

**59TH SCIENTIFIC CONFERENCE
THE COMMITTEE OF CIVIL AND HYDRAULIC ENGINEERING
OF POLISH ACADEMY OF SCIENCES AND THE SCIENCE COMMITTEE
OF POLISH ASSOCIATION OF ENGINEERS AND TECHNICIANS**

The 59th Scientific Conference of Committee of Civil and Hydraulic Engineering (KILiW PAN) and the Science Committee of Polish Association of Engineers and Technicians (PZITB) was held from 15–20 September 2013 in Krynica Zdrój. Its direct organizer was the Faculty of Civil Engineering and Architecture, Lublin University of Technology, and the place of sessions, Hotel Krynica****.

The Conference was held the auspices of Minister of Science and Higher Education – Barbara Kudrycka, Minister of Agriculture and Rural Development – Stanisław Kalemba, Undersecretary of State at the Ministry of Infrastructure, Construction and Maritime Economy – Janusz Żbik, as well as Marshall of Lubelskie Voivodeship – Krzysztof Hetman.



Fig. 1. The opening of the Conference by the Dean of the Faculty of Civil Engineering and Architecture, Lublin University of Technology, Assoc. Ewa Błazik-Borowa Prof. PL, Ph.D. Eng.; behind a presidium table there are sitting from the left: MSc. Ryszard Trykosko – the Chairman of PZITB, Prof. Wojciech Radomski Ph.D. Eng. – the Chairman of KILiW PAN, Prof. Andrzej Łapko – the Chairman of Scientific Committee PZITB.

The media sponsorship was provided by the journals: Civil Engineering and Building, Builders Review, Civil Engineer, Bridges, Modern Construction Engineering, Modern Hale, AgroHale.

The conference was attended by 367 people, representing mainly technical universities and Polish Chamber of Civil Engineers, as well as research institutes and agricultural universities. Moreover, the conference was also attended by the designers and representatives of construction works. It took place in two parts: the problematic and general.

OPENING OF THE CONFERENCE

The conference was officially opened by the Chairman of the Scientific Committee, Prof. Wojciech Radomski, Ph.D. Eng. and the Dean of the Faculty of Civil Engineering and Architecture, Lublin University of Technology – Assoc. Ewa Błazik-Borowa, Prof. PL, Ph.D. Eng. Furthermore, the letter from the Rector of the Technical University of Lublin, Prof. Piotr Kacejko, Ph.D. Eng. was read to the participants of the conference. The words of welcome were also given by the Chairman of the Scientific Committee PZITB Prof. Andrzej Łapko, Ph.D. Eng, the Chairman of PZITB MSc. Ryszard Trykoko and Deputy General Inspector of Building Ph.D. Eng. Jacek Szer.



Fig. 2. The speech of Prof. Tadeusz Godycki-Ćwirko who was awarded Prof. Roman Ciesielski Medal.



Fig. 3. The presentation of Kaufman Medal to Prof. Ryszard Kowalczyk Ph.D. Eng.

A significant part of the opening ceremony was the presentation of awards and medals PZITB. Thus, Prof. Żenczykowski Award received Ph.D. Eng. Zbigniew Perkowski, Prof. Bryła Award – Assoc. Renata Kotynia Prof. PŁ Ph.D. Eng., Prof. Kaufman Medal – Prof. Ryszard Kowalczyk Ph.D. Eng, and Prof. Ciesielski Medal – Prof. Tadeusz Godycki-Ćwirko Ph.D. Eng. Two Prof. Dyżewski Awards received: for scientific achievements Ph.D. Eng. Mieczysław Połoński, and for practical achievements – MSc Michał Wrzosek.



Fig. 4. Prof. Bryła Award Winner – Assoc. Renata Kotynia Ph.D. Eng. Prof. PL.



Fig. 5. Prof. Żenczykowski Award Winner – Ph.D. Eng. Zbigniew Perkowski.



Fig. 6. The presentation of Prof. Dyżewski Awards to Ph.D. Eng. Mieczysław Połoński and MSc. Michał Wrzosek.

