

**Programme**  
**Ecology in Electronics Conference & Green Electronics Workshop**  
**26th May 2008, Monday**

- 08:30-09:00** **Registration**
- 09:00-09:10** **Welcome address by Dr Józef Gromek**, Director of Tele and Radio Research Institute
- 09:10-09:20** **Other welcome addresses**
- 09:20-09:40** **Recent developments in the framework of Europe-China collaboration on Green Electronics Production Research (EC-GEPRO)**  
O. Andersen. Project Coordinator of EC-GEPRO, Western Norway Research Institute, Norway
- 09:40-10:00** **Urgent necessity of changes in Polish-Chinese economic relationship**  
Sylwester Szafarz. Director General of Polish-Chinese Chamber of Commerce, Poland
- 10:00-10:20** **ITR activities in research for environment protection in electronics**  
G. Kozioł, K. Bukat, J. Gromek. Tele and Radio Research Institute, Poland
- 10:20-10:40** **Tea and coffee break**
- 10:40-11:00** **RoHS-like regulations worldwide**  
J. Müller, H. Griese, N.N. Nissen, H. Reichl. Fraunhofer Institute, Germany
- 11:00-11:20** **Recent development of nanoelectronics packaging materials**  
J. Liu, Chalmers University of Technology, Sweden
- 11:20-11:50** **A method study of CFD simulation for CNT microcooler**  
X. Zhong, Y. Zhang, J. Liu, Z. Cheng. Shanghai University, China
- 11:50-12:10** **Tea and coffee break**
- 12:10-12:30** **Nanoporous materials for sensor's applications**  
E. Czerwosz, E. Kowalska, J. Radomska, H. Wronka. Tele and Radio Research Institute, Poland
- 12:30-12:50** **Development and application of polymer particles for "Green Electronics" manufacturing**  
H. Kristiansen, D. Walley. CONPART, Norway & Loughborough University, UK
- 12:50-13:10** **Green electronics with ZnO**  
K. Shtereva, V. Tvarozek, V. Dimov, I. Nowotny. University of Rousse, Bulgaria & Slovak University of Technology, Slovakia
- 13:10-14:30** **Lunch**
- 14:30-14:50** **Basic and application studies of the wettability of Pb-free solders**  
Z. Moser. Institute of Metallurgy and Materials Science Polish Academy of Science, Poland
- 14:50-15:10** **Lead free thick film materials**  
M. Jakubowska, K. Kielbasiński, A. Młożniak I. Wyżkiewicz, E. Zwierkowska. Institute of Electronic Materials Technology, Poland
- 15:10-15:30** **Copper solubilizing in dip soldering with lead-free solders and SnPb37 solder and protection of the elements of soldering facilities against damage**  
H. Drzeniek, Z. Mirski. Wrocław University of Technology, Poland
- 15:30-15:50** **Quality of lead-free solder joints applied on frequency synthesizer for automotive electronics**  
A. Manukova, D. Trifonova, V. Dimov, A. Levi. University of Rousse, Bulgaria & EPIQ Group, Bulgaria



**Programme**  
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**27th May 2008, Tuesday**

- 09:00-09:10** **Ceremony of signature of the International Declaration on Cleaner Production by ITR**  
Z. Nowak, Polish Movement for Cleaner Production Society, Poland
- 09:10-09:30** **Reliability problems in designing of ecological electronic products**  
M. Szwec, Z. Drozd. Warsaw University of Technology, Poland
- 09:30-09:50** **Life Cycle Indicators and their significance for the eco design of electronic products**  
M. Stachura, A. Schiffleitner, S. Salhofer. KERO Center of Excellence Electronics & Environment, Austria
- 09:50-10:10** **Computer aided design recycling assessment rate**  
A. Karwasz, Z. Weiss. Poznan University of Technology, Poland
- 10:10-10:30** **Energy-efficient microclimat control in a hatchery**  
N. Evstatieva, V. Dimov. University of Russe, Bulgaria
- 10:30-10:50** **Tea and coffee break**
- 10:50-11:10** **Recycling of the Li-Ion and Ni-MH battery scrap from mobile phones**  
J. Kozłowski, H. Czyżyk. Institute of Non-Ferrous Metals, Poland
- 11:10-11:30** **Treatment of waste electrical and electronic equipment technologies of disassembly, recycling stages**  
P. Matkowski, K. Friedel, J. Felba. Wrocław University of Technology, Poland
- 11:30-11:50** **Technical aspects of plastics waste recycling from used electric and electronic equipments**  
K. Walczak, M. Machnicka-Hławiczka. Central Mining Institute, Poland
- 11:50-12:10** **System of WEEE management potential directions of advancement in few years perspective**  
P. Matkowski, K. Friedel, J. Felba. Wrocław University of Technology, Poland
- 12:10-12:30** **Proecological policy in Hewlett-Packard company**  
P. Mękarski. Hewlett-Packard, Poland
- 12:30-13:50** **Lunch**
- 13:50-14:10** **The role of environmental management in realization of sustainable development principles in organizations of the electronic sector, as exemplified by ITR**  
J. Lenik. Tele and Radio Research Institute, Poland
- 14:10-14:30** **The electronic waste destruction in a new modular device worked on the principle of thermal decomposition and plasma oxidation**  
T. Opalińska, E. Kowalska, J. Radomska, B. Ulejczyk. Tele and Radio Research Institute, Poland and Institute of Plasma Physics and Laser Microfusion, Poland
- 14:30-14:50** **Prospects for including the „Green Electronics” issues into research project co-financed by the EU Seventh Framework Program for RTD**  
M. Gonera. Tele and Radio Research Institute, Poland
- 14:50-15:00** **Summary of the conference**
- 15:00** **Cocktail**

