



March 12 – 16, 2000

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# Advance Program

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## Committees

### ■ Conference Chair

Peter Günter (ETH Zürich, Switzerland)

### ■ Co-Chairs

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Mark Kuzyk, American Chair	(Washington State U., USA)
Hiroyuki Sasabe, Pacific Chair	(CIST, Japan)

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Seth Marder	(USA)	Kenneth Wynne	(USA)
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Hachiro Nakanishi	(Japan)		

### ■ Conference Secretariat

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	Web: <a href="http://www.icono5.ethz.ch">http://www.icono5.ethz.ch</a>

### ■ Local Organizing Committee

Ivan Biaggio (ETH)	Conference Program and Information
Christian Bosshard (ETH)	Secretary General
François Diederich (ETH)	
Peter Günter (ETH)	Conference Chair
Carolina Medrano (ETH)	Treasurer
Germano Montemezzani (ETH)	Local Arrangements
Ulrich Suter (ETH)	

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## Scope

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Optical wave manipulation is one of the future technologies for optical processing and communication. Organic nonlinear optical materials are thought to have a key role in those technologies, and a lot of effort to develop new molecules/materials as well as fundamental understanding is under way throughout the world.

ICONO'5 is the fifth International Conference on Organic Nonlinear Optics, a conference series that was started in Val Thorens, France, in January 1994. The conference aims at achieving international exchange of information and cooperation among researchers in academia, government laboratories, and industries, and to stimulate growth in the field of organic nonlinear optics. It will provide a forum for discussion of all aspects of nonlinear optics, e.g. new phenomena, novel optoelectronic devices, and advanced organic materials.

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## Location

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### ■ Davos, Switzerland

DAVOS is one of the largest and most impressive holiday, sports, and convention resorts in Switzerland. It is located in the south-eastern part of Switzerland in the heart of attractive surroundings and spectacular alpine atmosphere. You can find all the amenities of a city in the middle of a breathtaking mountain scenery, surrounded by the wonders of nature. Davos is also famous as a congress town. Among many other conferences, each February it hosts the world famous Annual Meeting of the World Economic Forum. Please look up the enclosed information booklet or visit the Davos website at <http://www.davos.ch> for additional tourist information.

### Important Deadlines

#### ■ Preregistration January 15, 2000

The discounted registration fee is only available for participants registering before this deadline. Additional registration forms are available on the conference web site.

#### ■ Hotel Reservation Form January 15, 2000

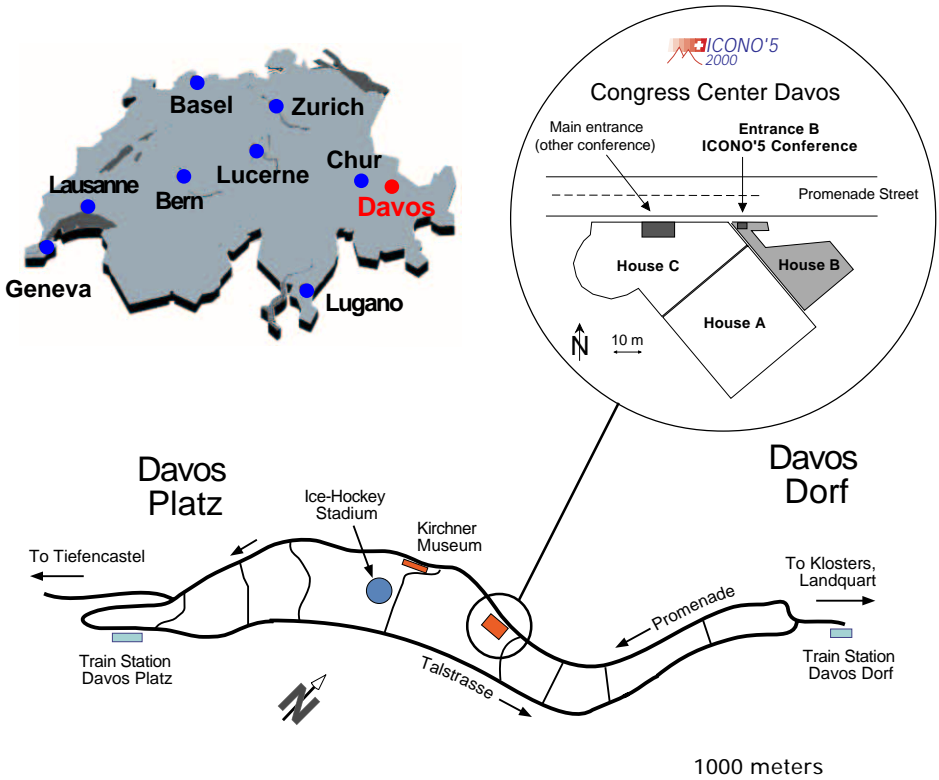
Hotel booking forms must be sent to the Davos Tourist Office before this deadline. Additional forms are available on the conference web site.

#### ■ Postdeadline Contributions February 15, 2000

A limited number of postdeadline contributions will be accepted. Refer to the general information section for instructions on postdeadline paper submissions.

## ■ Congress Center

The DAVOS CONGRESS CENTER (Promenade 92) is within 10 minutes walking distance from most hotels in Davos. It is situated approximately half-way between the town quarters DAVOS DORF and DAVOS PLATZ (see map). The congress center is divided into three independent sections. The ICONO'5 conference will be held in *section (House) B*, which is accessed from the Davos main street (Promenade) through the entrance marked B. Several bus lines of the Davos public transport system run along the Promenade street and all of them stop in front of the Congress Center (stop called Hallenbad/Kongresszentrum). Registration will start on Sunday, March 12, at 4 pm.



## ■ Climate

The town of DAVOS is situated at an elevation of 1560 meters above sea level. Snow coverage is very likely during ICONO'5. Average daily maximum and minimum temperatures in March are +5 °C (41 °F) and -4 °C (25 °F), respectively. In March you may expect about 15 sunny days and 10 days with significant precipitation.

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## General Information

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The invited oral contributions will be presented at plenary sessions during the morning and in the afternoon. All contributed and postdeadline papers are in the form of posters. Three two-and-a-half-hour long poster sessions are scheduled in the late afternoons. In addition, a round table panel discussion is scheduled on Tuesday evening. There will be a free afternoon where you may want to experience some of the impressive and wide ski slopes of the Davos area. The social program includes a welcome reception on Sunday evening, a conference reception on Monday evening in the renowned Kirchner Museum, and the conference dinner on Wednesday evening.

### ■ Oral Talks

The length of each invited oral talk is 25 minutes plus 5 minutes for discussions.