The opening ceremony was launched by the performance of Ballroom Dance Formation ‘Gamza’ existing for over 40 years at Lublin University of Technology.



Fig. 7. The performance of Ballroom Dance Formation ‘Gamza’ of Lublin University of Technology.

PROBLEMATIC PART OF THE CONFERENCE

According to tradition, problematic part of Krynica Conference is devoted to issues related to construction, yet with a social aspect. This year it was titled “Building on rural areas – science, practice, perspectives”. The organizers chose the theme on the basis of seven grounds which are

- social scale of the problem
- the current changes of the rural areas associated with cultural changes of rural society and technological alterations in agriculture,
- the treatment of rural building tradition as a social problem as well as the tradition of training the specialists in this field.
- scientific research conducted at Polish universities
- specific facilities related to agriculture and agri-food industry
- the increase of investment in rural areas related to aid programs
- the nature of Lublin as an agricultural region

In the problematic part, 25 papers were delivered, grouped into six sessions of a problem. The papers were prepared on request of the organizers by the recognized experts in the field of rural construction and related topics.

The first session was devoted to the investments in agriculture and agri-food industry. At the beginning, the representative of the Ministry of Agriculture and Rural Development – Prof. A. Kowalski Ph.D. Eng. discussed the place of agriculture and agri-food

industry in the national economy; and the specificity of agricultural investments in such region as Lublin Province – a representative of the Marshal's Office in Lublin – Ph.D. Eng. J. Sobczak. This session also dealt with such issues as the sustainability in urban planning in rural areas (Assoc. M. Kowicki Ph.D. Eng. of Architecture Prof. PK) as well as the place of agricultural construction in Construction Law (Ph.D. Eng. Jacek Szer).



Fig. 8. Sessions of problematic part were launched by the paper of Prof. A.Kowacki Ph.D. Eng. – a representative of the Minister of Agriculture and Rural Development.

The second session, titled “Problems of development of rural construction”, presents the characteristics of traditional rural construction (Ph.D. Eng. of Architecture I. Niedźwiecka-Filipiak), revitalization problems of historic agri-food industry buildings (Assoc. E. Przesmycka Ph.D. Eng. Arch. Prof. PWr), issues of energy economy from alternative sources in rural areas (Prof. Ph.D. Eng. P. Kacejko and Ph.D. Eng. S. Adamek), the specificity of forest construction (Ph.D. Eng. G.Trzcziński) and the issue of local roads (Ph.D. Eng. M. Cwiąkała). The third session was devoted to construction and materials in the agricultural construction. The two papers of this session were devoted to lightweight insulating enclosure applied to storage, coolers and freezers (MSc A. Krzywulski and Ph.D. Eng. Z. Pozorski), the principles of protection of reinforced concrete structures in agricultural buildings were also discussed (on behalf of the authors ITB, the paper was delivered by Ph.D. Eng. T. Możaryn) as well as glass was characterised as a building material for greenhouses (MSc A. Marczevska).

The fourth session concerned the development of agricultural buildings including the question of building physics, corrosion and fire hazards, and in particular agricultural biogas facilities (Prof. A. Myczko Ph.D. Eng.) livestock buildings (Assoc. T. Głuski

Ph.D. Eng. Prof. UP), greenhouses (Ph.D. Eng. S. Grabarczyk), coolers and freezers (Prof. H. Nowak Ph.D. Eng.), and the lecture about the fire hazards was given on behalf of the authors from ITB by Ph.D. Eng. A. Borowy. Furthermore, the fifth session dealt with the silos for agricultural products –the specifics of their design and construction (Prof. A. Łapko Ph.D. Eng.), testing and modelling loads in silos (Prof. J. Horabik Ph.D. Eng.) as well as steel silos (Assoc. E. Hołota Ph.D. Eng. Prof. Pwr). The last session was devoted to water systems in rural areas, and the reports on so-called drainage and building facilities associated with it, and small water bodies, were delivered by Prof. E. Pierzgalski Ph.D. Eng, Prof. Sz.L. Dąbkowski Ph.D. Eng, Prof. W. Moduszewski Ph.D. Eng, and Ph.D. Eng. A. Pichla.

