Front Matter: Volume 8454


Photonics Applications in Astronomy, Communications, Industry, and High-Energy Physics Experiments 2012

Ryszard S. Romaniuk
Editor

28 May – 3 June 2012
Wilga, Poland

Organized by
Institute of Electronic Systems, Faculty of Electronics and Information Technologies,
Warsaw University of Technology (Poland)

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Published by
SPIE

Volume 8454
Contents

xiii Symposium Committee
xv Introduction

SESSION 1 PHOTONICS APPLICATIONS AND WEB ENGINEERING, XXXTH JUBILEE WILGA 2012 SYMPOSIUM

8454 02 WILGA Photonics and Web Engineering, January 2012 [8454-101]
R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

8454 03 Astronomy and Space Technologies, Photonics Applications and Web Engineering, Wilga, May 2012 (Invited Paper) [8454-102]
R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

8454 05 Photon Physics and Plasma Research, Photonics Applications and Web Engineering, Wilga, May 2012 [8454-104]
R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

8454 07 Biomedical, Artificial Intelligence, and DNA Computing Photonics Applications and Web Engineering, Wilga, May 2012 [8454-106]
R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

SESSION 2 PI OF THE SKY: A NETWORK OF ASTRONOMICAL TELESCOPES

8454 08 Analysis framework for GLORIA (Invited Paper) [8454-42]
A. F. Żarnecki, L. W. Piotrowski, Univ. of Warsaw (Poland); L. Mankiewicz, Ctr. for Theoretical Physics (Poland); S. Matek, National Ctr. for Nuclear Research (Poland)

8454 09 Monitoring system of the Pi of the Sky experiment [8454-47]
A. Ćwiek, T. Batsch, National Ctr. for Nuclear Research (Poland); L. Mankiewicz, Ctr. for Theoretical Physics (Poland); K. Nawrocki, National Ctr. for Nuclear Research (Poland); A. F. Żarnecki, Univ. of Warsaw (Poland)
Parallax in Pi of the Sky project (Invited Paper) [8454-53]
A. Majcher, National Ctr. for Nuclear Research (Poland); M. Sokotowski, Curtin Univ. (Australia); ARC Ctr. of Excellence for All-Sky Astrophysics (Spain), and National Ctr. for Nuclear Research (Poland); T. Batsch, National Ctr. for Nuclear Research (Poland); A. J. Castro-Tirado, Instituto de Astrofísica de Andalucía (Spain); H. Czyrkowski, Univ. of Warsaw (Poland); A. Ćwiek, National Ctr. for Nuclear Research (Poland); M. Ćwiok, R. Dąbrowski, Univ. of Warsaw (Poland); M. Jelínek, Instituto de Astrofísica de Andalucía (Spain); G. Kasprowicz, Warsaw Univ. of Technology (Poland); A. Majczyna, National Ctr. for Nuclear Research (Poland); K. Matek, Ctr. for Theoretical Physics (Poland) and Nagoya Univ. (Japan); L. Mankiewicz, Ctr. for Theoretical Physics (Poland); K. Nawrocki, National Ctr. for Nuclear Research (Poland); R. Opieła, Ctr. for Theoretical Physics (Poland); L. W. Piotrowski, Univ. of Warsaw (Poland); W. Nowosielski, P. Orleanski, Space Research Ctr. (Poland); M. Zarembo, A. F. Żarnecki, Univ. of Warsaw (Poland)

Spectral analysis of the burst source 4U 1728-34 [8454-69]
A. Majczyna, National Ctr. for Nuclear Research (Poland); J. Madej, M. Należyty, Univ. of Warsaw Astronomical Observatory (Poland)

Photometric analysis of the Pi of the Sky data [8454-70]
R. Opieła, K. Matek, L. Mankiewicz, M. Siudek, Ctr. for Theoretical Physics (Poland); M. Sokotowski, A. F. Żarnecki, Univ. of Warsaw (Poland)

SESSION 3  SATELLITE AND SPACE TECHNOLOGY

Polish-made payload for the BRITE-PL 2 satellite Heweliusz (Invited Paper) [8454-88]
T. Zawistowski, Space Research Ctr. (Poland)

SphinX x-ray spectrophotometer (Invited Paper) [8454-28]
M. Kowaliński, Space Research Ctr. (Poland)