**Second Announcement**

**V<sup>th</sup> International Conference**  
**ECOLOGY IN ELECTRONICS & European-Chinese Seminar**  
**“Green Electronics”**



**Organizer**



**Tele and Radio Research Institute**

**Honour Patronage**



**MINISTRY OF ECONOMY**



**MINISTRY OF THE ENVIRONMENT**



**POLISH CHAMBER OF COMMERCE FOR ELECTRONICS AND TELECOMMUNICATION**

**26-27.05.2008**  
**WARSAW, POLAND**

## Ecology in Electronics & „Green Electronics”

### Registration Form

I accede to take a part in the conference.  
My details are:

First / Sure Name

Title

Position

Institution

Institution VAT identification number

Address for a correspondence

E-mail

Phone

Fax

Date

Signature

Registration on-line possible from our site  
<http://www.itr.org.pl/eko>

### Ecology in Electronics Conference mission and target:

The purpose of the V<sup>th</sup> Conference “Ecology in electronics” is the continuation of its traditional mission to establish a forum for the exchange of knowledge on ecological aspects of designing and manufacturing electronic systems, reuse of components and recycled materials used in electronic equipment.

Main target of the conference is strengthening among participants, the familiarity with principles and the application aspects of EU Directives on Waste Electrical and Electronic Equipment (WEEE), on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) and on Eco-Design Requirements for Energy-Using Products (EuP).

### European-Chinese Seminar “Green Electronics”

The conference will start with the seminar „Green Electronics” which aims at the exchange of experience and widening of research and business cooperation between Europe and China in the range of “green electronics”.

During the seminar the issues concerning the performance of the European project EC-GEPRO (Europe-China Cooperation in Green Electronics Production Research) will be presented.

### Invited participants

Active participation of persons from academia, research institutes, industry and administration is expected. We cordially invite all of them and hope the conference will create an effective platform for communication and cooperation between specialists from governmental, industrial, educational, research and other sectors in the range of environmental friendly electronics.

### Basic information:

- The working languages: Polish and English
- Place of the venue: The House of Technology, Warsaw, 3/5 Czackiego Str.
- All registered participants of the conference will receive printed materials in English
- Translation into English and Polish languages will be secured simultaneously

### Media Patronage

**E**lektronika  
konstrukcje • technologie • zastosowania

**Elektronik**  
MAGAZYN ELEKTRONIKI PROFESJONALNEJ

**RECYKLING**

**problemy  
EKOLOGII**

**PRZEGLĄD  
TECHNICZNY**  
GAZETA INŻYNIERSKA  
SAKOBÓW W 1990

### Scientific Committee:

**Dr. Józef Gromek** – Director of ITR – Chairman  
**Dr. Otto Andersen** – Western Norway Research Institute, Norway  
**Prof. Zdzisław Drozd** – Warsaw University of Technology, Poland  
**Prof. Jan Felba** – Wrocław University of Technology, Poland  
**Prof. Kazimierz Friedel** – Materials Recycling Center of Excellence, Poland  
**Dipl. Eng. Hansjörg Griese** – Fraunhofer Institute, Germany  
**Prof. Mieczysław Hering** – Warsaw University of Technology, Poland  
**Stefan Kamiński** – Polish Chamber of Commerce for Electronics and Telecommunication, Poland  
**Wojciech Konecki** – CECED, Poland  
**Dr. Helge Kristiansen** – CONPART, Norway  
**Prof. Johan Liu** – Chalmers University, Sweden  
**Prof. Xiu Zhen Lu** – Shanghai University, China  
**Piotr Mękowski** – Hewlett-Packard, Poland  
**Prof. Zbigniew Moser** – Institute of Metallurgy and Material Science of the Polish Academy of Sciences, Poland  
**Dr. David Whalley** – Loughborough University, UK  
**Dr. Zhang Yan** – Shanghai University, China  
**Prof. Zygfryd Nowak** – Society Polish Movement for Cleaner Production, Poland

### Organizing Committee:

**Chairperson** Krystyna Bukat  
**Secretary** Marek Gonera  
**Members** Wojciech Stęplewski  
Ireneusz Rafalik  
Sebastian N. Karolewski  
Tomasz Głuszak

### Address for correspondence

**Tele and Radio Research Institute**  
11 Ratuszowa Str., 03-450 WARSAW, POLAND  
Phone: +48-22 831 46 11, +48-22 619 25 10  
Fax: +48-22 619 29 47

**e-mail:** [eko@itr.org.pl](mailto:eko@itr.org.pl) <http://www.itr.org.pl/eko>

Conference fee - cost of conference reception, conference proceedings, refreshments and lunches - **100 EUR**. The fee should be transferred before **8<sup>th</sup> of May 2008** as follows:

**Bank:** Bank BPH S.A. O/Warszawa  
**Account number:** 50 1060 0076 0000 3200 0078 9676  
**SWIFT:** BPHK PL PK  
**Annotation:** Registration fee ECO <participant name>

Payment must be free of bank charges to the receiver.