### ■ Poster sessions

All contributed papers as well as the postdeadline papers are scheduled to be presented in the three afternoon poster sessions. The available area for the posters is 150 cm (59 in.) wide by 120 cm (47 in.) high (landscape format). Contributed posters will be on display a full day. They must be mounted at the latest during the morning coffee break and must be removed after the end of each afternoon poster session.

### ■ Postdeadline Contributions

A limited number of postdeadline contributions will be accepted. If you wish to submit a postdeadline paper you must proceed as follows. Fill in the online form on the web (<http://www.icono5.ethz.ch/abstracts.html>) and submit a two-pages long extended abstract by February 15, 2000. Templates for the extended abstract can be found on the ICONO'5 web page (<http://www.icono5.ethz.ch/extabsr.html>). Extended abstracts reaching the Conference Secretariat after February 15 will no longer be considered. Notifications of acceptance will be sent before February 25, 2000 by *e-mail only*.

### ■ Conference Registration

A registration form was included with the final circular. In case you did not do so yet, please complete the Registration Form (an additional copy is included) and mail or fax it to the Conference Secretariat by January 15, 2000. The registration fee includes the registration, the welcome party, the conference reception at the Kirchner Museum, and the conference dinner as well as the refreshments during coffee breaks. The fee for accompanying persons includes welcome party, conference reception, and conference dinner.

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### ■ Tutorial

Prior to ICONO'5 in Davos (March 12-16, 2000), there will be a tutorial course at the Swiss Federal Institute of Technology (ETH-Hönggerberg) organized by the Nonlinear Optics Laboratory of the Institute of Quantum Electronics. The course will take place from Thursday, March 9, 9:00 until Saturday, March 11, 12:00. Lectures will be presented on Thursday and Friday by top experts from all over the world. On Saturday, March 11, 9:00-12:00 there will be a visit of the Nonlinear Optics Laboratory with demonstrations. Please consult the enclosed leaflet for further information.

### ■ Proceedings

Proceedings of ICONO'5 will be published in a special issue of the journal *Nonlinear Optics* by Gordon and Breach. They will be published from Camera-Ready Copy (CRC) to be provided by the authors. Instructions for the preparation of the CRC manuscripts can be found at: <http://www.gbhap.com/journals/146/CRC/146-crcx.htm>. Participants can write up to 6 pages, invited speakers up to 12 pages. The manuscripts have to be submitted when registering on-site for the conference, but by 10 am on Monday, March 13, at the latest. They will be refereed during the conference and given back to the authors before the end of the conference when necessary.

### ■ Internet access

A limited number of internet stations will be made available.

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## Housing and Travel

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### ■ Hotel reservations

All hotel reservations will be made through the Davos Tourist Office, Convention Department, Davos, Switzerland. There is a wide range of rooms prereserved for the ICONO'5 conference, ranging from DeLuxe (5 stars) to C (2-3 stars). All room prices include breakfast as well as the Davos Guest Card entitling to unlimited free travel on all public transport (bus and train) in the Davos region during your stay. Arrangements for half-pension (breakfast and dinner) can be made with the individual hotels and must be indicated when you reserve your hotel. The enclosed *Hotel Booking Form* has to be mailed or faxed to the Davos Tourist Office by January 15, 2000.

### ■ Transportation

Davos is easily reached by road or by rail. 3 hours by car or train from Zürich's International Airport. From Munich or Milan, Davos is no longer than a 4 hour drive away.

### ■ Air Travelers

Zürich International Airport is connected by direct flights with all European capitals and several North American and Asian major cities. The best way to reach Davos from the Airport is by train. There is approximately one connection per hour between Zürich Airport and Davos. Trains can be boarded directly at the airport. Most connections require a change of train at Zürich Main Station (Hauptbahnhof) and in Landquart. Train travelers may leave the train at the station Davos Dorf.

### ■ Car Travelers

Davos is connected via Landquart by the European motorway network E4. Car drivers must be prepared for possible winterly driving conditions.

### ■ Train Fares

The cost of a train round-trip ticket between Zürich-Airport and Davos is CHF 153.- (first class) or CHF 92.- (second class). Prices are subject to change.

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## ■ Train schedule

The following tables give the most important train connections between Zürich Airport and Davos. Additional connections may be looked up directly on the Swiss Railroad Company Web page ([http://www.sbb.ch/index\\_e.htm](http://www.sbb.ch/index_e.htm)).

Saturday, March 11 and Sunday, March 12

Zürich Airport (Departure)		Zürich Main Station (Departure)		Landquart (Departure)		Davos Dorf (Arrival)	Davos Platz (Arrival)	Traveling time (hours)
08.10	(IC 714)	08.33	(IC 757)	09.45	(D 31)	10.46	10.51	2.41
08.43	(IC 814)	09.10	(IR 1759)	10.42	(D 35)	11.48	11.53	3.10
09.43	(IC 916)	10.10	(IR 763)	11.42	(D 41)	12.46	12.51	3.08
10.43	(IC 918)	11.10	(IR 1765)	12.42	(D 45)	13.46	13.51	3.08
11.47	(IC 10767)	12.09	(IC 10767)	13.42	(D 51)	14.46	14.51	3.04
12.43	(IC 924)	13.10	(IR 1769)	14.42	(D 55)	15.46	15.51	3.08
13.43	(IC 926)	14.10	(IR 773)	15.42	(D 61)	16.48	16.53	3.10
14.43	(IC 828)	15.10	(EC 103)	16.42	(D 65)	17.55	18.00	3.17
16.13	(IC 732)	16.33	(IC 779)	17.45	(D 71)	18.55	19.00	2.47
16.43	(IC 932)	17.10	(EC 3)	18.42	(D 75)	19.46	19.51	3.08
17.43	(IC 834)	18.10	(IR 783)	19.45	(REG 81)	20.52	20.57	3.14
18.43	(IC 936)	19.10	(IR 1787)	20.45	(REG 85)	21.52	21.57	3.14
19.43	(IC 938)	20.10	(EC 97)	21.45	(REG 91)	22.52	22.57	3.14
20.43	(IC 942)	21.10	(IR 1791)	22.45	(REG 95)	23.52	23.57	3.14

If the time is in boldface letters it means that a change of train is required at that station. Codes in parenthesis give the number of the train.