Low cost amateur rotators for student’s satellites and high altitude balloon application [8454-38]
G. Woźniak, M. Stolarski, Space Research Ctr. (Poland)

Dynamic partial FPGA reconfiguration in space applications [8454-39]
R. Graczyk, M. Stolarski, Space Research Ctr. (Poland) and Astri Polska sp.z o.o. (Poland); M.-C. Palau, Astri Polska sp.z o.o. (Poland); P. Orleanski, Space Research Ctr. (Poland)

Estimation of PW-Sat satellite orbit based on Doppler effect [8454-41]
M. Stolarski, G. Woźniak, Space Research Ctr. (Poland) and Nicolaus Copernicus Astronomical Ctr. (Poland)

Versatile self-reconfigurable digital processing platform for satellite and aerospace applications [8454-50]
A. Cichocki, Warsaw Univ. of Technology (Poland) and Space Research Ctr. (Poland); W. Nowosielski, P. Orleanski, Space Research Ctr. (Poland)
Low cost and high performance on-board computer for picosatellite [8454-67]
T. Rajkowski, R. Graczyk, Astri Polska sp.z o.o. (Poland), Space Research Ctr. (Poland), and Warsaw Univ. of Technology (Poland); M. C. Palau, Astri Polska sp.z o.o. (Poland); P. Orleński, Space Research Ctr. (Poland)

Instrument data processing unit for spectrometer/telescope for imaging x-rays (STIX) (Invited Paper) [8454-89]
K. R. Skup, A. Cichocki, R. Graczyk, M. Michalska, M. Mosdorf, W. Nowosielski, Space Research Ctr. (Poland); P. Orleński, Space Research Ctr. (Poland) and Univ. of Applied Sciences and Arts Northwestern Switzerland (Switzerland); A. Przepiórka, K. Seweryn, M. Stolarski, M. Winkler, J. Sylwester, M. Kowalinski, Space Research Ctr. (Poland); T. Mrozek, Space Research Ctr. (Poland) and Univ. of Wroclaw (Poland); P. Podgorski, Space Research Ctr. (Poland); A. O. Benz, S. Krucker, G. J. Hurford, N. G. Arnold, Univ. of Applied Sciences and Arts Northwestern Switzerland (Switzerland); H. Önele, Leibniz-Institut für Astrophysik Potsdam (Germany); A. Meuris, O. Limousin, CEA Saclay (France); O. Grimm, ETH Zürich (Switzerland)

SESSION 4  HIGH ENERGY PHYSICS EXPERIMENTS

Detector control system for the ATLAS Transition Radiation Tracker: architecture and development techniques (Invited Paper) [8454-71]
E. Banaś, Z. Hajduk, J. Olszowska, The Henryk Niewodniczański Institute of Nuclear Physics (Poland)

Fast ADC based multichannel acquisition system for the GEM detector (Invited Paper) [8454-48]
G. Kasprowicz, Warsaw Univ. of Technology (Poland); T. Czarski, M. Chernyshova, Institute of Plasma Physics and Laser Microfusion (Poland); W. Dominik, Univ. of Warsaw (Poland); K. Jakubowska, L. Karpinski, Institute of Plasma Physics and Laser Microfusion (Poland); K. Kierzkowski, Univ. of Warsaw (Poland); K. Poźniak, Warsaw Univ. of Technology (Poland); J. Rzadkiewicz, M. Scholz, Institute of Plasma Physics and Laser Microfusion (Poland); W. Zabolotny, Warsaw Univ. of Technology (Poland)

Implementation of PCI Express bus communication for FPGA-based data acquisition system [8454-62]
A. Byszuk, J. Kołodziejski, G. Kasprowicz, K. Poźniak, W. M. Zabolotny, Warsaw Univ. of Technology (Poland)

Accelerator science and technology in Europe: EuCARD 2012 [8454-107]
R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

Heavy stable charged particles search by novel pattern comparator processor [8454-73]
A. Zagoźdźinska, K. T. Poźniak, R. Romaniuk, Warsaw Univ. of Technology (Poland)

Simulation and measurement of super-high density micropixel avalanche photodiodes [8454-45]
A. Rychter, Warsaw Univ. of Technology (Poland)
SESSION 5  COMMUNICATIONS AND MULTIMEDIA TECHNOLOGY

8454 0R  Particularities of design and application of model-based simulation research bench to analysis of adaptive feedback communication systems (Invited Paper)  [8454-75]
I. Zaitsev, A. Platonov, Warsaw Univ. of Technology (Poland)

