

Korea-Japan Joint Forum (KJF2001)

## Organic Materials for Electronics and Photonics

Symposium Homepage <http://plaza.snu.ac.kr/~parksy>

September 25 - 27, 2001  
Hoam Convention Center  
Seoul National University  
Seoul, Korea



Second-circular : July 5, 2001  
Title submission : June 11 - August 10, 2001  
Registration and Abstract deadline: August 30, 2001  
Final program : September 15, 2001  
Symposium paper: KJF2001 desk (September 25-27, 2001)

*Organized by:*

- ◆ *Molecular Electronics Div. - The Polymer Society of Korea*
- ◆ *BK21 Division of Materials Education and Research, Seoul Nat'l Univ.*



### INVITATION

Korea-Japan Joint Forums (KJF) on the topic of 'Organic Materials for Electronics and Photonics' have been held since 1989. More than 120 papers and 150 active participants at every recent meeting witness the leading role of KJF at this scientific field. This year, KJF2001 continues to provide important landmarks towards 'Organic electronics and molecular photonics'. We cordially invite you to join this exciting meeting of KJF2001 at Seoul National University on September 25-27.

### SCOPE of KJF2001

All related subjects on 'organic materials for electronics and photonics' are included. Representative technical sessions are as follows:

- Electroluminescent Materials
- Nonlinear Optical Materials
- Molecular Photonics
- Optical Properties
- Optical Devices
- Fabrication and Characterization
- Molecular Recognition
- Sensors and Bioelectronics

## CALL for PAPERS

Both the oral and poster presentations are possible. Title of the paper and 100 words abstract should be submitted before **August 10, 2001**. Deadline of A4 - 1 page abstract submission is **August 30, 2001**. Proceeding papers submitted to the registration desk at KJF2001 site will be reviewed by the guest editor under journal's highest standard. Accepted papers will be published in a special issue of 'Molecular Crystals and Liquid Crystals' by Gordon and Breach Science Publishers.

### \* Title Submission : August 10, 2001

Both Korean and Japanese scientists should submit the title on-line to the symposium homepage.

Title submission form [on-line](#), [DOC](#)

[ Available from KJF homepage (<http://plaza.snu.ac.kr/~parksv/KJFHome1/title.htm>) ]

### \* Abstract deadline: August 30, 2001

Please download the abstract form and return A4 1-page abstract to the conference secretariat by e-mail.

Abstract submission form [DOC](#)

[ Available from KJF homepage (<http://plaza.snu.ac.kr/~parksv/KJFHome1/abstract.doc>) ]

## PLENARY and INVITED SPEAKERS

### Plenary Speakers

Prof. Jung-Il Jin (Korea Univ.)

Prof. Toyoki Kunitake (Kyushu Univ./RIKEN)

### Special Guest Speakers

Prof. Wolfgang Knoll (Max-Planck Institute for Polymer Research)

### Invited Speakers and Topics

Dr. Chihaya Adachi, Chitose Inst.

Prof. Soon-Ki Kwon, Gyeongsang Univ.

Prof. Junji Watanabe, TIT

Prof. Suck-Hyun Lee, Ajou Univ.

Dr. Isamu Moriguchi, Nagasaki Univ.

Dr. Eunkyong Kim, KRICT

Prof. Hirokazu Tada, IMS

Dr. Myung Hyun Lee, ETRI

Prof. Tokuji Miyashita, Tohoku Univ.

Prof. Joonwon Park, Pohang Univ.

Prof. Shuji Okada, Tohoku Univ.

Prof. Myung-Hoon Lee, Chunbuk Univ.

Organic EL and Laser

EL organics and polymers

Cholesteric LC

Organic NLO material

ECD and organic-inorganic nanofilms

Photochromic Polymer

Phthalocyanine Sensor and TFT

NLO devices

Polymer LB films

Biochip, Nanochip

Polydiacetylene

Photoactive polyimides

## REGISTRATION

Registration Fees for KJF2001 is as below. No additional payments are needed for the events like welcome reception and banquet.