Thursday, March 16

Davos Platz (Departure)		Davos Dorf (Departure)		Landquart (Departure)		Zürich Main Station (Departure)	Zürich Airport (Arrival)	Traveling time (hours)
12.09	(D 44)	12.13	13.26	(EC 96)	15.04	(IR 1974)	15.13	3.04
13.07	(D 50)	13.11	14.26	(IR 782)	16.04	(IR 1976)	16.13	3.06
14.09	(D 54)	13.13	15.26	(IR 1784)	17.04	(IR 1976)	17.13	3.04
15.07	(D 60)	15.11	16.22	(IC 786)	17.40	(IC 729)	17.51	2.44
16.09	(D 64)	16.13	17.26	(IR 1788)	19.04	(IR 1984)	19.13	3.04
17.09	(D 70)	17.13	18.22	(IC 792)	19.40	(IC 737)	19.51	2.42
18.09	(D 74)	18.13	19.26	(IR 1792)	21.07	(IC 941)	21.16	3.07

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## Sponsors

We gratefully acknowledge generous support from:

- Swiss National Science Foundation  
Wildhainweg 20, P.O. Box, CH-3001 Berne, Switzerland  
<http://www.snf.ch>
- Swiss Federal Institute of Technology (ETH)  
<http://www.ethz.ch>
- Nonlinear Optics Laboratory  
ETH Zürich, Switzerland  
<http://nlo-serv.ethz.ch>
- Gordon and Breach Science Publishers  
<http://www.gbhap.com>
- GMP SA  
19, av. de Baumettes/CP, CH-1020 Renens 1, Switzerland  
<http://www.gmp.ch>
- Rainbow Photonics AG  
Einsteinstrasse HPF E7, CH-8093 Zürich, Switzerland  
<http://www.rainbowphotonics.ethz.ch>

## Exhibitors

The following companies have agreed to take part in the exhibition:

- Gordon and Breach Science Publishers  
<http://www.gbhap.com>
  - Springer-Verlag  
Tiergartenstrasse 17, D-69121 Heidelberg, Germany  
<http://www.springer.de>
  - Sopra  
26 rue Pierre Joigneaux, F-92170 Bois Colombe, France  
<http://www.sopra-sa.com>
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Monday, March 13

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9:00-10:30 Future Photonic Applications

- 8.30-9.00 Welcome Address
- 9:00-9:30 Advanced telecommunication components and materials research in Europe  
*Hans Melchior*
- 9:30-10.00 Optics and applications of photo-aligned liquid crystalline surfaces  
*Martin Schadt*
- 10:00-10:30 Nonlinear optical spectroscopic studies of polymer surfaces and interfaces  
*Yuen-Ron Shen*

//////////////////////////////////// 10:30-11:00 Coffee/Tee //////////////////////////////////////

11:00-12:30 Electro-optic Polymers

- 11:00-11:30 Production of high bandwidth polymeric electro-optic modulators with  $V_{\pi}$  voltages of less than 1 Volt  
*Larry Dalton*
- 11:30-12:00 Organic-inorganic hybrid NLO materials with different chromophore bonding directions  
*Kwang-Sup Lee, Tae-Dong Kim, Yu Hong Min, and Choon Sup Yoon*
- 12:00-12:30 Refractive index volume grating fabrication by photo-bleaching of azo-dye functionalized polymer waveguides  
*Toshikuni Kaino, Tomoaki Shibata, and Toshiaki Hattori*

//////////////////////////////////// 12:30-14.30 Lunch //////////////////////////////////////

14:30-16:30 Optical Memories

- 14:30-15:00 Memory applications of novel organic materials  
*D. Haarer*
- 15:00-15.30 High density, high performance optical data storage via volume holography: Viability at last?  
*William L. Wilson*
- 15:30-16:00 Recent advances in fast photorefractive polymers and bright OLEDs  
*Nasser Peyghambarian*
- 16:00-16:30 Organic photorefractive materials with sub-millisecond response and large dynamic range  
*K. Meerholz, E. Mecher, R. Bittner, F. Gallego, and H.H. Hoerhold*

16.30-19.00 Poster Session I (page 14)

19.30-21.30 Conference Reception (Kirchner Museum)

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8:30-10:30 High Nonlinearity Organic Crystals

- 8:30-9:00 Frequency conversion through parametric interaction and cascaded processes in a NPP crystal  
*Gian Piero Banfi, P. K. Datta, V. Degiorgio, D. Fortusini, E. E. A. Shepherd, and J. N. Sherwood*
- 9:00-9:30 Organic crystal growth and epitaxy  
*Norbert Karl*
- 9:30-10:00 Growth of high quality DAST crystals by using slope nucleation method  
*Yusuke Mori*
- 10:00-10:30 Molecular engineering of the DAST family  
*Hachiro Nakanishi*

////////////////////// **10:30-11:00 Coffee/Tee** ////////////////////////

11:00-12:30 Nonlinear Optical Polymers

- 11:00-11:30 Photodegradation of various electro-optic polymer families  
*George I. Stegeman, A. Galvan-Gonzales, M. Canva, R. Twieg, T. C. Kowalczyk, X. Q. Zhang, H. S. Lackritz, S. Marder, S. Thayumanavan, K. P. Chan, A. K.-Y. Jen, and X. Wu*
- 11:30-12:00 Nonlinear optics and photorefractivity of polymer composites  
*N. Kim, W. S. Jahng, S. Song, D.-H. Shin, H. Chun, and M. Joo*
- 12:00-12:30 Periodically structured polymer films and applications  
*J.-M. Nunzi, L. Rocha, V. Dumarcher, C. Denis, P. Raimond, C. Fiorini, F. Sobel, B. Sahraoui, and D. Gindre*

////////////////////// **12:30-14.30 Lunch** ////////////////////////

16.30-19.00 Poster Session II (page 18)

19.00-20.00 Round Table Discussion

“ The Future of Electro-optical Polymers ”

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Wednesday, March 15

8:30-10:30 Third Order Nonlinear Optics

- 8:30-9:00 Applications of molecules with large two-photon absorption cross sections  
*V. Alain, S. Ananthavel, J. K. Cammack, M. Halik, S. Kuebler, S. Marder, J. W. Perry, M. Rumi, S. Thayumanavan, W. Wenselers, B. Cumpston, M. Dickinson, S. E. Fraser, A. Heikal, and M. Lipson*
- 9:00-9:30 Dimensionality aspects for two-photon absorption in conjugated chromophores  
*Jean-Luc Brédas, H. Vogel, J. W. Perry, S. R. Marder, and D. Beljonne*
- 9:30-10:00 Waveguides of PPV-derivatives with large cubic nonlinearities  
*Christoph Bubeck*
- 10:00-10:30 Multifunctional macrocycles and polymers with carbazole oligomeric units  
*Tatsuo Wada, Atsushi Gunji, Yoshihiro Imase, Tetsuya Aoyama, Hiromi Kimura-Suda, and Hiroyuki Sasabe*

////////////////////// **10:30-11:00 Coffee/Tee** ////////////////////////

11:00-12:30 Organic Semiconductors and Light Emitting Diodes

- 11:00-11:30 The current in organic light-emitting diodes  
*M. Schworer*
- 11:30-12:00 Semiconducting polymers as materials for photonics  
*Alan J. Heeger*
- 12:00-12:30 Charge transport in oligothiophene single crystals  
*B. Batlogg, J. H. Schön, and Ch. Kloc*