8454 0S  Development of embedded PC and FPGA based systems with virtual hardware  [8454-6]
W. M. Zabołotny, Warsaw Univ. of Technology (Poland)

8454 0T  Low cost USB-local bus interface for FPGA based systems  [8454-7]
W. M. Zabołotny, G. Kasprowicz, Warsaw Univ. of Technology (Poland)

8454 0U  Huffman coding in advanced audio coding standard  [8454-24]
G. Brzuchalski, Warsaw Univ. of Technology (Poland)

8454 0V  Stereo matching with superpixels  [8454-25]
M. Roszkowski, Warsaw Univ. of Technology (Poland)

8454 0W  An FPGA architecture for MPEG-2 TS demultiplexer  [8454-33]
A. Abramowski, Warsaw Univ. of Technology (Poland)

8454 0X  Bitrate estimation for P-frames in rho domain  [8454-34]
M. Wieczorek, Warsaw Univ. of Technology (Poland)

8454 0Y  Measuring and minimizing interrupt latency in Linux-based embedded systems  [8454-60]
R. Rybaniec, Institute of Aviation (Poland); P. Z. Wieczorek, Warsaw Univ. of Technology (Poland)

8454 0Z  Improvement of intelligent cyclic ADC resolution by randomization of DAC INL errors  [8454-74]
Ł. Małkiewicz, Warsaw Univ. of Technology (Poland)

SESSION 6  OPTOELECTRONIC TECHNOLOGIES, COMPONENTS, DEVICES, AND SYSTEMS

8454 10  Nonlinear light propagation in photonic crystal fibers infiltrated with liquid crystalline materials (Invited Paper)  [8454-21]
K. Orzechowski, K. A. Rutkowska, Warsaw Univ. of Technology (Poland)

8454 11  Time efficiency of the electric tuning of index-guiding photonic liquid crystal fiber  [8454-59]
A. Siarkowska, S. Ertman, T. R. Wolinski, Warsaw Univ. of Technology (Poland)

8454 12  Incoherent optical MIMO transmission over multimode fibers  [8454-26]
M. Kowalczyk, Warsaw Univ. of Technology (Poland)

8454 13  Enhancement of pumping efficiency in 8-core double-clad optical fiber doped with Nd³⁺  [8454-22]
M. Kochanowicz, D. Dorosz, J. Żmojda, P. Miluski, J. Dorosz, Białystok Univ. of Technology (Poland)
Yb\(^{3+}\)/Ho\(^{3+}\)-codoped antimony-silicate optical fiber [8454-30]
J. Żmojda, D. Dorosz, M. Kochanowicz, P. Miluski, J. Dorosz, Białystok Univ. of Technology (Poland)

Active materials to enhance the efficiency of PV systems [8454-31]
M. Wyrwas, J. Żmojda, D. Dorosz, M. Kochanowicz, K. Iwanowicz, T. Ragiń, W. Mazerski, J. Dorosz, Białystok Univ. of Technology (Poland)

Analysis of upconversion processes in germanate and tellurite glasses codoped with Yb\(^{3+}\)/Ho\(^{3+}\) [8454-32]
K. Iwanowicz, T. Ragiń, M. Wyrwas, J. Żmojda, M. Kochanowicz, D. Dorosz, J. Dorosz, Białystok Univ. of Technology (Poland)

Capillary optical fibre sensor for measurement of dry weight in liquid sugar [8454-49]
P. Miluski, Białystok Univ. of Technology (Poland)

Laser technology and applications 2012: a preview [8454-111]
J. Gajda, West Pomeranian Univ. of Technology in Szczecin (Poland); R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

Optical testing of air slit [8454-97]
D. Kuźma, Ł. Dubiel, T. Więcek, Rzeszów Univ. of Technology (Poland)

Atlas of copper standard spectrum for the grating 1300 lines/mm mounted at PGS-2 spectrograph [8454-96]
J. Domin, J. Sadowska, Rzeszów Univ. of Technology (Poland)

SESSION 7 MATERIALS AND TECHNOLOGIES

Method of making electric connections using inkjet printing painting on LTCC substrates (Invited Paper) [8454-4]
K. Futera, Tele and Radio Research Institute (Poland) and Warsaw Univ. of Technology (Poland); M. Jakubowska, Warsaw Univ. of Technology (Poland); G. Kozioł, A. Araźna, K. Janeczek, Tele and Radio Research Institute (Poland)