	Before August 30, 2001	After August 30, 2001
Active participant	20,000 Yen (Japanese) 200,000 Won (Korean)	22,000 Yen (Japanese) 220,000 Won (Korean)
Student	10,000 Yen (Japanese) 100,000 Won (Korean)	11,000 Yen (Japanese) 110,000 Won (Korean)

Please complete the Registration Form on-line or e-mail it to the conference secretariat.

**Registration form [on-line](#), [DOC](#)**

[ Available from KJF homepage (<http://plaza.snu.ac.kr/~parksv/KJFhome1/regist.htm>) ]

**\* PAYMENT**

**Korean Participant**

Bank transfer to: 농협 079-02-743118, 박수영

**Japanese Participant**

口座名 日韓フォーラム  
銀行名 七十七銀行  
店名 本店  
店番号 1 00  
口座番号 普通預金 7 1 8444 1

**MEETING VENUE**

KJF2001 will be held at the Hoam Convention Center (<http://www.hoam.ac.kr/english>) of Seoul National University (<http://www.snu.ac.kr/engsnu>) which locates at the southern part of Seoul, Korea.

**ACCOMODATION**

40 rooms which include twin, triple, and single rooms, are reserved for Japanese participants at the Hoam Faculty Center ( <http://www.hoam.ac.kr/english> ) of Seoul National University. The room charge is around 60,000 Won. You can reserve rooms of Hoam Faculty Center at the on-line registration of symposium homepage.

**ORGANIZATION**

- **Organized by:**  
Molecular Electronics Div. - The Polymer Society of Korea  
BK21 Division of Materials Education and Research, Seoul National University
- **Supported by:**  
Division of Polymer Chemistry - Korean Chemical Society  
M&BE (Div. of Molecular Electronics and Bioelectronics),  
Japanese Society of Applied Physics  
JOEM (The Japanese Research Association for Organic Electronics Materials)
- **Chair:** Nakjoong Kim (Hanyang University), **Co-Chair:** Kiyoshi Yase (AIST)
- **Secretary General:** Soo Young Park (Seoul National Univ.)
- **Honorary Chair:**  
Hiroyuki Sasabe (Chitose Inst. of Tech.), Un Young Kim (KIST),  
Jong-Kyu Yoon (Seoul National Univ.)
- **Organizing Committees:**  
Jeong Weon Wu (Ewha Univ.), Jang-Joo Kim (KJIST), Kwang Sup Lee (Hannam Univ.), Haiwon Lee (Hanyang Univ.), Changjin Lee (KRICT), Hirokazu Tada (IMS), Yoshio Taniguchi (Shinshu Univ.), Lyong Sun Pu (Fuji Xerox), Mutsuyoshi Matsumoto (AIST), Shuji Okada (Tohoku Univ.)

**CORRESPONDENCE**

KJF2001 Secretariat: Prof. Soo Young Park  
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San 56-1 Shillim-dong, Kwanak-ku, Seoul 151-744, Korea  
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homepage: <http://plaza.snu.ac.kr/~parksv>



*Korea-Japan Joint Forum*

**KJF2001**

## Organic Materials for Electronics and Photonics

**September 25 - 27, 2001**

**Hoam Convention Center, Seoul National University, Seoul, Korea**

<b>REGISTRATION FORM</b>
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**date of pre-registration : by August 30, 2001**

**Please, send to KJF2001 Secretariat**

**Prof. Soo Young Park**

**School of Materials Science and Engineering, Seoul National University**

**56-1 Shillim-dong, Kwanak-ku, Seoul 151-744, Korea**

**Tel: +82-2-880-8327, Fax: +82-2-886-8331, E-mail : [parksv@plaza.snu.ac.kr](mailto:parksv@plaza.snu.ac.kr)**

### **PERSONAL INFORMATION**

Full name (First Name, Middle Initials, Last name) \_\_\_\_\_ Title \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

Country \_\_\_\_\_ Postal code \_\_\_\_\_

Phone (\_\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_\_) \_\_\_\_\_

(include country and area codes)

E-mail \_\_\_\_\_

### **REGISTRATION FEES**

	Before August 30, 2001	After August 30, 2001
Active participant	___ 200,000 Won (Korean) ___ 20,000 Yen (Japanese)	___ 220,000 Won (Korean) ___ 22,000 Yen (Japanese)
Student	___ 100,000 Won (Korean) ___ 10,000 Yen (Japanese)	___ 110,000 Won (Korean) ___ 11,000 Yen (Japanese)