////////////////////// **12:30-14.30 Lunch** ////////////////////////

14:30-16:30 Novel Molecules

- 14:30-15:00 Hypercubic octupolar molecular crystals for quadratic nonlinear optics  
*Joseph Zyss*
- 15:00-15:30 Molecular chirality as a tool for second-order nonlinear optics  
*André Persoons, M. Kauranen, N. Bussin, S. Van Elshocht, T. Verbiest, T. J. Katz, K. E. S. Phillips, and C. Nuckolls*
-

15.30:16.00 Spectroscopy of excited states in organic molecules studied by optical limiting  
*P.-A. Chollet*, B. Paci, V. Hully, A. Sornin, J.-M. Nunzi, F. Kajzar, P. Baldeck, Y. Morel, M. Maggini, G. Scorra, A. Bianco, M. Prato, and T. Da Ros

16.00-16:30 Synthesis and photonic properties of some novel heterocyclic molecules  
*R. J. Twieg*, S. Gu, M. He, F. You, A. Semyonov, L. Sukhomlinova, G. G. Malliaras R. Fan; D. Culjkovic, W. E. Moerner, D. Wright, K. D. Singer, R. G. Petschek, V. Ostroverkhov, and O. Ostroverkhova

16.30-19.00 Poster Session III (page 22)

20.00-22.30 Conference Dinner

Thursday, March 16

8:30-10:30 Fundamental Investigations

8:30-9:00 Polarization state sensitive nonlinear effects in optical active and chiral molecular systems  
F. Jonsson, M. Haddad, R. Frey, and *C. Flytzanis*

9:00-9:30 Sub-5fs nonlinear optical processes in polydiacetylenes  
*Takayoshi Kobayashi*

9:30-10:00 Quantum mechanical limits of the nonlinear optical susceptibility  
*Mark G. Kuzyk*

10:00-10:30 Molecular considerations for optimizing the second-order nonlinear optical response in chiral media  
V. Ostroverkhov, O. Ostroverkhova, R.G. Petschek, *K.D. Singer*, L. Sukhomlinova, R.J. Twieg, X.-Y. Wang, and L.C. Chien

////////////////////// 10:30-11:00 Coffee/Tee //////////////////////////////////////

11:00-12:00 New Phenomena

11:00-11:30 THz wave sensors and their applications  
P. Y. Han, M. Tani, F. Pan, and *X.-C. Zhang*

11:30-12:00 Growth and processing of DAST crystals and its application toward Tera-Hertz  
*Hiromasa Ito*

12.00-12.30 Concluding Remarks

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## Poster Session I, Monday 16:30-19:00

### **A** Novel Nonlinear Optical Phenomena and Applications

- A 1 Spatial solitons in dye-doped nematic liquid crystals  
G. Abbate, J.F. Henninot, F. Derrien, and M. Warenghem
  - A 2 Molecular engineering for optical limiting in the visible  
C. Andraud, R. Anémian, A. Collet, J.-F. Nicoud, B. Paci, P. A. Chollet,  
J.-M. Nunzi, N. Sanz, A. Ibanez, Y. Morel, and P. L. Baldeck
  - A 3 Nonlinear optical properties of octupoles  
C. Andraud, T. Zabulon, R. Anémian, X. L. Lang, A. Collet, S. Brasselet,  
I. Ledoux-Rak, and J. Zyss
  - A 4 Biphenyl derivatives for optical limiting in the visible  
R. Anémian, C. Andraud, A. Collet, B. Paci, J.M. Nunzi, Y. Morel,  
and P.L. Baldeck,
  - A 5 Theoretical investigation of the nonlinear circular dichroism  
in a liquid of chiral molecules  
F. Hache, M.C. Schanne-Klein, and H. Mesnil
  - A 6 New properties of COANP-polyimide compound: optical  
limiting effect  
Natalie V. Kamanina, Lev N. Kaporskii, Alex Leyderman,  
and Alfonso Barrientos
  - A 7 Optical limiting effect in polymer organic systems  
Natalie V. Kamanina and Lev N. Kaporskii
  - A 8 In-situ observation of thermochromic behavior in merocyanine  
J-aggregate monolayer using the multipurpose nonlinear  
optical microscope  
Noritaka Kato, Kentaro Saito, and Yoshiaki Uesu
  - A 9 Real-time transmission spectroscopy with ultrashort THz pulses  
P. Kuzel, A. V. Pashkin, and J. Kroupa
  - A 10 Nonlinear optical phenomena in turbid media of living tissue  
Asatur Lalayan
  - A 11 Optically controlled reversible structuring of doped polymer  
thin film waveguides  
S. Lecomte, U. Gubler, M. Jäger, Ch. Bosshard, P. Günter, L. Gobbi,  
and F. Diederich
  - A 12 Quantum and semi-classical modeling of NLO properties in  
organic systems  
Y. Luo, P. Norman, P. Macak, and H. Ågren
-

- A 13 Membrane imaging by simultaneous second-harmonic generation and two-photon microscopy  
L. Moreaux, O. Sandre, M. Blanchard-Desce, and J. Mertz
- A 14 Narrow-line laser emission from dendrimer doped polymer waveguides  
Akira Otomo, Shiyoshi Yokoyama, and Shinro Mashiko
- A 15 Nonlinear optical properties of push-pull stilbenes based on a strong carbocation acceptor moiety  
B. Paci, C. Schmidt, C. Fiorini, J.M. Nunzi, C. Arbez-Gindre, and C. G. Screttas
- A 16 All-optically poled polymer microcavities: enhancement of nonlinear optical effects  
R. Piron, E. Toussaere, D. Josse, S. Brasselet, and J. Zyss
- A 17 Characterization of two-photon absorption in symmetric conjugated systems with carbazol end groups  
J. Segal, Z. Kotler, M. Sigalov, A. Ben-Asuly, and V. Khodorkovsky