Characterization of polymer silver pastes for screen printed flexible RFID antennas [8454-43]
K. Janeczek, Tele and Radio Research Institute (Poland); M. Jakubowska, Institute of Electronic Materials Technology (Poland) and Warsaw Univ. of Technology (Poland); K. Futera, Tele and Radio Research Institute (Poland); A. Młoźniak, Institute of Electronic Materials Technology (Poland); G. Kozioł, A. Araźna, Tele and Radio Research Institute (Poland)

Composites with increased thermal conductivity: FEM analysis [8454-81]
K. Gutkowska, Warsaw Univ. of Technology (Poland)

Screen printed, transparent, and flexible electrodes based on graphene nanoplatelet pastes [8454-95]
G. Wróblewski, D. Janczak, Warsaw Univ. of Technology (Poland)
SESSION 8 COMPONENTS AND SYSTEMS MODELING

8454 1F A study of the parallel algorithm for large-scale DC simulation of nonlinear systems (Invited Paper) [8454-10]
D. E. Cortés Udave, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico); J. Ogrodzki, Warsaw Univ. of Technology (Poland); M. A. Gutiérrez de Anda, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico)

8454 1G DC simulator of large-scale nonlinear systems for parallel processors [8454-11]
D. E. Cortés Udave, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico); J. Ogrodzki, Warsaw Univ. of Technology (Poland); M. Gutiérrez de Anda, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico)

8454 1H Benchmarking a derivative-free minimax optimizer for EM design (Invited Paper) [8454-12]
L. J. Opalski, Warsaw Univ. of Technology (Poland)

8454 1I A new approach to improvement of pipeline A/D converters characteristics [8454-36]
K. Jędrzejewski, Warsaw Univ. of Technology (Poland)

8454 1J Properties of digital 1/3-octave filters implemented according to ANSI S1.11 [8454-40]
A. Geras, T. Starecki, Warsaw Univ. of Technology (Poland)

8454 1K Transmission line model with skin effect for generic circuit simulator [8454-8]
K. Opalska, Warsaw Univ. of Technology (Poland)

8454 1L Accelerating artificial intelligence with reconfigurable computing [8454-18]
R. Cieszewski, Warsaw Univ. of Technology (Poland)

8454 1M Application of the least squares constant modulus algorithm for multipath removal in the FM signal [8454-112]
Z. Gajo, M. Linczuk, Warsaw Univ. of Technology (Poland)

SESSION 9 BIOMEDICAL AND DNA COMPUTING

8454 1N Simplified model of mean double step (MDS) in human body movement (Invited Paper) [8454-16]
J. J. Dusza, Warsaw Univ. of Technology (Poland); Z. M. Wawrzyniak, Warsaw Univ. of Technology (Poland) and Medical Univ. of Warsaw (Poland); C. F. Mugarra González, Univ. of Valencia (Spain)

8454 1O Data management and quality assurance in a population study (Invited Paper) [8454-98]
Z. M. Wawrzyniak, Warsaw Univ. of Technology (Poland) and Medical Univ. of Warsaw (Poland); D. Paczesny, Warsaw Univ. of Technology (Poland)

8454 1P Reverse translations of gene-coding DNA sequences using hidden Markov models [8454-27]
T. Kaczynski, R. Nowak, Warsaw Univ. of Technology (Poland)
EEG signal classification based on artificial neural networks and amplitude spectra features
K. Chojnowski, J. Frączek, Warsaw Univ. of Technology (Poland)

Classification of RNA secondary structure
P. Róż, R. Nowak, Warsaw Univ. of Technology (Poland)

Heuristics for haplotype frequency estimation with a large number of analyzed loci
M. Nowotka, R. Nowak, Warsaw Univ. of Technology (Poland)

Impedance pneumography: Is it possible?
M. Młyńczak, Warsaw Univ. of Technology (Poland); G. Cybulski, Warsaw Univ. of Technology (Poland) and Mossakowski Medical Research Ctr. (Poland)

Optimization of short amino acid sequences classifier
A. Barcz, Z. Szymański, Warsaw Univ. of Technology (Poland)

