



5th European Young Investigator Conference
June 22 – 26, 2011 (Collegium Polonicum, Słubice)

Conference Program

Date: May 17, 2011

Organizers

Dirk M. Guldi, Erlangen, Germany (Chairman)
Axel Kahnt, Erlangen, Germany
Christian Ehli, Erlangen, Germany

Local Organizing Committee

Bronisław Marciniak, Poznań, Poland
Klaus-Dieter Asmus, Berlin/Poznań, Germany/Poland
Tomasz Pędziński, Poznań, Poland

CONFERENCE PROGRAM

Wednesday, June 22, 2011

14.00 – 18.00	REGISTRATION (Collegium Polonicum, main entrance) Guesthouse check-in
19.00	WELCOME PARTY

Thursday, June 23, 2011

7.00	FIT FOR EYIC	(please see page 10)
8.00 – 9.00	BREAKFAST	
9.15 – 9.40	OPENING OF THE CONFERENCE	

Session I

Chair: Dirk M. Guldi

- 9.40 Małgorzata Bayda, Jack Saltiel
Photochemistry of Provitamin D₃ at 77 K
- 10.05 Bohdan Skalski, Jan Milecki, Stefan Franzen, Joanna Nowak
Photocrosslinking of 5-halogeno-2'-o-methyl-4-thiouridine-labelled duplex oligodeoxynucleotides
- 10.30 Susanne Eich, Elmar Schmälzlin, Hans-Gerd Löhmannsröben
Distributed fiber optical oxygen sensing with optical time domain reflectometry

10.55 COFFEE BREAK

Session II

Chair: Jaipal Mittal

- 11.15 Taru Nikkonen, Juho Helaja, Christian Ehli, Dirk Guldi
Models for chlorophyll 'spezial pairs' in photosynthetic reaction centers
- 11.40 Katrin Peuntinger, Miguel Iglesias, Tomas Torres, Dirk M. Guldi
Hydrogen bonding in supramolecular electron donor acceptor hybrids for solar energy conversion
- 12.05 Paweł Wroński, Anna Szpigiel, Jan Perkowski, Magdalena Szadkowska-Nicze
Photocatalytic properties of nitrogen doped TiO₂ irradiated with electron beam
- 12.30 Przemysław Michalak, Mariusz Wojcik, M. Tachiya
Computer Simulations of Charge Carrier Separation in Organic Photovoltaic Cells

13.00 LUNCH
14.00 FREE TIME
16.10 COFFEE BREAK

Session III

Chair: Ortwin Brede

- 16.30 Milena Marszalek, Anna Konarska, Tadeusz Strozik, Marian Wolszczak
Physicochemical properties of berberine and sanguinarine upon binding to DNA and human serum albumin (HSA)
- 16.55 D. A. Streletsova, S. V. Vasilieva
Comparative study of the SOS DNA-repair mechanism induced by UVC in the aerobic and anaerobic respiratory systems
- 17.20 Michelle S. Tierney, Anna K. Croft and Maria Hayes
Irish macroalgae; Promising sources of novel free radical scavengers

18.00 DINNER

Session IV

Chair: Bernd Abel

- 19.30 Krzysztof Bobrowski (invited talk)
Radiation-induced Oxidation Processes in Peptides and Proteins Relevant to Oxidative Stress
- 20.20 **Poster pre-presentation I** (odd numbers)

20.40 **POSTER PRESENTATION I** (odd numbers)

Friday, June 24, 2011

7.00 FIT FOR EYIC (please see page 10)
8.00 – 9.00 BREAKFAST

Session V

Chair: Klaus-Dieter Asmus

- 9.15 Anna Lewandowska, Gerald Hörner, Gordon L. Hug, Bronislaw Marciniak
Unexpected solvent effect in the quenching of triplet-excited benzophenones by anisole
- 9.40 Sabrina Kirner, Jackson D. Megiatto, Gustavo de Miguel, Silke Wolfrum, Dirk M. Guldi, David I. Schuster
Interlocked supramolecular porphyrin-fullerene systems for solar energy conversion
- 10.05 Jenny Malig, J., Norbert Jux , Dirk M. Guldi
Graphene Nanohybrids
- 10.30 Philipp Stock, Gerald Hörner, Andreas Grohmann
Photoinduced Spin Transitions in a Conformationally Restricted Iron(II) Complex: Observation of a Long-Lived High-Spin State

10.55 COFFEE BREAK

Session VI

Chair: Gerald Hörner

- 11.15 Christina Schubert, Yongjun Li, Steffen Jockusch, Nicholas Turro, Dirk M. Guldi
Photophysics of Fullerenes Covalently linked to Nitroxide Radicals
- 11.40 Marta Ignasiak, Tomasz Pedzinski, Debora Scuderi, Piotr Filipiak, Gabriel Kciuk, Chantal Houee-Levin, Bronislaw Marciniak
Oxidation studies of methionine-containing peptides
- 12.05 Ekaterina S. Lisitsyna, Sergey G. Skuridin, Yuriy M. Evdokimov, Victor M. Rudoy, Olga V. Dementieva, Vladimir A. Kuzmin
Au nanoparticles influence on SYBRGreen fluorescence in DNA complex
- 12.30 Suvarna Phadatare, Kiran Sharma, Stefanie Klein, Geeta Sharma, Carola Kryschi
Role of Metallic Nanostructures in DNA damage: A Radiation Chemical approach

