

6th International BAPT Conference

“POWER TRANSMISSIONS 2019”

June 19-22, 2019, Varna, Bulgaria



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Dear colleagues,

The 6th International Conference of Balkan Association of Power Transmissions will be held. BAPT was founded in 2001, since then conferences were organized by many Balkan countries like Bulgaria, Serbia, Montenegro, Greece, Romania, and Macedonia. It is the turn of Bulgaria again.

Dear colleagues, I think that we could consider ourselves lucky with our subject area. It is no coincidence that the gearwheel has become the symbol of the entire technology. The great number of conferences on transmissions in the various countries, even several in the same year so that they almost overlap, are a fact that speaks for itself. I believe that no other international organization enjoys such an interest and can come up with such numbers and frequency of meetings. Not to be overlooked is the fact that our subject field appeals to the people of the practice

and the deed. Apropos, this fully meets the demands of our pragmatic time.

Logically, the number of meetings around the world and their frequency raise the question of whether it is time to take organizational steps to form a global, 100% practical organization, not just a local organization like ours. The people of the deed will certainly welcome that.

Dear colleagues! By having the honor to open this conference, I allow myself to wish a high degree of efficiency of the conference ($\eta > 1$).

Prof. Dr.-Eng. Kiril Arnaudov
Honor President of the Balkan Association of Power Transmissions



Dear Ladies and Gentlemen,

I have the pleasure to welcome you to the

6th International BAPT Conference “Power Transmissions 2019”

which is organized by the Balkan Association of Power Transmissions and the Scientific-Technical Union of Mechanical Engineering (Bulgaria).

By this conference, we are putting an end to a cycle which was started with the foundation of BAPT in 2001 in Sofia, followed by the first conference in Varna in 2003 and the subsequent conferences in Novi Sad 2006, Kallithea 2009, Sinaia 2012, Ohrid 2016, and now again near Varna in 2019. I don't know any participants in a number of these conferences who can tell which was the best one. Each conference had its unique charm, both in terms of venue and warmth of the hosts, and in terms

of participants and high-quality papers.

I hope that this conference will bring together both founders and regular participants, and new (young both at age and at heart) participants as well in order to share our achievements and ideas for the development of power transmissions, to discuss the possibilities for joint projects, and to start a new and even more successful cycle of conferences under the auspices of BAPT.

I would like to acknowledge our sponsors and the members of the Organizing and Scientific Committees for their great support.

Thank you for attending to the 6th BAPT Conference!

Dr. Eng. Dimitar Karaivanov
President of the Balkan Association of Power Transmissions

Balkan Association of Power Transmission (BAPT)¹

Founded on 14 May 2001 in Sofia, Bulgaria by: **Bulgarian** Scientific-Technical Union of Mechanical Engineering (presented by Kiril Arnaudov, Dimitar Karaivanov and Damian Damianov); Technical Chamber of **Greece** and Association of Mechanical and Electrical Engineers of Northern **Greece** (presented by Athanassios Mihailidis from Aristotle University of Thessaloniki); **Macedonian** Union of Machine Elements and Design (MADEKO, presented by Dimitar Stamboliev and Kliment Trimchev), **Yugoslavian** Union of Machine Elements and Design (JUDEKO, presented by Vojislav Miltenović, Siniša Kuzmanović and Milosav Ognianović) and Mechanical Engineering Faculty of University of East Sarajevo (member of JUDEKO) – **Bosnia and Herzegovina** (presented by Momir Šarenac, nowadays presented by Biljana Marković).

Balkan and not only Balkan countries have joined the BAPT since foundation:

- In 2003 **Romania** (ROAMET presented by George Dobre, nowadays presented by Sorin Cananau);
- Slovenia** (University of Ljubljana presented by Yože Hlebanja)
- In 2009 **Kazakhstan** (Kazakh National Technical University, Almaty, presented by Konstantin Ivanov)
- In 2012 **Moldova** (Technical University of Moldova, Kishinev, presented by Ion Bostan and Valeriu Dulgheru)
- In 2014 **Ukraine** (National Technical University, Kharkiv, presented by Alexander Ustinenko)

BAPT is regularly organizing scientific conferences:

- 2003 in Varna, Bulgaria (Proceedings of Int. Conf. "Power Transmissions'03", Varna, 11 – 12 September 2003, 3 volumes. ISBN 954-90272-9-5);
- 2006 in Novi Sad, Serbia and Montenegro (Proceedings of Int. Conf. "Power Transmissions 2006", Novi Sad, 25-26.04.2006, 548 p. ISBN 86-85211-78-6.
- 2009 in Kallithea, Greece (Proceedings of the 3rd Int. Conf. Power Transmissions'09", edited by A. Mihailidis. Kallithea: Sofia Publications, 01-02 Oct. 2009, 656 p. ISBN 978-960-243-662-2)
- 2012 in Sinaia, Romania (Power Transmissions, edited by G. Dobre. In: *Mechanisms and Machine Sciences 13*. Springer Dordrecht Heidelberg, New York, London, 2013, 746 p. ISSN 2211-0984; ISSN 2211-0992 (electronic); ISBN 978-94-007-6557-3; ISBN 978-94-007-6558-0 (eBook);
- 2016 in Ohrid, Macedonia (Proceedings of the 5th Int. Conf. on Power Transmissions "BAPT2016", edited by Petar Simonovski and Tashko Rizov. 5-8 Oct. 2016, Ohrid. Skopje: Faculty of Mechanical Engineering, 2016, 253 p. ISBN 978-608-4624-25-7).

BAPT supports:

- International VDI Conference on Gears – Munich, Germany
- Balkan Journal of Mechanical Transmissions, ISSN 2069-5497.
- Annual Congresses "Machines, Technologies, Materials" of Bulgarian Scientific-Technical Union of Mechanical Engineering.
- Books publishing (Arnaudov, K., Karaivanov, D. Planetary gear trains. Sofia: Bulgarian Academy of Sciences Publ. "Prof. Marin Drinov", 2017, 368 p., ISBN 978-954-322-885-0. (in Bulgarian)).

¹ [https://www.acronymatic.com/Balkan-Association-of-Power-Transmissions-\(BAPT\).html](https://www.acronymatic.com/Balkan-Association-of-Power-Transmissions-(BAPT).html)