

Polish Committee  
on Theory of Machines and Mechanisms  
affiliated to the Committee of Machine Building  
Polish Academy of Science  
affiliated to IFToMM (international relations)  
Term of office: 2007-2010

Gliwice, 8<sup>th</sup> DEC., 2008

**REPORT on ACTIVITIES  
of POLISH COMMITTEE on THEORY of MACHINES and MECHANISMS  
(PC TMM)  
YEAR 2008**

1. AUTHORITIES

New authorities for the term of office 2007-2010 (appointed in February 2008) are as follows:

President: prof. dr hab. inż. Józef Wojnarowski,

Vice-presidents :

prof. dr hab. inż. Antoni Gronowicz, prof. dr hab. inż. Edmund Wittbrodt.

Presiding Board of PC TMM consists of the president, the vice-presidents as well as members:

dr hab. Iwona Adamiec-Wójcik, prof. AT-H, prof. dr hab. inż. Krzysztof Kędzior,  
prof. dr hab. inż. Franciszek Siemieniako, prof. dr hab. inż. Tadeusz Uhl.

Secretary: dr inż. Stanisław Zawiślak.

National Committee of Co-operation with IFToMM:

President: prof. dr hab. inż. Marek Dietrich,

Members: prof. dr hab. inż. Antoni Gronowicz, prof. dr hab. inż. Krzysztof Kędzior,  
prof. dr hab. inż. Tadeusz Uhl, prof. zw. dr hab. inż. Józef Wojnarowski.

Secretary: dr inż. Stanisław Zawiślak

2. PLENARY MEETINGS

2.1. In 2008 three plenary meetings and one meeting of presiding board of PC TMM took place. The plenary meetings were held in Warszawa (on 19<sup>th</sup> FEB., 2008), in Hołny Mejera (on 13<sup>th</sup>-15<sup>th</sup> JUNE, 2008) and in Szczyrk (on 24<sup>th</sup> SEPT., 2008), whereas the meeting of the presiding board in Bielsko-Biała (on 11<sup>th</sup> APRIL, 2008).

2.2. On the first plenary meeting in Warszawa (Warsaw University of Technology) the special Guests came i.e.:

Prof. Marco Ceccarelli (University of Casino, Italy) – President of IFToMM and Prof. Gerhard Bögelsack (University of Technology in Ilmenau, Germany) member of IFToMM commission i.e. - Permanent Commission for the Standardization of Terminology. During the meeting the letters of appointment for members of PC TMM for new term of office (duties) as well as for members of National Committee for Co-operation with IFToMM were granted. In total there are 60 members of PC TMM. The meeting were organized by Professor Krzysztof Kędzior.

The current issues of PC TMM were discussed.

After the session all members of PC TMM took part in the ceremony of granting to Professor Jan Oderfeld, (Honorary President of PC TMM, founder father of IFToMM) the title of Doctor Honoris Causa of the Warsaw University of Technology.

- 2.3. The plenary meeting no 2 took place in Hołny Mejera in the hostel of the University of Technology in Białystok. It was organized by: prof. Franciszek Siemieniako and dr Kazimierz Dzierżek from the Mechanical Faculty of Politechnika Białostocka (University of Technology in Białystok).

The special Guest was prof. Vitautas Ostasevicius – President of IFToMM National Committee in Lithuania, Member of Lithuanian Academy of Science.

The meeting consisted of three parts: part no 1: seminar during which the workers of Mechanical Faculty of Białystok University of Technology gave four talks on the departmental scientific research; part no 2: discussion of the current issues of PC TMM and part no 3: social/informal i.e. a day-trip to Vilnius – the capital of Lithuania.

During the discussions prof. Vitautas Ostasevicius presented the IFToMM National Committee of Lithuania. Moreover He proposed versatile areas of co-operation between the committees as well as the universities of Poland and Lithuania.

Further discussed issues were as follows: curricula of the subjects belonging to the field of TMM in Polish Universities of Technology (based upon Ministry files ), conference on TMM in Szczyrk (which will be held in September 2008), nominations of so called members-observers of PC TMM and World Congress of IFToMM in Mexico in 2011 as well as GAMM conference in Gdańsk in February 2009.

