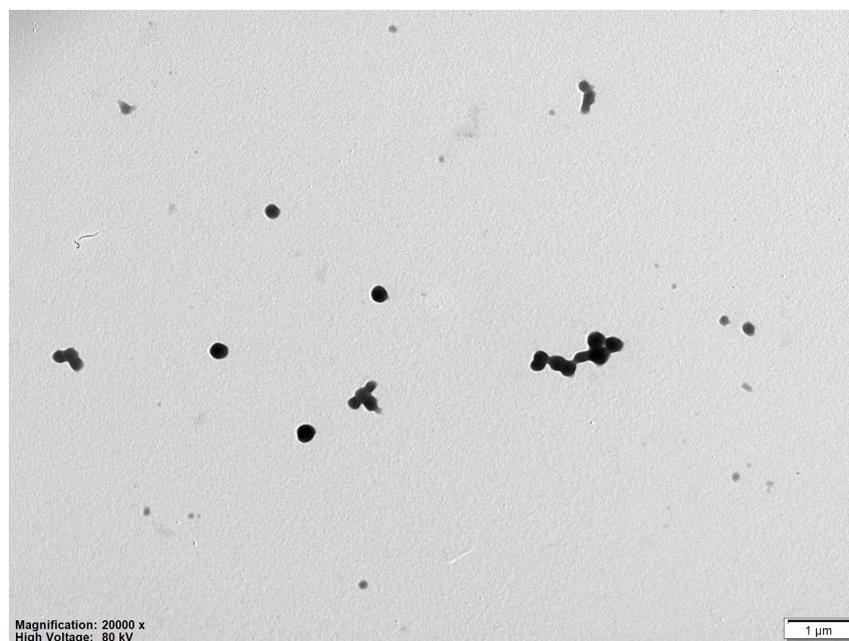


OXYGEN-TOLERANT PHOTO-CONTROLLED ATR-PISA IN FLOW REACTORS - NEW POLYMERIZATION SET-UP

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Preparation of copolymer amphiphilic micro- and nanoparticles in one pot system combining several approaches: (i) robust and versatile photo-controlled ATRP allows polymerization even in the presence of oxygen [1], (ii) Polymerization-Induced Self Assembly (PISA) is the way how achieve supramolecular assemblies in high yield under reproducible conditions and (iii) flow reactors enable fast and controlled polymerizations with online analysis and fast variation of reaction conditions.



TEM micrograph of particles of PEG-HPMA copolymer prepared by photo-operated flow ATR-PISA without degassing in water.

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[1] Dmitrij Bondarev, Katarína Borská, Michal Šoral, Daniela Moravčíková, Jaroslav Mosnáček *Polymer*, **2019** (161) 122-127