

## Peter Magyar

---

**Von:** Adam Dąbrowski <adam.dabrowski@put.poznan.pl>  
**Gesendet:** Dienstag, 13. Januar 2026 10:36  
**Betreff:** January 22, 2026 at 11:30 AM – meeting of the IEEE Poland Section (LMAG),  
"High Precision Digital Signal Processing Using Rotation Structures"

Dear Colleagues,

I would like to inform you about the next IEEE Poland Section (LMAG) meeting on January 22, 2026 at 11:30 AM. At this meeting Dr inż. Robert Wirska will present a very interesting and important lecture entitled: "**High Precision Digital Signal Processing Using Rotation Structures**"

### Summary

The presentation will start with the 1-D and 2-D DSP background including the state-space approach. The performance of digital structures using finite precision arithmetic will be discussed. Orthogonal filters will be introduced, which consist of Givens rotations. Developed by the presenter, the original 2-D orthogonal filters synthesis technique will be proposed, illustrated by an example of an edge detection filter. Simulation results of selected digital filters performance will be presented.

### Dr Inż. Robert Wirska CV

Dr Inż. Robert T. Wirska was born in Koszalin, Poland, on October 21, 1970. He received the M.Sc. degree in Electronics from Technical University of Koszalin, Poland, in 1995. He received the Ph.D. degree in Telecommunication from Wroclaw University of Technology, in 2004. Since 1995, he has been with the Faculty of Electronics and Computer Science, Koszalin University of Technology, Poland. His research interests include systems theory and digital signal processing.

The meeting (on January 22, 2026 at 11:30 AM) will be organized in a hybrid form.

On one hand, the link to the meeting for the remote participants is as follows:

<https://emeeting.put.poznan.pl/eMeeting/ada-zkq-942>

On the other hand, for those who will directly participate in this meeting, the address is:

POZNAŃ UNIVERSITY OF TECHNOLOGY

CENTER FOR MECHATRONICS, BIOMECHANICS, AND NANOENGINEERING

ul. Jana Pawła II 24, 60-965 Poznań

room 230 (seminar room of the DIVISION OF SIGNAL PROCESSING AND ELECTRONIC SYSTEMS)

Best regards

Adam Dąbrowski, Chairman of the IEEE Poland Section LMAG