

XII Conference SPIE-IEEE "Photonics and Web Engineering" WILGA, 22-25 May 2003

International M.Sc. and Ph.D. students Symposium gathers in Warsaw University of Technology Resort in Wilga numerable representatives of technical universities from this country and IEEE Region 8. The high patronage over this symposium is held by IEEE, SPIE, Polish Academy of Sciences and Warsaw University of Technology. The event is held, since several years, annually, during the last weekend of May. This year the Symposium saw over 200 participants, quite a number from them from IEEE Region 8 (Europe, Middle East and Africa).

The Wilga Symposium created a specific form of appointing the Technical Program Committee. Permanent members are leaders of the patronage institutions. Changing members are present at the Symposium senior representatives of technical universities and industrial laboratories from this country and IEEE R8.

The Symposium is usually attended by quite large groups of M.Sc. and Ph.D. students as well as young researchers from technical universities and corporate laboratories. These groups come frequently under the supervision of a senior research worker. Wilga Symposium is one of not very numerable meetings in IEEE R8 totally designed for young scientists and organized by young scientists and engineers, many of them members of IEEE and SPIE. Wilga Symposium is an effective forum of exchange for research results and information on work conditions at different places in the IEEE R8. The students are interested in similarities and differences in the curricula's and employment opportunities over the region. Ph.D. students are seriously interested in study subjects in the relevant fields of their colleagues from other universities in IEEE R8. This knowledge considerably facilitates their work on the thesis. Wilga facilitates exchange of personal information during IEEE sponsored, informal, social meeting at a grill. The nice specialty of the local kitchen are extremely tasty Wilga cakes, specially fit to semi-sweet wine.

Not all of the standard research conferences enable such efficient meetings of young researchers. The financial problems are the basic cause. The young researcher problems are treated as marginal at many conferences. A lot of the communications of young researchers are presented only during poster sessions. Wilga is quite different in this respect. All papers are presented orally in English with an obligatory discussion following the presentation. Frequently, the hot discussion is continued during the coffee breaks. All the sessions are lead by young researchers, while the senior research staff work as judges. The presentations are judged by the colleagues, sometimes quite deeply, not only in respect of research content but also of the graphical form. The presentations are sent to organizers only in electronic form and presented in this way. They are then distributed on CDs or available on the web.

The fundamental assumption for the Wilga Symposium is to keep the minimal costs for the young participant. Organizers offer full accommodation at a very competitive price. There is no conference fee at all. The second assumption is to keep the program level of the Symposium as high as possible. For most of the participants, members of IEEE and SPIE the participation costs are close to zero as it is comparatively easy to get organizational support. No conference fee is possible, only when the event is organized wholly on the voluntary base. It has to be valued at a Symposium of this extent and size. The organization is facilitated by the fact that Wilga is nearly an ideal spot. Warsaw University of Technology resort is located at the outlet of the Wilga River to the big Vistula River in the middle of big pine forests. The accommodation conditions are modest but acceptable. The local food is very good. These conditions isolate the participants ideally from the influence of the external world. Good and cheap bus communications to/from Warsaw assures that the Symposium attracts numerable young researcher participation.

To assure the highest level of the Symposium the papers are selected first for the presentation and next for the publication. The papers submitted for the Symposium have to be recommended by the supervisors of the young researchers, symposium participants. After presentation and discussion, the best papers are chosen for publication in the IEEE professional press. Usually the organizers publish a special edition of one of the local professional journals additionally to issuing a separate volume of well known series Proceeding of SPIE. Prior to publication the papers are peer reviewed. The announcements about the Wilga symposium are published in IEEE and SPIE press as well as in the local professional journals.

Topical area of the symposium was initially confined to the photonics, optical communications and the optical Internet. With time it was broadened to advanced electronic systems, digital signal processing, mechatronics, automation, etc. Broadening of the scope was very favorable for the level of the contributions, especially from the Ph.D. students. The analysis methods used in quite different branches of modern technology are sometimes analogous and it is possible to transfer efficiently the experience between young researchers. The successive symposia receive more and more better contributions from the whole IEEE R8. The organizers consider edition of more than one volume of international proceedings next year.

Patronage of large international organizations like IEEE and SPIE over the Wilga symposium is very important not only for the organizers but also for individual participants. The mentioned organizations are represented in this country by their national Sections and Chapters. Both organizations IEEE and SPIE have rich libraries in this country, accessible freely for members. The libraries are located at the central technical library of Warsaw University of Technology. The IEEE and SPIE patronage assures international meaning of the symposium. It is possible to publish the symposium papers in the press of these organizations, which assures the worldwide access. The organizers try to make Wilga symposium as an official event of IEEE and SPIE in this geographical region. Now Wilga is supported by regional Student Activity Committees of both institutes.

The major topical subject of Wilga 2003 Symposium was photonics. The biggest centers presenting these subjects were Technical Universities in Warsaw, Białystok and Wrocław, Institute of Electron Technology and Military Academy of Technology in Warsaw. A group of papers concerned developments in the construction of the biggest world X-ray, free electron laser TESLA (DESY, Hamburg). These papers were in between such branches as mechatronics, advanced electronics, and UV, RTG photonics. The photonics was also represented in papers from TU of Kielce (photonic materials), TU of Lublin (industrial applications) and TU of Gdansk (sensors). Some papers described particular photonic sub-systems applied in industrial conditions.

The papers concerning the Internet touched such problems as: optical network architecture, modern protocols for optical networks, optical network reliability, QoS, etc. Other papers concerned distance learning, data bases for WWW servers, hardware remote control over the Internet, etc. A separate session was organized with the aid of Industrial Institute of Telecommunication in Warsaw about DSP for industrial and military applications.

Other topical groups during the 2003 Wilga Symposium were: image recognition, optical mapping of 3D objects, electronics and photonic for astronomy and accelerator technology, laser technology, calculation grids, complex measurement systems and networks.

In order to further decrease the costs for users and make the symposium more comfortable for the users the sessions were organized not according to the topics but the papers from particular TUs were gathered. It was customary for TU groups to come to and leave the symposium together. Topical sessions will be created in the proceedings. Each topical session has a supervisor - a member of the patronage committee.

The organizers invite interested persons, member and non-members of IEEE and SPIE institutes to participate actively in the IEEE-SPIE Symposium Wilga 2004. The Symposium is scheduled for 26-30 May 2004. More detailed information is available on the web under the following URL <http://nms.ise.pw.edu.pl/wilga>.

Senior researchers are invited to bring along younger colleagues, organize topical or panel sessions and suggest invited papers. M.Sc. and Ph.D. students are invited to present the results of their research on theoretical and practical problems, which are subjects of their theses. The IEEE-SPIE Wilga Symposium is a magnificent place to test your ability to present ones own results and to defend the thesis in the fire of research discussion in an international environment. It is just the best way to begin the difficult way of gathering ones own achievements on a difficult but fascinating way of technical research.

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