# High-speed imaging with CQDs for machine vision applications

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Emberion is a deep-technology company developing and commercializing wide wavelength range infrared image sensors and cameras that disrupt and extend multiple imaging markets. Emberion's image sensor technology is based on quantum dot (CQD) photosensitive stack processed directly onto in-house designed and optimized ROIC. In this talk, we expand on the unique features of Emberion's products including (i) extended and tailorable spectral range, (ii) scalability in pixel dimensions, (iii) wide dynamic range, (iv) low noise readout and (v) high frame rate image capture. We have demonstrated our CQDs to enable high-speed imaging at above 1900 fps while preserving the broad wavelength range from 400 to 2000 nm making it attractive for applications such as quality control, sorting and recycling.