Design guidelines for an umbilical cord blood stem cell therapy quality assessment model
W. S. Januszewski, K. Michatek, Warsaw Univ. of Technology (Poland); O. Yagensky, Jagiellonian Univ. in Krakow (Poland); M. Wardzińska, Univ. of Warsaw (Poland)

Feature selection from short amino acid sequences in phosphorylation prediction problem
J. Węcławski, S. Jankowski, Z. Szymański, Warsaw Univ. of Technology (Poland)

On data modeling for neurological application
K. Woźniak, J. Mulawka, Warsaw Univ. of Technology (Poland)

Development of genome viewer (Web Omics Viewer) for managing databases of cucumber genome
M. Wojciech, Warsaw Univ. of Life Sciences (Poland); P. Róż, Warsaw Univ. of Technology (Poland); M. Pawłowski, Warsaw Univ. of Life Sciences (Poland); R. Nowak, Warsaw Univ. of Technology (Poland); Z. Przybecki, Warsaw Univ. of Life Sciences (Poland)

SESSION 10
AIRBORNE APPLICATIONS OF COMPUTATIONAL INTELLIGENCE

A new bio-inspired decision chain for UAV sense-and-avoid applications (Invited Paper)
P. Fallavollita, Univ. degli Studi di Roma La Sapienza (Italy) and Humanitarian Demining Lab. (Italy); F. Cimini, Univ. degli Studi di Roma La Sapienza (Italy); M. Balsi, S. Esposito, Univ. degli Studi di Roma La Sapienza (Italy) and Humanitarian Demining Lab. (Italy); S. Jankowski, Warsaw Univ. of Technology (Poland)

Environment model for unmanned flying vehicles based on simulated radar data
M. Pawłowski, Z. Szymański, Warsaw Univ. of Technology (Poland)

Unmanned aerial vehicle 3D flight simulator by vector field histogram
S. Tor, S. Jankowski, Warsaw Univ. of Technology (Poland)
Reconstruction of environment model by using radar vector field histograms [8454-94]
Z. Szymański, S. Jankowski, J. Szczyrek, Warsaw Univ. of Technology (Poland)

Optimization of support vector machine hyperparameters using radius/margin bound [8454-100]
S. Jankowski, W. Sadurski, Warsaw Univ. of Technology (Poland)

SESSION 11  ARTIFICIAL INTELLIGENCE, CRYPTOGRAPHY, SOFTWARE, AND ONTOLOGICAL ITC SYSTEMS

A proposal to describe a phenomenon of expanding language (Invited Paper) [8454-57]
K. Swietorzecka, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland)

Implementation of inference calculus in the PowerLoom environment [8454-15]
M. F. Wachuński, J. J. Mulawka, Warsaw Univ. of Technology (Poland); E. Nieznański, Lazarski Univ. (Poland)

On a categorial aspect of knowledge representation [8454-37]
E. Tataj, J. Mulawka, Warsaw Univ. of Technology (Poland); E. Nieznański, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland)

On proving in epistemic logic [8454-46]
D. Grzegorczyk, J. J. Mulawka, Warsaw Univ. of Technology (Poland); E. Nieznański, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland)

The philosophical backgrounds of formal concept analysis [8454-51]
M. Porwolik, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland)

Interfacing Clojure with Pogamut 3 platform [8454-58]
M. Gołuński, P. Wąsiewicz, Warsaw Univ. of Technology (Poland)

Modeling intelligent agent beliefs in a card game scenario [8454-68]
M. Gołuński, Warsaw Univ. of Technology (Poland); R. Tomanek, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland); P. Wąsiewicz, Warsaw Univ. of Technology (Poland)

Inconsistency and its automated proving [8454-76]
P. Orzeszek, Cardinal Stefan Wyszynski Univ. in Warsaw (Poland)

A plug-in to Eclipse for VHDL source codes: functionalities [8454-108]
B. Niton, K. T. Poźniak, R. S. Romaniuk, Warsaw Univ. of Technology (Poland)

Cryptographically secure hardware random number generator dedicated for distributed measurement and control systems [8454-3]
P. Czernik, Warsaw Univ. of Technology (Poland)
Modular multiplication in $\text{GF}(p)$ for public-key cryptography [8454-17]
J. Olszyna, Warsaw Univ. of Technology (Poland)