**B**

## Photorefractive Effects

- B 1 Mechanism of the reversible photoinduced switching of impurity molecules in doped molecular crystals  
I.V. Brovchenko
- B 2 High speed PVK-based photorefractive polymer composites  
M. A. Díaz-García, D. Wright, J. D. Casperson, B. Smith, E. Glazer, W. E. Moerner, L. I. Sukhomlinova, and R. J. Twieg
- B 3 Modelization and experimental characterization of angular redistribution in optical ordering processes in dye containing polymers  
Michel Dumont
- B 4 Photorefractive effects in DAST and other organic crystals  
S. Follonier, A. Schneider, Ch. Bosshard, I. Biaggio, and P. Günter
- B 5 Formation of an anti-guide structure in a photorefractive polymer by a pump-light beam  
Takashi Fujihara, Kazutoshi Ozawa, Takafumi Sassa, Shinsuke Umegaki, Masaaki Yokoyama, Tatsuo Wada, and Hiroyuki Sasabe
- B 6 LC SLM based on fullerene doped polyimide  
Natalie V. Kamanina and Natalie A. Vasilenko
- B 7 Application of the phase-modulated beam technique for Bacteriorhodopsin Langmuir-Blodgett thin films characterization  
A. Kir'yanov, Yu. Barmenkov, A. N. Starodumov, N. Kozhevnikov, and H. Lemmetyinen

- B 8 Influence of rheological properties on photorefractive polymer electrooptic response  
L. Mager, J.-C. Ribierre, A. Fort, S. Méry, and J.-F. Nicoud,
- B 9 Optical image correlators based on nematic liquid crystals  
A. Miniewicz, P. Sikorski, A. Januszko, S. Bartkiewicz, J. Parka, and F. Kajzar
- B 10 Influence of the chromophore ionization potential on the magnitude of photorefractive effects in PVK-based polymer composites  
David Van Steenwinckel, Eric Hendrickx, Andre Persoons, Kurt Van Den Broeck, and Celest Samyn
- B 11 Photorefractive effects in nematic liquid crystals under rigid boundary conditions  
G. Zhang, D. Haertle, G. Montemezzani, and P. Günter
- B 12 Surface mediated photorefractive mechanisms in liquid crystals  
J. Zhang, V. Ostroverkhov, K.D. Singer, V. Reshetnyak, and Yu. Reznikov
- B 13 Theory for self-enhancement of second-harmonic generation in a photorefractive polymer based on formation of an anti-guide Structure  
Takafumi Sassa, Takashi Fujihara, Kazutoshi Ozawa, Shinsuke Umegaki, Masaaki Yokoyama, Tatsuo Wada, and Hiroyuki Sasabe

**C**

## Poled Polymers for SHG and Electro-optic Devices

- C 1 3D- $\chi^{(2)}$ -analysis of high field poled polymers  
R. Blum, K. Pfeifer, G. Schoer, and M. Eich
- C 2 Polymer based electro-optic inline fiber modulator with 1 GHz bandwidth  
M. Bösch, M. Jäger, Ch. Bosshard, and P. Günter
- C 3 Wavelength and environment dependence of photodegradation processes in highly nonlinear bithiophene chromophores  
M. Bösch, I. Liakatas, C. Cai, Ch. Bosshard, and P. Günter
- C 4 Towards stable hybrid materials for electro-optic modulation and photorefractive applications  
F. Chaput, K. Lahlil, J.-P. Boilot, M. Mladenova, L. Ventelon, M. Blanchard-Desce, B. Darracq, J. Reyes, and Y. Levy
- C 5 Polarization-insensitive polymer amplitude modulator  
A. Donval, E. Toussaere, R. Hierle, and J. Zyss
- C 6 Doped planar and channel sol-gel waveguides for nonlinear devices operating at telecommunications wavelengths  
Anne-Claire Le Duff, Michael Canva, Yves Lévy, Alain Brun, Frédéric Chaput, Jean-Pierre Boilot, Tomas Pliska, and George I. Stegeman

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- C 7 Second harmonic generation in photo-bleached PU1-C4B film channel waveguides  
Suguru Horinouchi, Kwang-Sup Lee, Je-Hyun Lee, Primoz Kerkoc, Junichi Yoshida, and Keisuke Sasaki
- C 8 New SCLCPs based on 3,3'-bipyridine chromophores for applications in NLO  
N. Lemaitre, A.-J. Attias, I. Ledoux, and J. Zyss
- C 9 Photobleaching mechanism studies in side-chain polyimides  
I. Liakatas, M. Jäger, Ch. Bosshard, P. Günter, and T. Kaino
- C 10 Measurement of relative electrical resistivities for optimized poling of nonlinear optical polymeric waveguides  
Tomas Pliska, Vincent Ricci, Joachim Meier, Arne Eckau, Anne-Claire Le Duff, Michael Canva, George I. Stegeman, Paul Raymond, François Kajzar, and Kwok Pong Chan
- C 11 Second-harmonic generation at telecommunication wavelengths in polymeric waveguides  
Tomas Pliska, Wook-Rae Cho, Vincent Ricci, Joachim Meier, Anne-Claire Le Duff, Michael Canva, George I. Stegeman, Paul Raymond, and François Kajzar
- C 12 Relaxation behavior of the second-order nonlinear response of spin-coated polyphosphazenes films  
G. Rojo, G. Martín, F. Agulló-López, G. A. Carriedo, F. J. García-Alonso, and J. I. Fidalgo
- C 13 Synthesis and nonlinear optical properties of high glass transition polyimides and poly(maleimide-styrene)s  
Celest Samyn, Kurt Van den Broeck, Thierry Verbiest, and André Persoons
- C 14 Second harmonic generation in molecular-doped poly(ethylene oxide)/ *atactic*-poly(methyl methacrylate) blends  
A.V. Vannikov, A.D. Grishina, L.Ya. Pereshivko, and T.V. Krivenko
- C 15 Organized organic multilayer structures for frequency doubling and electro-optics  
V. Zauls, S. Schrader, B. Dietzel, B. Schultz, C. Fluerau, H. Motschmann, and G. Decher
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## Poster Session II, Tuesday 16:30-19:00

### **D** Nonlinear Optical Organic Crystals

- D 1 Realising the SHG response in DCNP through anomalous atomic thermal motion and hydrogen-bonding  
J. M. Cole, C. C. Wilson, and J. A. K. Howard
- D 2 Preparing polydiacetylene single crystal thin films  
A. Feldner, T. Fehn, T. Vogtmann, and M. Schwoerer
- D 3 Linear optical properties of p-toluene sulfonate PTS  
Lars Friedrich, Tomas Pliska, Mingguo Liu, George I. Stegeman, Seung-Han Park, Andreas Feldner, Thomas Vogtmann, and Markus Schwoerer
- D 4 Molecular recognition concept in the growth of organic nonlinear optical crystals  
Hyung-ki Hong, Jaewoo Park, and Choon Sup Yoon
- D 5 SHG-active p-nitroaniline thin films grown by dip-coating  
Hiroyuki Kobayashi, Hiroyuki Okuyama, and Masahiro Kotani
- D 6 DAST thin film growth: seven exploratory methods  
S. Manetta, M. Ehrensperger, Ch. Bosshard, X.-M. Zhang, and P. Gunter
- D 7 Observations of 180° polar domains in molecular crystals using phase-sensitive second harmonic microscopy  
P. Rechsteiner and J. Hulliger
- D 8 Organic nanocrystals in sol-gel glasses: a new type of nonlinear organic material  
I. Wang, P. L. Baldeck, N. Sanz, and A. Ibanez

