CMOS sensors

Very few technologies had such a fast development like the fabrication of CMOS microchips. The complexity of integrated circuits doubled approximately every two years in the past four decades.

The main application of CMOS microchips is the digital signal processing. However, CMOS technology is much more versatile. Beside digital circuits, it is possible to implement analogue components, memory elements, even sensors on a CMOS chip. This allows construction of systems on a chip that can perform measurements, do data-processing and transmit the results in digital format.

The central theme of this talk will be the smart CMOS sensors – the technology which has gained in popularity over past decade both in consumer- as well as in scientific applications.