13.00 CONFERENCE PICTURE

13.10 LUNCH

14.30 EXCURSION TO MÜLLROSE

19.00 DINNER

Session VII**Chair: Krzysztof Bobrowski**

- 20.15 Ivana Ivanović-Burmazović (invited talk)
**Interactions of metal centers and small inorganic molecules and free radicals
(superoxide, NO, H₂S)**

- 21.05 Poster pre-presentation II (even numbers)

- 21.25 **POSTER PRESENTATION II** (even numbers)

Saturday, June 24, 2011

- 7.00 FIT FOR EYIC (please see page 10)
8.00 – 9.00 BREAKFAST

Session VIII**Chair: Axel Kahnt**

- 9.15 Bernd Abel (invited talk)
The solvated electron: a seemingly familiar chemical and biological transient
- 10.05 A. K. El Omar, U. Schmidhammer, M. Mostafavi
**Distance dependence of the reaction rate of organic compounds with
solvated electrons**
- 10.30 Anna Balcerzyk, Uli Schmidhammer and Mehran Mostafavi
**Picosecond Pulse Radiolysis of Direct and Indirect Radiolytic Effects in
Highly Concentrated Halide Aqueous Solutions**

- 10.55 COFFEE BREAK

Session IX**Chair: Ivana Ivanović-Burmazović**

- 11.15 B. G. Singh and K. I. Priyadarsini
One-electron redox reaction of organoselenium compounds
- 11.40 Piotr Meisner, Jerzy L. Gębicki
Reactions of flavonoids with some oxidizing radicals in water systems
- 12.05 D. Saffré, E. Atinault, M. Mostafavi, M. Fattahi-Vanani,
E. Balanzat, G. Baldacchino
Br⁻ oxidation in extreme conditions of Linear Energy Transfer and temperature
- 12.30 Stefanie Kuke, Michael U. Kumke
Lanthanides as luminescence probes for the investigation of metal-ligand interactions

13.00 DINNER

14.00 FREE TIME

16.10 COFFEE BREAK

Session X**Chair: Wolfgang Knolle**

- 16.30 Anne Techen, Carsten Hille, Carsten Dosche and Michael U. Kumke
CTAB micelles as carrier models for studying drug carrier interactions
- 16.55 Artemiy Mizerev, Elena Lukovskaya, Olga Fedorova, Yury Fedorov, Alla Boblyova,
Anna Moiseeva, Aleksander Anisimov
Design, complexing, optical and electrochemical properties of oligothiophenes containing crown ether fragments
- 17.20 Kyunsylu Khatmullina
Studies of the gel-polymer electrolytes based on polyester diacrylate by the electrochemical impedance spectroscopy method

17.45 – 18.00 CLOSING ADDRESSES

19.00 CONFERENCE DINNER

Sunday, June 26, 20118.00 – 9.00 BREAKFAST
9.00 DEPARTURE

LIST OF POSTERS

- P 01 Gerald Hörner, Anna Lewandowska, Gordon L. Hug
Medium Effects on Hydrogen-Atom Transfer Reactions from Phenols: The Intramolecular Kinetic Solvent Effect and its Reversal
- P 02 Alexey Kiryutin, Olga Morozova, Alexandra Yurkovskaya, Herbert Zimmermann, Talea Köchling, Hans-Martin Vieth
Determination of Hyperfine Coupling Constants of Short-lived Radicals from ^{13}C and ^{15}N Geminate CIDNP Spectra
- P 03 Katarzyna Stawowska, Piotr Meisner, Jerzy L. Gebicki, Lidia Gebicka
The kinetic studies of the reaction of flavonoids with the radiation-generated $\cdot\text{NO}_2$ radicals
- P 04 Aleksandra Wojcik, Prashant V. Kamat
Interaction of tetra(4-aminophenyl)porphyrin with graphene oxide and reduced graphene oxide
- P 05 Katarzyna Taras-Goślińska, Gotard Burdziński, Tomasz Pędziński, Grażyna Wenska
Femtosecond and nanosecond photolysis of 2-Thiothymidine and its derivatives
- P 06 Marta Chylińska, Marta Ziegler-Borowska, Halina Kaczmarek
Novel spirohydantoin-based stymeric monomers
- P 07 Agnieszka Sulich, Jan Grodkowski, Jacek Mirkowski, Rafal Kocia, Mark Foreman
Benzophenone as a probe in the pulse radiolysis of cyclohexanone and 1-octanol, diluents for procedures in minor actinides extraction
- P 08 Tadeusz Strozik, Anna Konarska, Milena Marszałek, Marian Wolszczak, Maria Hilczer
Interactions of Some Porphyrines with Human Serum Albumin or DNA
- P 09 Małgorzata Szymańska-Owczarek, Jerzy L. Gębicki
Kinetics of ascorbic acid oxidation in micellar systems – pulse radiolysis studies
- P 10 Sławomir Kadłubowski, Bożena Rokita, Piotr Ułański, Janusz M. Rosiak
Pulse radiolysis of N-acetyl-seryl-aspartyl-lysyl-proline in aqueous solutions: determination of reaction rate constants and product analysis