The papers aroused lively discussion. In the concluding session, the participants claimed that the subject of construction in rural areas, treated frequently as a “second-class” construction, turned out to be intriguing. More importantly, investments in rural areas, currently so intensified, are an opportunity not only for this area but also for construction industry itself since designers and contractors can use this place for their business. Hence agricultural building provides ample opportunities for research, especially in the field of research work in the specific conditions and the use of local and waste materials to reduce the cost of investment.

GENERAL PART OF A CONFERENCE

In the general session, out of 127 submitted papers, 114 papers were delivered and accepted by the Scientific Committee, working under the guidance of Prof. W. Radomski Ph.D. Eng.



Fig. 9. One of the speakers of “Communication Engineering – Bridges” session.



Fig. 10. A discussion during the “Concrete Structures” session.

The papers were divided into sessions according to their subject matter: General and Agricultural Construction (4 papers), Building Physics (6 papers), Communication Engineering – Bridges (9 papers), Building Material Engineering (16 papers), Construction Projects Engineering (10 papers), Concrete Structures (17 papers), Steel Structures (18 papers), Mechanics of Structures and Materials (11 papers), Geotechnical Design (7 papers), as well as Historic Buildings (4 papers) and Wind Engineering (12 papers).

In the course of a general part, a competition for the best paper of a young scientist was held. The condition was that it was a self-report and the author was under the age of 35 years. The paper of MSc. K. Synowiec from Silesian University of Technology was considered to be the best by the jury, and two more awards received the representatives of the Institute of Building Technology – MSc. G. Krajewski and MSc. W. Węgrzyński.

In the summary of a general part, the Chairman of Scientific Committee concluded that while searching for new trends or scientific schools in delivered paper, two significant groups of new issues can be distinguished: wind engineering and scaffolding issues.

EVENTS ACCOMPANYING THE CONFERENCE

On Tuesday, September 17, there was the meeting of the Scientific Committee PZITB during which Prof. Bryła and Prof. W.Żenczykowski Awards Winners presented their research profiles.



Fig. 11. Congratulations to the Chairman of the Scientific Committee PZITB – Prof. Andrzej Łapko Ph.D. Eng. who was elected for a new term.

It was also the report and election meeting. The outgoing Chairman of Scientific Committee PZITB – Prof. A. Łapko Ph.D. Eng. presented the report for the passing term. Subsequently, in the secret ballot, the government committee for a new term was elected. The Chairman turned out to be Prof. A. Łapko Ph.D. Eng. for the second time, and a secretary Assoc. Krystyna Nagrodzka-Godycka Ph.D. Eng. Prof. PG.

Moreover, in the course of the conference, there took place the meeting of Program Group *ISO/TC98*, Metal Structures Section *KILiW* Academy of Sciences, the Polish Association of Wind Engineering as well as the meeting of Scientific Committee “Composite Structures”.

Tuesday night is regarded to be a traditional “Engineering Evening” organized by the Polish Association of Construction Engineers and Technicians. The official part, led by the Chairman of PZITB MSc. R. Trykosko, consisted of two points. The first was the 75th anniversary of the journal “Engineering and Construction”. Its editor-in-chief – Ph.D. Eng. S. Pyrak who holds this role for almost 30 years, presented the history of the journal, and then received congratulations from the Chairman of PZITB, Chairman of *KILiW* Academy of Sciences, Chairman of Council Journals PZITB as well as the Organizing Committee of the conference. The second point concerned the presentation of a representative of the Circle of Young PZITB. She told about the operation of the Circles of Young, which bring together young engineers and students in their last year of studies, and in particular, about conferences and competitions for young “builders” as well as the program directed at their campaign “Engineer’s Honor”. Engineering evening ended with a banquet.



Fig. 12. The 75th anniversary of the journal “Engineering and Construction”, from the left: the Chairman of PZITB MSc Ryszard Trykosko and the editor-in-chief of the journal, Ph.D.Eng. Stefan Pyrak.