Author Index
Symposium Committees

Symposia Steering Committee

Andrzej W. Domański, Warsaw University of Technology (Poland)
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Władysław Skarbek, Warsaw University of Technology (Poland)
Wojciech M. Zabołotny, Warsaw University of Technology (Poland)
### Session Chairs

1. Photonics Applications and Web Engineering, XXXth Jubilee Wilga 2012 Symposium  
   **Ryszard S. Romaniuk**, Warsaw University of Technology (Poland)

2. Pi of the Sky – A Network of Astronomical Telescopes  
   **Filip A. Żarnecki**, Warsaw University (Poland)

3. Satellite and Space Technology  
   **Piotr Orleański**, Space Research Center, Polish Academy of Sciences (Poland)

4. High Energy Physics Experiments  
   **Krzysztof T. Poźniak**, Warsaw University of Technology (Poland)

5. Communications and Multimedia Technology  
   **Władysław Skarbek**, Warsaw University of Technology (Poland)

6. Optoelectronic Technologies, Components, Devices, and Systems  
   **Michał Borecki**, Warsaw University of Technology (Poland)

7. Materials and Technologies  
   **Małgorzata Jakubowska**, Warsaw University of Technology (Poland)

8. Components and System Modeling  
   **Leszek Opalski**, Warsaw University of Technology (Poland)  
   **Jan Ogrodzki**, Warsaw University of Technology (Poland)

9. Biomedical and DNA Computing  
   **Antoni Grzanka**, Warsaw University of Technology (Poland)

10. Airborne Applications of Computational Intelligence  
    **Stanisław Jankowski**, Warsaw University of Technology (Poland)

11. Artificial Intelligence, Cryptography, Software and Ontological ITC Systems  
    **Jan J. Mulawka**, Warsaw University of Technology (Poland)

12. WILGA 2012 SPIE–PSP Best Student Paper Awards  
    **Maciej Linczuk**, Warsaw University of Technology (Poland)  
    **Ryszard Kossowski**, Warsaw University of Technology (Poland)  
    **Michał Ramotowski**, Warsaw University of Technology (Poland)
Introduction

The SPIE-IEEE-PSP WILGA Symposium [wilga.ise.pw.edu.pl] is a kind of international Forum of Young Science in Photonics, Advanced Electronics, and Internet Engineering. It is organized twice a year under the eminent patronage of two big international engineering institutions, SPIE [www.spie.org/] and IEEE [www.ieee.org/] and their Polish Counterparts: PSP—Photonics Society of Poland [www.photonics.pl/], successor of Polish Chapter of SPIE [www.spie.pl/] and IEEE Poland Section [www.ieeepol.pl], with participation of IEEE R8 [ewh.ieee.org/reg/8/sac/cms]. The patrons of the symposium are: PAS—Polish Academy of Science (The Committee on Electronics and Telecommunication) [keit.pan.pl], Association of Polish Electrical Engineers (SEP) [www.sep.com.pl], Polish Committee of Optoelectronics SEP [pkopto.ise.pw.edu.pl], Warsaw University of Technology [www.pw.edu.pl], Institute of Electronic Systems [www.ise.pw.edu.pl].

WILGA Organizers: The Symposium is organized by a group of devoted young people - photonics, mechatronics, and electronics researchers - gathered in the PERG/ELHEP Research Group of the Institute of Electronic Systems at the Faculty of Electronics and Information Technology of WUT. Most of these young researchers are active members of PSP, SEP, SPIE, OSA, and IEEE. The symposium is diligently done by young researchers for young fellow researchers and the main aim is to have a lot of fun and to learn a lot.

WILGA Publications: The WILGA Symposium publishes its papers in the following proceedings series, technical and peer-reviewed journals: Proceedings of SPIE, since 2002; IEEE eXplore, Internet publication database; Photonics Letters of Poland, since 2009; Elektronika, SEP Journal, since 1998; JET—Intl. Journal of Electronics and Telecommunications, PAS.