- 2.4. The plenary meeting of PC TMM no 3 were organized during the polish national Conference on TMM. Co-organizer of the meeting was Professor dr hab. n.t. Iwona Adamiec-Wójcik – Chairwoman of the Organizing Committee of the Conference. Several topics were discussed e.g.: Prof. Gronowicz presented a report on the presence of the TMM-connected subjects in curricula of Polish technical universities. Congratulations were given to the members of PC TMM which celebrated their jubilees of 70 and 75 birthdays – they obtained also some flowers. The place and the organizer of the next domestic conference on TMM in 2010 were established: i.e. Organizer: University of Technology in Białystok and Place: Augustów – a resort in Lake District (Pojezierze Augustowskie). Moreover it was decided that tradition of PC TMM meetings will be held i.e. presence of seminar part as an integral part of every meeting (giving 2-3talks) and visiting different university centers in Poland.

### 3. MEETING OF THE PRESIDING BOARD OF PC TMM

During the meeting of the presiding board of PC TMM in Bielsko-Biała in April 2008 – the current issues connected with organization of the Conference on TMM in Szczyrk were discussed. Among other – the following issues were considered: phase of preparation of the Conference, the referees of the papers submitted for the Conference were appointed, whole PC TMM was invited for the Conference.

### 4. CONFERENCE on TMM

The XXI-th Scientific-Didactic Conference on TMM were held within the period 22-25.09 in the hotel „Orle Gniazdo” in Szczyrk. At the beginning 91 papers were announced - however finally 52 papers were accepted and published in a book form. There were two volumes of the book one in Polish and one in English. The English book is entitled „Theory of Machines and Mechanisms” and it was edited by Professors J. Wo-

Wojnarowski and I. Adamiec-Wójcik. It contains 9 papers of Poles as well as foreign participants of the Conference e.g. from two Romanian Universities and from Kazakhstan. The book consists of two chapters: Analysis of kinematics and dynamics and Drives and control (86 pages in total).

There were the following papers of the foreign participants:

Catalin Alexandru, Claudiu Pozna: Dynamic analysis of the windshield wiper mechanisms in mechatronic concept.

Konstantin Ivanov: Dynamics of gear torque variator.

Simona-Mariana Cretu: Global mobility of mechanisms.

Catalin Alexandru, Claudiu Pozna: Testing the solar tracking mechanisms in virtual environment.

Konstantin Ivanov: Creation of gear adaptive mechanisms with constant engagement of wheels.

There were the following plenary lectures:

Eugeniusz Maciejewski, Jerzy Osiński, Piotr Żach, Zygmunt Żach: Gears of very high ratios.

Piotr Borkowski, Wojciech Niedźwiedź, Konstanty Skalski: Module of supply and control of elongable prosthesis of lower limb

Edmund Wittbrodt: Educational policy in European Union

Józef Wojnarowski: TMM history

Józef Knapczyk: Car suspension systems – design and investigations

## 5. ROUGH PLAN FOR YEAR 2009

5.1. The Plan for year 2009 encloses two plenary meetings of PC TMM i.e. – in March 2009 in Łódź and in the second part of a year in Nowy Sącz,

5.2. Encourage of Polish scientists to prepare papers and for participation in the World Congress of IFToMM in 2011,

5.3. Propagation of an idea of organization a future IFToMM Congress in Poland in year 2019 i.e. to celebrate the 50<sup>th</sup> anniversary of establishing of IFToMM (in Zakopane in 1969),

5.4. Co-operation with IFToMM.

## 6. WEB PAGE OF PC TMM

The web page of PC TMM has the following address: [www.tmm.ath.bielsko.pl](http://www.tmm.ath.bielsko.pl). The page has Polish and English subpages. The English subpage has an abbreviated form, enclosing the basic data on PC TMM and IFToMM. The Polish subpage contains several topics e.g.: history, members, photo galleries, co-operation with IFToMM and documents. On the subpage 'documents/reports' there are downloadable reports from the plenary meetings of PC TMM. There are also such data as: list of members of PC TMM, members of the presiding board and members of the national committee for co-operation with IFToMM. There are also direct links to: IFToMM webpage, webpage of the IFToMM Congress in Mexico in 2011 as well as a link to a current Polish conference on TMM when it is open.

President of PC TMM

Prof. Józef Wojnarowski