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The EW and IO Association

Invitation to an AES-IEEE-CH Joint Lecture on

History of Central and Eastern European Radar Technology - An Untold Story

Dr. Piotr Samczynski
Prof. Warsaw University of Technology
Senior Member IEEE Chair of Poland Chapter of IEEE Signal Processing Society

Datum: **20 March 2019**
Zeit: **17.30 Uhr**
Ort: **ETH Zürich**
HG D 1.1

Prof. Dr. Piotr Samczyński received his B.Sc. and M.Sc. degrees in electronics and Ph.D. and D.Sc. degrees in telecommunications, all from the Warsaw University of Technology (WUT), Warsaw, Poland in 2004, 2005, 2010 and 2013, respectively. Since 2018 he has been the Associate Professor at the WUT; and since 2014 a member of the WUT's Faculty of Electronics and Information Technology Council. Prior to this, he was Assistant Professor at WUT a research assistant at the Przemyslowy Instytut Telekomunikacji S.A. (PIT S.A.) and the head of PIT's Radar Signal Processing Department. Prof. Samczynski has been an IEEE member since 2003, and IEEE Senior member since 2016. He is a member of IEEE AES, SP, and GRS Societies. Prof. Samczynski has been a Chair of the Polish Chapter of the IEEE Signal Processing Society. In 2017 he received the *IEEE Fred Nathanson Memorial Award* for outstanding contribution to the field of passive radar imaging, including systems design, experimentation and algorithm development.

The lecture covers the early history of radar development in Poland and the former USSR. This includes the original radar research and development in Ukraine and Russia, which at that time constituted a part of the USSR. It starts with a brief description of the radar development in Central and Eastern Europe in the 1920s, focusing on research and development of wave-tubes and magnetrons, mostly used for radio-communications and radio-telegraphy purposes at that time. This particular research built a solid foundation for the further development in the field of radar in the 1930's. The presentation of the thorough development of different kinds of radars over a span of four decades will be presented including numerous examples of the most interesting technical solutions, while covering also less known chapters. The lecture concludes with radar instances from the 1970s, when a new era began with generation of fully coherent radars, using frequency modulation and pulse compression, and with an onset of digital signal processing at the same time.

We look forward to your participation. Guests are welcome.

Heinz Wipf, Chair AES IEEE.CH Dr. Jürg Wildi, Präsident SVFW Richard Morva, President Swiss Crows