- P 11 Joanna Jozwiakowska, Sameer P. Nalawade, Radoslaw A. Wach,
Bozena Rokita, Piotr Ulanski, Dirk W. Grijpma, Jan Feijen, Janusz M.
Rosiak
**Influence of Electron Beam Irradiation on Physicochemical
Properties of Poly(trimethylene carbonate)**
- P 12 R. A. Wach, A. Adamus, A.K. Olejnik, J. Jozwiakowska, J.M. Rosiak
**Biodegradation of nerve regeneration tube of poly(L-lactic acid),
poly(trimethylene carbonate) and methylcellulose**
- P 13 A. Adamus, R.A. Wach, J. Jozwiakowska, D.W. Grijpma, P. Ulanski
**Effect of electron beam irradiation on trimethylene carbonate and
lactide copolymers**
- P 14 Adam Sikora, Dawid Dębski, Jan Adamus, Jacek Zielonka,
Balaraman Kalyanaraman
**The pulse radiolysis study of the transient products of one-
electron oxidation of fluorescent probe Amplex Red.**
- P 15 Małgorzata Jakubowska, Adam Sikora, Andrzej Marcinek, Jerzy
Gębicki
**The pulse radiolysis study of the interaction between heparin and
pyridinium cations**
- P 16 Łukasz Piotrowski, Adam Sikora, Agnieszka Dybała-Defratyka, Joanna
Narewska, Radosław Podsiadły, Jolanta Sokołowska, Andrzej
Marcinek
**Oxidative transformation of aryl boronate compounds by
hypochlorite - Stopped flow and quantum mechanical study**
- P 17 Varavara Y. Gotovtseva
**Increasing productivity of the strain *Streptomyces sp.* № 59 by
induced selection**
- P 18 Gabriel Kciuk, Krzysztof Bobrowski, Jacek Mirkowski, Julio R. De la
Fuente, Christian Aliaga
**Spectral and kinetic properties of transient species derived from
2-methyl-3-azaoxoisoporphine in organic solvents**
- P 19 Stefanie Klein, Luitpold Distel, Suvarna Phadatare, Carola Kryschi
**Engineering of functionalized gold nanoparticles as
radiosensitizer for radiation therapy**
- P 20 Michael Sekita, Franziska Witterauf, Gerhard Bringmann, Dirk M. Guldi
**Photophysical Characterization of Multichromophoric Porphyrin
Systems**
- P 21 A. Stritt, A. Ünal, A. Grohmann
**Thermally Induced Valence Tautomerism in Novel Cobalt
Complexes**

- P 22 Daniel Kofi Essien, Nicholas Appiah Korsah, Jonah Techie-Yawson, Francis Acquah
Production of potassium permanganate ($KMnO_4$) from cocoa pod and manganese dioxide ore
- P 23 W. Knolle, S. Naumov, L. Prager, T. Scherzer, H. Oppermann, K. Czihal
Photochemistry of (Meth)Acrylates Following 172 - 222 nm Excitation
- P 24 Ewa Banasiak and Lidia Gębicka
Radiation-induced changes of the heme center of hemoglobin in the absence and presence of catechins
- P 25 Rafael M. Krick Calderon, Michael Frunzi, Elisa Huerta, Carles Bo, Javier de Mendoza, Bruno Grimm, Nicholas J. Turro, Dirk M. Guldi
Photoinduced Electron Transfer and Spin Chemistry of Endohedral Fullerenes
- P 26 Anna Konarska, Milena Marszalek, Tadeusz Strozik, Marian Wolszczak
Characterization of short-lived intermediates of biologically important alkaloids
- P 27 A. G. Sanz, F. Sebastianelli, F.A. Gianturco, F. Blanco, G. García
Electron scattering cross sections in HCN
- P 28 Christopher Asmus, Christian Schöneich
Mechanistic Aspects of Pyruvate and Peroxide - Experimental verification of an intermediate
- P 29 Georgios Katsukis, Dirk M. Guldi
Immobilization of CdTe Nanoparticles onto Single and Few Layer Graphene

During all poster sessions:



FIT FOR EYIC

Invitation to Fit for EYIC



morning recreation run (ca. 5 km) along the Oder river for all interested EYIC participants

Thursday / Friday / Saturday (7 a.m.)
Meeting point in front of the guesthouse
at the main entrance gate

IMPRINT

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