscellaneous Information/Elaboration on any of the above entries (see below)**

Roel Baets (Ghent University, Belgium) has become the **associate vice-president Membership** (region 8).

Three members of the LEOS Benelux were awarded a **LEOS graduate fellowship**: María García Larrodé, Joris Van Campenhout and Dirk van den Borne.

**VII. "Best Practices" and Pre-college Programs**

Large part of the vitality of our chapter is due to the active involvement of a large number of students (Ph.D. as well as master). They can easily become a LEOS member when they attend the annual symposium, which is the major local event in the Benelux region in the LEOS related fields.

This year's symposium was a one and half day event with over 140 attendees and 66 scientific contributions, comprising 3 invited papers, 15 contributed papers selected for oral presentation and 48 poster presentations. The symposium proceedings are available in printed form at the event itself, and are also publicly accessible through the chapter website ([leosbenelux.org](http://leosbenelux.org)). Many of the contributions are presented by students. The edition of proceedings of all contributions gives an additional stimulus, as academic contributors are interested in opportunities for scientific output. The poster session was linked to a Student Poster Contest, which has rewarded the best poster presented by a student as a first author.

The Benelux chapter has a separate student chapter, started in 2004, that organizes student-specific activities, such as company visits. In addition, the student chapter is co-organizing our annual symposium, as well as the annual workshop. This year's workshop was held in Brussels and had two invited speakers, detailed in the above table, and 5 contributed papers.

The board of the Benelux Chapter consists of a good mix of engineers and scientists from industry as well as academic institutions including two active student members. Over the 12 years of existence of the Chapter there is a continuous refreshing of board members, sufficiently slow to conserve experience and knowledge, but sufficiently rapid to avoid too much routine and to stimulate renewal.

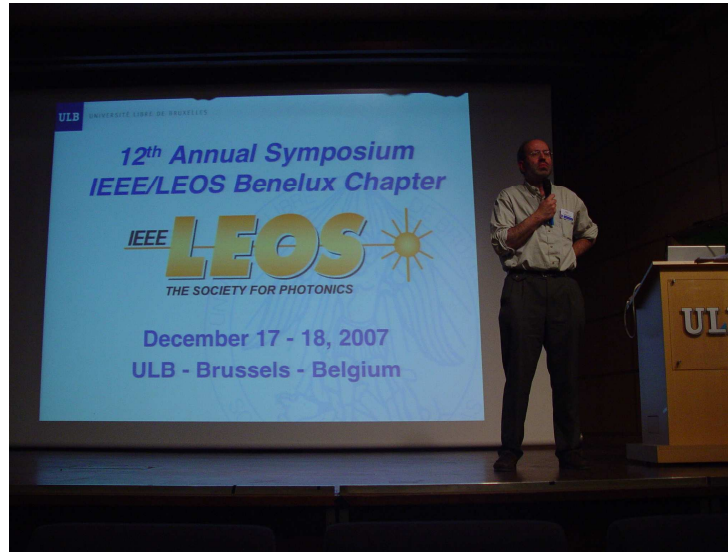
We wish to have our chapter considered for the following chapter awards:

- Chapter of the Year (All information)
- Best Membership Percentage Increase (Part I.C.)
- Most Improved Chapter (Part III)
- Most Innovative Chapter Activities (Part IV)
- Most Senior Member Elevations (Part V)

Chapter Chair Signature:



## VI. Miscellaneous Information/Elaboration on any of the above entries



We organized our 12<sup>th</sup> annual symposium as a one day and half event with an evening session and a complete day session. The symposium has been managed such that four talks were presented on December 17<sup>th</sup>, including an invited talk:

- “Nonlinear Fiber Optics and Supercontinuum Generation -- New Fibers, New Opportunities”, Prof. John M. Dudley (CNRS Institut FEMTO-ST Université de Franche-Comté, Besançon, France)

This was followed by poster presentations and a walking dinner.

The next day session was balanced with oral (15) and posters presentations (48) and started with an invited talk by a LEOS distinguished lecturer:

- “VLSI Photonics: Visions, Challenges and Progresses” Prof. El-Hang Lee (Graduate School of Information Technology and Telecommunications, INHA University Incheon City, South Korea)

After the first invited speaker, a special session started to celebrate the 30<sup>th</sup> Anniversary of LEOS:

- Introduction: Prof. Roel Baets (Universiteit Gent)
- “Solid State Lighting - The Road Ahead”, Dr Hans Nikol (BU Solid State Lighting / Innovation Philips Lighting B.V.)



As usual, the emphasis has been put on exchange between students, professionals, professors, which is best facilitated through the poster sessions that are combined with lunch and drinks. The large number of papers presented and their high quality demonstrate the vitality of the Benelux chapter. The printed version of the proceedings are distributed among the participants, the electronic version is freely accessible on the Benelux Chapter website ([leosbenelux.org](http://leosbenelux.org)).

Twelfth Annual Symposium of the IEEE/LEOS Benelux Chapter

Meeting date: December 17-18, 2007

Venue: Université Libre de Bruxelles, Belgium

Admission charge: Yes

Meeting Category: Technical

Guests: 4 guest speakers

Total: 140 participants

Pres. Officer: Philippe Emplit

## **Board of LEOS- Benelux 2005-2006** <http://leosbenelux.org/>

### **Chair:**

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### **Treasurer:**

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### **Other board members and members of the advisory board:**

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