

### Summary ASEV Workshop by IZON

On 28.8.2019 young researchers in the field of extracellular vesicles (EVs) gathered together at the Danube University Krems to get new insights in devices to isolate and characterize EVs. The workshop was hosted by the company IZON whose products are based on isolating EVs by size exclusion chromatography (SEC). After a theoretical introduction participants were able to lay their hands on the new *Automatic Fraction Collector (AFC)* which automates the EV isolation process.

After isolation of EVs from plasma, serum and cell culture media by using the AFC together with IZON's *qEV* columns, size and concentration of particles were determined on the Tunable Resistive Pulse Sensing (TRPS) instrument *qNano*. TRPS measures nanoparticles suspended in electrolytes on a particle-to-particle basis as they pass through a nanopore. The impedance of a nanopore in an electrolyte fluid cell is sampled 50,000 times per second. Sample particles are driven through the nanopore by applying a combination of pressure and voltage, and each particle causes a resistive pulse or „blockade“ signal that is detected and measured by the application software.

Taken together, this ASEV workshop in collaboration with IZON was a great opportunity to get to know new devices on the market aiming at more accurate and standardized EV isolation and characterization, which is still lacking in the EV field. In addition, opportunities for scientific exchange between academia and industry contribute to better understanding the mysteries of EVs.

We hope you will join us at the next ASEV workshop!