### **E** Fundamental Studies

- E 1 Anharmonicity effects in spectra of alcohols  
N.A. Atamas, A.M. Yaremko, L. A. Bulavin, V. E. Pogorelev, S. Berski, Zd. Latajka, H. Ratajczak, and J. Leszczynski
  - E 2 Photosensitive media on the base of bacteriorhodopsin  
I. K. Bandrovska, Z. I. Batori-Tartzi, A. A. Grabar, O. I. Korposh, N. P. Frolova, and J. P. Sharkany
  - E 3 Investigation of the third-order optical susceptibility of chromophores through electrooptic spectroscopy  
Brian K. Canfield, Robert J. Kruhlak, and Mark G. Kuzyk
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- E 4 Second-harmonic generation in chiral smectic liquid crystals  
*M. Copic, I. Drevensek Olenik, and M. Zgonik*
- E 5 Modelling and characterisation of nonlinear materials for optical limiting. Mononuclear and binuclear platinum ethynyls  
Anders Eriksson, Cesar Lopes, Mikael Lindgren, Soren Svensson, Tim McKay, and Julianne Davy
- E 6 Electronic defects and conjugation length in a mesoscopic p system  
Luca Del Freato, Anna Painelli, Alberto Girlando, and Z.G.Soos
- E 7 Improved photogeneration efficiency of C<sub>60</sub> sensitized arylamines  
E. Hendrickx, B. Kippelen, S. R. Marder, A. Persoons, and N. Peyghambarian
- E 8 Control of the first hyperpolarizability of functionalized mesostructures through cation binding  
Stephan Houbrechts, Tatsuo Wada, Hiroyuki Sasabe, and Yuji Kubo
- E 9 Ellipsometric polarization contour measurement for anisotropy in organic materials  
Minsoo Joo, Dong-Ho Shin, and Nakjoong Kim
- E 10 Determining the nature of excited states using an inhomogeneous-broadening analysis of third-order processes  
Robert J. Kruhlak, and Mark G. Kuzyk
- E 11 Application of the optical and positron spectroscopy to the study of structural transformations in milk fat and its simple purified fractions  
V. Y. Kudryavtsev, S. M. Yablochkov, S. P. Likhtorovich, M. M. Nishchenko, T. A. Rashevskaya, and I. S. Gulyi
- E 12 Strong field poling of multipolar structures: fundamentals and device applications  
Isabelle Ledoux, Irène Cazenobe, Sophie Brasselet, Eric Toussaere, and Joseph Zyss
- E 13 Second-order nonlinear optical response at the two-photon resonance in a two dimensional NLO molecule  
G. Meshulam, G. Berkovic, Z. Kotler, A. Ben-Asuly, R. Mazor, L. Shapiro, and V. Khodorkovsky
- E 14 Enhanced two-photon absorption in phenyl and fluorene oligomers  
Y. Morel, O. Stephan, P.L. Baldeck, and C. Andraud
- E 15 Response theory calculations of optical limiting processes  
P. Norman, Y. Luo, P. Cronstrand, P. Macak, and H. Ågren
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- E 16 Theoretical study on the third-order nonlinear optical properties of thiophene derivatives  
Koji Ohta, Ryo Shikata, Kenji Kiyohara, Keiko Tawa, and Kenji Kamada
- E 17 Polarization recording and reconstruction in a photoinduced anisotropic medium  
Yoshiko Okada-Shudo
- E 18 Optical properties of composite materials  
Anatoliy O. Pinchuk
- E 19 Femtosecond spectroscopy of polymethine dyes in liquid and polymeric media  
Olga V. Przhonska, Mikhail V. Bondar, Yuriy L. Slominskyà, Raluca Negres, JinHong Lim, David J. Hagan, and Eric W. Van Stryland
- E 20 Microscopic and macroscopic third-order nonlinear optical properties of organobimetallic compounds  
Gema Rojo, José A. Campo, José V. Heras, Mercedes Cano, and Fernando Agulló-López
- E 21 Quantum chemical ab initio search for novel molecular technologies  
A. Tamulis, J. Tamuliene, M. L. Balevicius, J.-M. Nunzi, R. Abdreimova, M. Peruzzini, and A. Graja
- E 22 Understanding non-linearity: a toy model for push-pull chromophores  
Francesca Terenziani, Luca Del Freato, and Anna Painelli
- E 23 Establishing the optical parameters of thin films in the case of bacteriorhodopsin molecules  
Radu Todoran, Daniela Todoran, and J. Sharkany
- E 24 Second harmonic spectroscopy and SHG microscopic observation of J-aggregate domains in merocyanine at air-water interface  
Y. Uesu, N. Kato, and K. Saito
- E 25 Longitudinal and transverse dynamics of soliton excitations on a multileg ladder lattice  
Oleksiy O. Vakhnenko
- E 26 Orientation and non linear optical properties of DAN crystals on PTFE substrates  
R. Vallée, P. Damman, M. Dosière, E. Toussaere, and J. Zyss
- E 27 Holographic time of flight for the sub-nanosecond investigation of charge transport  
Marc Wintermantel, Ivan Biaggio, and P. Günter
- E 28 Influence of conjugation length on first hyperpolarizability of fluorescent hemicyanine (DAST) derivatives  
Kurt Wostyn, Geels Olbrechts, Koen Clays, André Persoons, Akira Watanabe, Kyoki Nogi, Xuan-Ming Duan, Shuji Okada, Hidetoshi Oikawa, H. Nakanishi, Henryk Vogel, David Beljonne, and Jean-Luc Brédas
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## F

