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Jozef Piotrowski is a research and development manager at Vigo System S.A., Warsaw, Poland, and a scientific advisor at the Military Institute of Armament Technology, Zielonka.

He started his career with studies of gigantic photovoltaic effects in semiconductors. By the end of the 1960s, he had recognized the importance of sensitive and fast detection of long-wavelength IR radiation without cooling, and this became his main research subject. He proposed numerous concepts and practical solutions related to uncooled detection. In 1972 he demonstrated uncooled 10- μm photoconductive and photoelectromagnetic detection based on HgCdTe epilayers grown by unique vapor phase deposition on hybrid substrates. During the following decades he developed more advanced IR devices (Dember, magnetoconcentration, and photovoltaic) based on HgCdTe and other material systems (HgZnTe, HgMnTe, InAsSb, InGaAs), various bulk and epitaxial growth techniques (quench/anneal, LPE, MOCVD), and specialized processing techniques (ion milling, ion implantation, photolithography, heterostructure passivation).

In the early 1980s, together with some of his students, Professor Piotrowski founded Vigo System S.A. to commercialize uncooled IR detectors. One of their success stories was the development of low-cost and versatile open-tube gas phase epitaxy, a technique that has been used for commercial detector fabrication for many years. Consequently, in the past decade Professor Piotrowski has introduced into practice various uncooled photodetectors with optical, detection, and electronic functions integrated into a monolithic 3D heterostructure chip. He was also involved in developing advanced detector modules and IR systems based on uncooled photodetectors such as thermal imagers, fast pyrometers, gas analyzers, and IR threat warning, surveillance, and guidance systems. Another field of activity was CdZnTe x-ray and nitride UV detectors. At present, Professor Piotrowski's efforts are concentrated on attaining picosecond response time in the 2–16 μm range with multiple heterojunction IR devices whose performance is close to fundamental limits.

Professor Piotrowski is the author and co-author of about 300 scientific papers, 15 books and monographic papers, and more than 20 patents. Among the honors he has received are the Poland Ministry of Defense Award; the "Photonics Spectra" Circle of Excellence Award (1996) in recognition of excellence, innovation, and achievement in photonics technology; the "Polish Product for Future" Award of the Prime Minister of Poland; foreign membership in the Yugoslav Academy of Engineering; and many others.



Antoni Rogalski, a professor at the Institute of Applied Physics, Military University of Technology in Warsaw, Poland, is one of the world's leading researchers in the field of IR optoelectronics. During the course of his scientific career, he has made pioneering contributions in the theory, design, and technology of different types of IR detectors. In 1997, he received an award from the Foundation for Polish Science, the most prestigious scientific award in Poland, for achievements in the study of ternary alloy systems for IR detectors—mainly alternatives to HgCdTe ternary alloy detectors such as lead salts, InAsSb, HgZnTe, and HgMnTe. In 2004, he was elected as a corresponding member of the Polish Academy of Sciences.

Professor Rogalski's most important scientific achievements include determining the fundamental physical parameters of InAsSb, HgZnTe, HgMnTe, and lead salts; estimating the ultimate performance of ternary alloy detectors; elaborating on studies of high-quality PbSnTe, HgZnTe, and HgCdTe photodiodes operated in the 3–5 and 8–12 μm spectral ranges; and conducting comparative studies of the performance limitations of HgCdTe photodiodes versus other types of photon and thermal detectors (especially QWIR photodetectors).

Professor Rogalski has given more than 35 invited plenary talks at international conferences. He is the author or co-author of approximately 200 scientific papers, 10 books (published by Pergamon Press, SPIE Press, Gordon & Breach, Elsevier, Nauka, and WNT), and 20 book chapters. He is a Fellow of SPIE, the Vice President of the Polish Optoelectronic Committee, a member of the Electronic and Telecommunication Division at the Polish Academy of Sciences, the Editor-in-Chief of the journal *Opto-Electronics Review*, the Deputy Editor-in-Chief of the *Bulletin of the Polish Academy of Sciences: Technical Sciences*, and a member of the editorial boards of the *Journal of Infrared and Millimeter Waves* and the *Journal of Technical Physics*.

Professor Rogalski is also a very active member of the international technical community. He is a co-chair and member of many scientific committees of national and international conferences on optoelectronic devices and crystal growth, the conference chair and organizer of the *International Conference on Solid State Crystals* and the *Material Science and Material Properties for Infrared Optoelectronics* conference, the co-editor of six *SPIE Proceedings* volumes, and a guest editor of *Optical Engineering*.