# **ABSTRACT SUBMISSION FORM**

**(a form for each submitted abstract)**

**Authors names :**

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**Affiliation and title:**

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**Address :**

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**Telephone:**

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**Fax :**

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**E-mail :**

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*Korea-Japan Joint Forum*  
**KJF2001**

Organic Materials for Electronics and Photonics

**September 25 - 27, 2001**

**TITLE (Times New Roman, 14 points, all capitals, Single-spaced)**

Author1<sup>a</sup>, Author2<sup>a</sup>, Author3<sup>b</sup> (Times New Roman, 12 points)

<sup>a</sup>Overwrite Address Here (Times New Roman, 12 points)

<sup>b</sup>School of Materials Science and Engineering, Seoul National University, Seoul 151-744,  
Korea

Overwrite text of section here. (Times New Roman, 11 pt)

Each table should have a number and heading, formatted as follows above the table:

**Table 1. The Table Title Should Be Boldface, Main Words Capitalized, and Centered Above the Table (Times New Roman, 11 pt)**

Each figure should have a number and caption, formatted as follows below the figure:

**Figure 1.** The figure number should be boldface, but the figure caption should be regular typeface, below the figure, with full justification. (Times New Roman, 11 pt)

**References (11 pt)**

1. Zhang, Y.; Burzynski, R.; Ghosal, S.; Casstevens, M. K. *Adv. Mater.* **8**, 111 (1996)

## EXAMPLE OF THE ABSTRACT

Jaehoon Hwang<sup>a</sup>, Jin-Kyung Lee<sup>b</sup>, Geon Joon Lee<sup>c</sup>

<sup>a</sup>School of Materials Science and Engineering, Seoul National University, Seoul 151-742, Korea

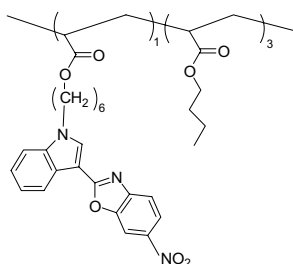
<sup>b</sup>Department of Physics, Seoul National University, Seoul 151-742, Korea

<sup>c</sup>Center for Electro- & Photo- Responsive Molecules, Korea University, Seoul 136-701, Korea

Photorefractive polymers have attracted considerable attention due to their potential applications including high-density optical data storage, optical image processing, phase conjugation, lasing, dynamic holography, optical computing, and pattern recognition.[1] The necessary elements for a material to be regarded as potentially photorefractive are photoconductivity and electrooptic (EO) property. The chemical structure of polymer is shown in Figure 1. Indole, the heteroaromatic structure like carbazole, was designed to work as photoconducting moiety as well as electron donor, and it can also provide better orientational motion owing to the more compact size compared with carbazole. Benzoxazole moiety was introduced as  $\pi$ -conjugated bridge instead of conventional stilbene unit to obtained blue-shifted absorption together with the enhanced thermal and photochemical stability.[2] Sandwiched films of 100  $\mu\text{m}$  thickness with different TNF doping level (0%, 0.2%, 1%) were prepared and photorefractivity was determined by two-beam coupling and four-wave mixing experiments. Their properties are summarized in Table 1.

**Table 1. Photorefractivities of polymer samples**

TNF doping level	$\alpha(\text{cm}^{-1})$	$\Gamma(\text{cm}^{-1})$	$\eta$ (%)
0%	6.7	7.94 <sup>a)</sup>	3.01 <sup>c)</sup>
0.2%	7.0	29.26 <sup>b)</sup>	3.93 <sup>d)</sup>
1%	12.4	27.43 <sup>b)</sup>	5.18 <sup>b)</sup>



**Figure 1.** Chemical structure of Polymer.

1. Zhang, Y.; Burzynski, R.; Ghosal, S.; Casstevens, M. K. *Adv. Mater.* **8**, 111 (1996)
2. Park, K. H.; Yeon, K. M.; Lee, M. Y.; Lee, S. -D.; Shin, D. -H.; Lee, C. J.; Kim, N. *Polymer* **39**, 7061 (1998)