## Ultrafast Nonlinear Optics In Organics

- F 1 Influence of the molecular orientation on the stimulated emission and gain dynamics of Phenylene Vinylene oligomers  
T. Barisien, T.-A. Pham, L. Guidoni, M. Albrecht, and J.-Y. Bigot
- F 2 Femtosecond Z-scan measurement of the third order nonlinear optical coefficient of CuPc thin films  
H.J. Chang, S.H. Han, and J.W. Wu
- F 3 Measurement of relations between molecular structure and two-photon absorption spectra in fluorene dye compounds  
David J. Hagan, Kevin D. Belfield, Katherine J. Schafer, Raluca Negres, Wael Mourad, and Eric W. Van Stryland
- F 4 Influence of molecular orientation and arrangement to two-dimensionality of metallophthalocyanines  
Takashi Isoshima, Tatsuo Wada, and Hiroyuki Sasabe
- F 5 Optical and nonlinear optical properties of low-dimensional aggregates of the amphiphilic cyanine dyes  
R.V. Markov, P.A. Chubakov, A.I. Plekhanov, Z.M. Ivanova, N.A. Orlova, T.N. Gerasimova, V.V. Shelkovnikov, and J. Knoester
- F 6 Picosecond optical limiting action through a thin MMA-octupole copolymer layer near the total reflection state  
R. Mountasser, H. Maillotte, M. Ayadi, and F. Chérioux
- F 7 Resonant nonlinearities in an organic material: irradiance dependence  
R. Rangel-Rojo, H. Matsuda, H. Kasai, and H. Nakanishi
- F 8 Studies of third-order nonlinearity, nonlinear absorption, and excited state dynamics in tetra tolyl porphyrins using degenerate four-wave mixing and Z-scan  
S. Venugopal Rao, N.K.M. Naga Srinivas, Reji Philip, G. Ravindra Kumar, L. Giribabu, Bhaskar G. Maiya, and D. Narayana Rao
- F 9 Nonlinear optical properties of model polyenes studied with femtosecond Z-scan at 800 nm  
Anna Samoc, Marek Samoc, Barry Luther-Davies, Chantal Andraud, Thierry Brotin, and André Collet
- F 10 Thin films of a novel polydiacetylene for applications to all-optical signal processing  
S. Sottini, G. Margheri, E. Giorgetti, F. Gelli, A. Cravino, D. Comoretto, C. Cuniberti, C. Dell'Erba, I. Moggio, and G. Dellepiane
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## Poster Session 3, Wednesday 16:30-19:00

### **G** Fibers and Waveguides

- G 1 Drift correction in organic intensity modulators  
P. Labbé, A. Clouqueur, R. Hierle, E. Toussaere, and J. Zyss
- G 2 Gaussian profile Bragg gratings in polydiacetylene waveguides: characterization and application in integrated optics  
G. Marowsky and M. A. Bader
- G 3 Compression of self-trapping pulses in Kerr-type planar waveguides  
Monika E. Pietrzyk
- G 4 Functionalized polymers for photonic applications  
Claire Pitois, Anders Hult, Dorothea Wiesmann, Åsa Claesson, and Mikael Lindgren
- G 5 Four layer polymeric mode polarization filter for integrated optics  
G.K. Singh, V.K. Sharma, A. Kapoor, and K.N. Tripathi
- G 6 Three dimensional optical fiber simulation  
D. M. Sullivan
- G 7 Channel waveguide fabrication of the organic nonlinear optical crystal DAST by using oxygen RIE  
K. Takayama, M. Yoshida, H. -H. Deng, K. Komatsu, and T. Kaino

### **H** Novel Molecular Designs and Synthesis

- H 1 New disubstituted organic compounds with enhanced non-resonant nonlinear refraction in the picosecond range  
André-Jean Attias, Frédéric Chérioux, and Hervé Maillotte
  - H 2 Tuning of the mesogenic, electronic, and optical properties of new conjugated 3,3'-bipyridine derivatives  
A.-J. Attias, B. Bloch, C. Cavalli
  - H 3 Synthesis of a new nonlinear optical chromophore based on a novel N-aryl carbazole derivative  
Amos Ben-Asuly, Lev Shapiro, Arkady Ellern, and Vladimir Khodorkovsky
  - H 4 Molecular engineering of push-pull chromophores for nonlinear optics  
M. Blanchard-Desce, V. Alain, S. Rédoglia, M. Barzoukas, R. Wortmann, S. Lebus, K. Lukaszuk, P. Günter, C. Bosshard, and U. Gubler
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- H 5 Tetra(4-methoxyphenyl)phosphonium iodide : a new NLO crystal built-up with tetrahedral-like octupolar chromophores  
Cyril Bourgogne, Patrick Masson, Jean-François Nicoud, Yvette Le Fur, Patrick Juen, and René Masse
- H 6 Nonlinear optical thin films based on strong head-to-tail hydrogen bonding grown by Oblique Incidence Organic Molecular Beam Epitaxy  
C. Cai, M. Kiy, A. Taponnier, R. Ono, I. Biaggio, and P. Günter
- H 7 New octupolar star-shaped molecules with non-resonant quadratic optical nonlinearities  
Frédéric Chérioux, Pierre Audebert, Sophie Brasselet, and Joseph Zyss
- H 8 Synthesis and characterisation of an octupolar polymer and new molecular octupoles with off-resonant refractive index  
Frédéric Chérioux, Hervé Maillotte, Joseph Zyss, and Pierre Audebert
- H 9 Structure-property relations in nonlinear optical molecular wires and planar sheets  
U. Gubler, Ch. Bosshard, R. Martin, R. Tykwinski, F. Diederich, and P. Günter
- H 10 Second-order nonlinear optical and photorefractive properties of amorphous calix[4]arene containing carbazole derivatives  
Atsushi Gunji, Hiromi Kimura-Suda, Takafumi Sassa, Tatsuo Wada, and Hiroyuki Sasabe
- H 11 Linear and nonlinear optical properties of hypervalent iodine derivatives  
K. Kamada, K. Ohta, R. R. Tykwinski, and D. Bykowski
- H 12 Nonlinear optical properties of the Langmuir-Blodgett films of an intermolecular charge transfer complex  
J. Kawamata, T. Akutagawa, T. Hasegawa, K. Inoue, and T. Nakamura
- H 13 Structural analyses of clay-metal complex hybrid films by observing optical second harmonic generation  
Jun Kawamata, Kuon Inoue, Yuichirou Ogata, and Akihiko Yamagishi
- H 14 Dithienothiophene-based organic molecules with large two-photon absorption cross sections  
Kwang-Sup Lee, Jong Hyoup Lee, Oh-Kil Kim, Han Young Woo, and Kie-Soo Kim
- H 15 Molecular design and syntheses of new pyrazine chromophores for 3<sup>rd</sup> order NLO materials and their  $\pi$ - $\pi$  interactions in the solid state  
Masaru Matsuoka
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- H 16 New photoisomerizable organometallic chromophores as precursors of optically poled materials  
Olivier Maury, Hubert Le Bozec, Isabelle Ledoux, Michel Dumont, and Joseph Zyss
- H 17 Synthesis and characterization of a series of NLO chromophores based on 1,3-indandione derivatives  
Royi Mazor, Lev Shapiro, Arkady Ellern, Vladimir Khodorkovsky, Zvi Kotler, Garry Berkovic, and Guilia Meshulam
- H 18 Nonlinear optical properties of cyanines and oligoenes: influence of bond-length alternation, substituents, chain length  
D. Scherer, A. Feldner, M. Welscher, T. Vogtmann, M. Schwoerer, T. Laue, U. Lawrentz, H.-H. Johannes, and W. Grahn
- H 19 MO calculations of dyes for the solid state absorption spectra  
Hisayoshi Shiozaki, Yoshiaki Sakurai, Satoru Nakao, and Masaki Kimoto
- H 20 Novel aminopyrazine fluorescent dyes for NLO materials; their solid state spectra and crystal structures  
Kazuko Shirai and Masaru Matsuoka
- H 21 Novel carbazole derivatives for two-photon absorption applications  
Mark Sigalov, Amos Ben-Asuly, Lev Shapiro, and Vladimir Khodorkovsky
- H 22 Multifunctional TCNQ adducts  
Marek Szablewski, Mosurkal Ravi, Nancy-Ann Hackman, Graham H Cross, and David Bloor
- H 23 Organic / inorganic quantum confinement structures based on lead halide perovskites  
Yuko Tabuchi, Keisuke Asai, Masahiro Rikukawa, Kohei Sanui, and Kenkichi Ishigure
- H 24 Novel organic-inorganic quantum confinement structure (VII)  
Structural characterization and optical properties for low dimensional compounds with  $PbX_6$  octahedra  
Kenjiro Teshima, Satoshi Kano, Mitsuyasu Kawahara, Masahiro Rikukawa, and Kohei Sanui
- H 25 Novel organic-inorganic quantum confinement structure (VIII)  
Structural characterization for self-organized compounds with quaterary ammonium salt  
Kenjiro Teshima, Satoshi Kano, Masahiro Rikukawa, and Kohei Sanui
- H 26 New quadrupolar fluorophores with high two-photon excited fluorescence  
L. Ventelon, L. Moreaux, J. Mertz, and M. Blanchard-Desce
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- H 27 Intermolecular coupling enhancement of the molecular hyperpolarizability in multichromophoric dipolar dendrimers  
Shiyoshi Yokoyama, Tatsuo Nakahama, Akira Otomo,  
and Shinro Mashiko
- H 28 Octuplar engineering for nonlinear optics  
J. Zyss and I. Ledoux