Fig. 13. The presentation of Young Circles PZITB: “Engineer’s Honor”.

On Wednesday, the “Bridge Evening” took place which was hosted by the Polish Association of Bridge Engineers. A banquet was preceded by the official part which was graced by the presence of Undersecretary of State in the Ministry of Transport, Construction and Maritime Economy – Janusz Żbik. During its course, the annular awards of the Polish Association of Bridge Engineers were presented. The statuette in the competition “Bridge Work of the Year” A.D. 2012 for “the implementation of new technology, new technical solutions as well as innovative solutions in terms of

the elements of bridge equipment – which have a significant impact on the progress of Polish bridge engineering” won the ribbon footbridge for drivers and pedestrians in Lubień (contractor ENGINEERING COMPANY IMB Podbeskidzie Ltd., designer – MSc. B. Markocki). The statuette for “a building of an innovative design and technical solutions, fitting the environment” won a viaduct WD-1 in the route J.Słowackiego in Gdańsk (contractor: Budimex SA, designer – MSc. K. Topolewicz), and a statuette for “the rehabilitation of bridge construction – the object which new technologies, innovative design and organization solutions were implemented on” received the reconstruction of the bridge over the Bóbr River as well as the construction of a twin bridge to the other thread (contractor: “Gotowski Communication and Industrial Construction” Ltd., designer – MSc. K. Kolasa). Moreover, the ZMRP medals were presented for “outstanding achievements in Polish bridge engineering”. They were awarded to W. Bielski of the Warsaw Branch ZMRP, M. Jusik of Wielkopolska Branch ZMRP and R. Michalczuk of Pomorsko-Kujawski Branch ZMRP. The final Prize of Mieczysław Rybaka for outstanding achievements in the research and development of Polish bridge technology was presented to Ph.D. Eng. P. Łaziński of Silesian University of Technology.



Fig. 14. The presentation of one of the prizes ZMRP “Bridge Work of the Year” during the Bridge Evening, the ceremony was attended by the Undersecretary of State in the Ministry of Transport, Construction and Maritime Economy – Janusz Żbik (the first from the left).

For a more complete presentation of the Faculty of Civil Engineering and Architecture, Lublin University of Technology, the organizer of the conference, the exhibition of the works by students of architecture was organized in the lobby in front of the conference rooms. The students prepared not only the exhibition itself, but also the

professional directory that was included in the conference materials received by the participants. The exhibition as a non-technical and artistic element of the conference aroused great interest.



Fig. 15. The conference lobby with promoting stands.



Fig. 16. The exhibition of the works by students of architecture of the Faculty of Civil Engineering and Architecture, Lublin University of Technology in the lobby.

SPONSORS, PROMOTIONS, EXHIBITIONS

The conference could take place thanks to the sponsors. These were the Main Sponsors: EuroProjekt, Interbud Lublin S.A., Kingspan, Lublin District Chamber of Civil Engineers, MOTAENGIL, Wienerberger i Wikana S.A.; Sponsors: PANanalytical, Market Elizówka, Stachema Polska and Wapeco Ltd.; as well as prizes sponsors in the competition for the best paper of a young researcher: Stachema Poland and Polish Scientific Publishers PWN.

Four of the sponsors presented themselves in 15-minute presentations as a part of a promoting session, and companies such as Betomax, Hilti, Stachema, PANanalytical presented their stands in the conference lobby.

THE NEXT YEAR CONFERENCE

In conclusion, it can be stated that almost a week spent at the conference in Krynica by the participants was fruitful in terms of science. Many scientific achievements were presented, and experiences were exchanged. This was also the time of scientific community integration as well as its integration with the practitioners.

The next conference is going to be in the following year – this time Jubilee – organized for the sixtieth time. It will be organized by the Department of Civil Engineering and Architecture, Lublin University of Technology for the second time. Even today, the Scientific Committee and Organizing Committee of the conference invite to participate in it.

The Chairman of the Scientific Committee – Prof. Wojciech Radomski

Vice-Chairman of the Organizing Committee – Prof. Anna Halicka