WILGA Proceedings of SPIE: There has been a long tradition of WILGA publishing its works in the Proceedings of SPIE. This volume is the 12th published of the WILGA-SPIE series. All of the WILGA-SPIE volume series contain more than 1000 papers; all WILGA Symposia published more than 2500 papers with around 5000 participants. This is an extraordinary achievement for a modest symposium oriented solely on young researchers. No one event of similar character could compare to this achievement. This success was only possible due to big involvement of young researchers in their work. The following WILGA Proc. SPIE were published: Wilga 2002 – Proc. SPIE 5125; Wilga 2003 – Proc. SPIE 5484; Wilga 2004 – Proc. SPIE 5775; Wilga 2005 bis – Proc. SPIE 5948; Wilga 2005 – Proc SPIE 6159; Wilga 2006 – Proc. SPIE 6347; Wilga 2007 – Proc. SPIE 6937; Wilga 2008 – Proc. SPIE 7124; Wilga 2009 – Proc. SPIE 7502; Wilga 2010 – Proc. SPIE 7745; WILGA 2011 – Proc. SPIE 8008; WILGA 2012 – Proc. SPIE 8454.
SPIE Poland 2005: The SPIE Poland meetings in 2005 were very special because then the Polish Chapter of SPIE (predecessor of Photonics Society of Poland) hosted together with SPIE and some other regional SPIE Chapters, the SPIE Warsaw Congress on Optics and Optoelectronics – SPIE COO Warsaw 2005. WILGA 2005 Symposium was split to two parts – one held usually in WILGA and the second jointly with the COO’05.

WILGA ways and topics: The official language of the symposium is English. Peer reviewed papers are published in a renowned, internationally recognized series called the Proceedings of SPIE. The symposium is designed mainly for Ph.D., M.Sc., and B.Sc. students (from physics, electronics and mechatronics, as well as material research) and their tutors/mentors. WILGA has a number of main topical tracks. Historically, the first one was Photonics and Web Engineering. Generally, WILGA embraces advanced photonic, mechatronic and electronic systems, in the following aspects: theory, modeling, algorithms, simulations, emulations, design, hardware, software, hardware-software interaction and integration, measurements, testing, commissioning and exploitation. WILGA also addresses new research tendencies like 3D photonics and electronics design, micro- and nano-systems, material engineering including meta-materials.

Topical sessions are organized by leading experts. Sessions usually begin with current tutorials and are filled with contributed papers by students and young researchers. One of the most important session tracks in WILGA are photonics applications and systems for superconductive accelerator (and free electron laser) technology and high energy physics experiments. We invite warmly students, young researchers and their tutors to participate in WILGA.

WILGA XXXth Jubilee Symposium: The WILGA 2012 January Edition was held on 26–29 January 2012 at WUT’s FE&IT. WILGA 2012, the May edition, was held on 28 May-2 June 2012 in a resort owned by Warsaw University of Technology. More than 300 presentations were delivered during both editions of Wilga, covering a broad area of photonics applications and web engineering. Nearly 350 persons participated. An exceptionally efficient chair of the Organization Committee of WILGA 2012 was traditionally Dr. Maciek Linczuk [M.Linczuk@elka.pw.edu.pl].

The working research Sessions of 30th WILGA 2012 were: general photonics, optical fiber technology, optical communications, optoelectronics, applications of optical fibers, integration of electronics, photonics and mechatronics, distributed measurement systems, LHC and CMS at CERN, JET and ITER tokamaks, optics and optoelectronics for astronomy, fundamentals of FPGA-DSP systems, object oriented design of hardware, terabit optical data links, software-hardware co-design, biomedical engineering, computational intelligence of advanced systems, development of photonics and electronics in Europe and Poland, radar technology, terahertz photonics, free electron lasers, E-XFEL and POLFEL lasers, EuCARD – European Coordination of Accelerator Research and Development, TIARA, etc.
WILGA offsprings: The WILGA Symposium gave birth to a few topical meetings and conferences which then struck out on their own. These include students regional meetings (Opole, Wroclaw, Kielce, Bialystok, Lublin, Torun and others), of SPIE student chapters, IEEE student branches, but also stand-alone conferences. Some of these meetings are still held periodically with Wilga, while some of them gained complete independence. WILGA is very proud of this sort of partnership, since the very good idea of WILGA is proliferating elsewhere. One of such meetings is, now fully nondependent, SPS – Signal Processing Symposium which started at Wilga in 2003.

SPIE – PSP WILGA 2013: The organizers of WILGA 2012 Symposium, to be held on 27 May – 02 June 2013, warmly invite interested young researchers and students in photonics and related fields to participate in this exceptional and very friendly research event oriented to host young researchers from Poland and all over Europe.

References
25. R. Romaniuk, WILGA Symposium on photonics applications, Photonics Letters of Poland 1 (2), 2009, pp. 46-48

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