**I**

## Organic Light Emitting Materials

- I 1 Surface and bulk phenomena in conjugated polymer devices  
F. Cacialli, J.S. Kim, T.M. Brown, J. Morgadol, M. Granström, R.H.  
Friend, G. Gigli, R.Cingolani, L. Favaretto, G. Barbarella, R. Daik,  
and W.J. Feast
- I 2 Performance of organic light emitting devices based  
8-hydroxyquinolato boron emitters  
Marie D'lorio, Yeh Tao, Suning Wang, Qing-guo Wu,  
and James Lavigne
- I 3 Hetero-layer light-emitting devices based on quinoxaline films  
P. Imperia, S. Schrader, M.B. Casu, M. Jandke, and P. Strohriegl
- I 4 Ultra high vacuum reveals interface-dependent charge-injection  
properties of organic light emitting diodes, and the effects of  
exposure to impurity gases  
M. Kiy, I. Gamboni, I. Biaggio, and P. Günter
- I 5 Blue Organic Light-Emitting Diode Based on Dipyrvole3  
Weiling Guo, E.H. Li Chi-Ming Che Yi zhao and S.Y.Liu
- I 6 Organic DFB-lasers with mode emission tuneability by dynamic  
and permanent photoinduced gratings  
G. Kranzelbinder, E. Toussaere, R. Mathevet, D. Josse, and J. Zyss
- I 7 Influence of hole transport materials on the properties of organic LED  
Zugang Liu, Jorge Soares, and Estela Pereira
- I 8 Probing space charge distributions in polymer LEDs by means of  
an electro-optic technique  
F. Michelotti, S. Bussi, M. Bertolotti, and Z. Bao
- I 9 Impedance spectroscopy of Alq<sub>3</sub> based- organic light emitting  
diodes measured in ultra high vacuum and air  
Rudi Ono, Paolo Lusio, Michael Kiy, Axelle Tapponnier, Iris Gamboni,  
Ivan Biaggio, and Peter Günter
- I 10 A comparative study of photoluminescence spectra of  
chromophores and semiconducting polymer films  
J. Shin, H. Choi, J. Ro, H. Kim, J. Noh, S. Lee, H. Suh, C. Ha, K. Lee,  
and M. Cha

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- I 11 Amplification of raman scattering in an oriented poly(p-phenylenevinylene) film  
Seungwoo Shin, Jeongmi Shin, Hongki Kim, Jung Hoon Ro, Heayoung Choi, Kwanghee Lee, and Myoungsik Cha
  - I 12 Blue-green light-emitting electrochemical cells based on a copolymer derived from fluorene  
O. Stéphan, V. Collomb, and J.-C. Vial
  - I 13 Luminescent and electronic properties of end-substituted oligo(phenylen vinylene)s  
Y. Tao, M. D'Iorio, A. Donat-Bouillud, J. Lam, M.S. Wong, and Z.H. Li
  - I 14 Investigation of photocurrent in organic films for light emitting diodes  
A. Tapponier, I. Biaggio, and P. Günter
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Sunday, March 12	Monday, March 13	Tuesday, March 14	Wednesday, March 15	Thursday, March 16
	8.30-9.00 Welcome Address Future Photonic Appl.	High NL Org. Crystals 8.30-10.30 Karl Nakanishi Mori Banfi	Third-order NLO 8.30-10.30 Marder Brédas Bubeck Wada	Fund. Investigations 8.30-10.30 Kuzyk Kobayashi Singer Flytzanis
	9.00-10.30 Melchior Schadt Shen	10.30-11.00 Coffee/Tee	10.30-11.00 Coffee/Tee	10.30-11.00 Coffee/Tee
	EO Polymers	NLO Polymers	OLED's	New Phenomena
	11.00-12.30 Dalton Lee Kaino	11.00-12.30 Stegeman Kim Nunzi	11.00-12.30 Schwoerer Heeger Batlogg	11.00-12.00 Zhang Ito
	12.30-14.30 Lunch	12.30-14.30 Lunch	12.30-14.30 Lunch	12.00-12.30 Concl. Remarks
	Optical Memories	14.30-16.30	Novel Molecules	
	14.30-16.30 Haarer Wilson Peyghamb. Meerholz	Free time	14.30-16.30 Zyss Persoons Chollet Twieg	
16.00-18.00 Registration House B Congress Center	16.30-19.00 Poster I	16.30-19.00 Poster II	16.30-19.00 Poster III	
18.00-20.00 Welcome Reception	19.30-21.30 Kirchner Museum (Conference reception)	19.00-20.00 Round Table Discussion		
			20.00-22.30 Conference Dinner	