

## Supplement

# The Role of the Initiator System in the Synthesis of Acidic Multifunctional Nanoparticles Designed for Molecular Imprinting of Proteins

Marwa Aly Ahmed<sup>1,2</sup>, Júlia Erdőssy<sup>1</sup>, Viola Horváth<sup>1,3\*</sup>

<sup>1</sup> Budapest University of Technology and Economics, Department of Inorganic and Analytical Chemistry, H-1111 Budapest, Szent Gellért tér 4., Hungary

<sup>2</sup> Department of Chemistry, Faculty of Science, Arish University, 45511 El-Arish, North Sinai, Dahyet El Salam, Egypt

<sup>3</sup> MTA-BME Computation Driven Chemistry Research Group, H-1111 Budapest, Szent Gellért tér 4., Hungary

\* Corresponding author, e-mail: [vhorvath@mail.bme.hu](mailto:vhorvath@mail.bme.hu)

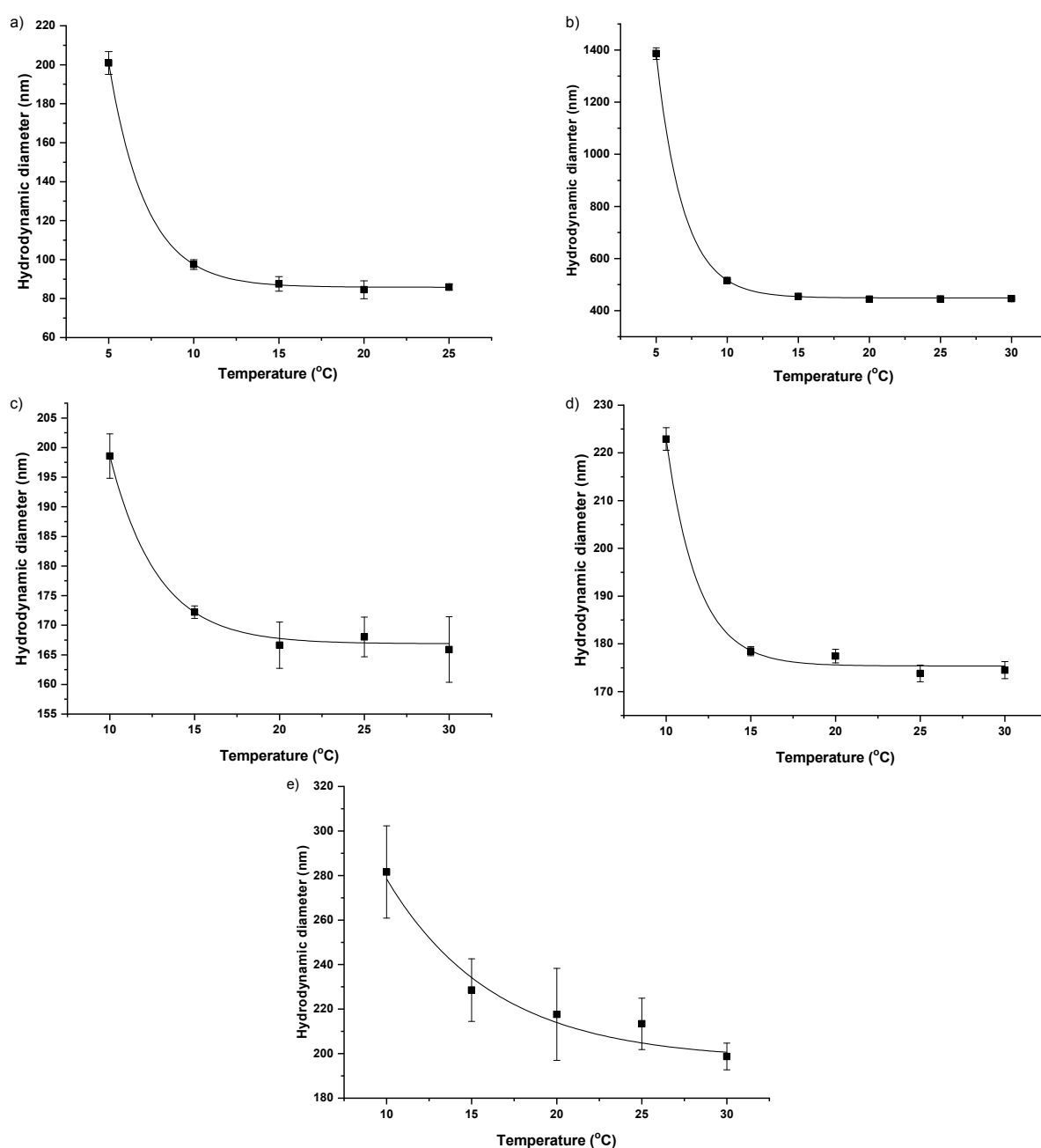


Fig. S1 Temperature dependence of the hydrodynamic diameters of a) NP1 prepared with SDS at 60 °C; b) NP2 prepared at 60 °C; c) NP3 prepared with SBS at 40 °C; d) NP4 prepared with SBS at room temperature; e) NP5 prepared with TEMED at 40 °C

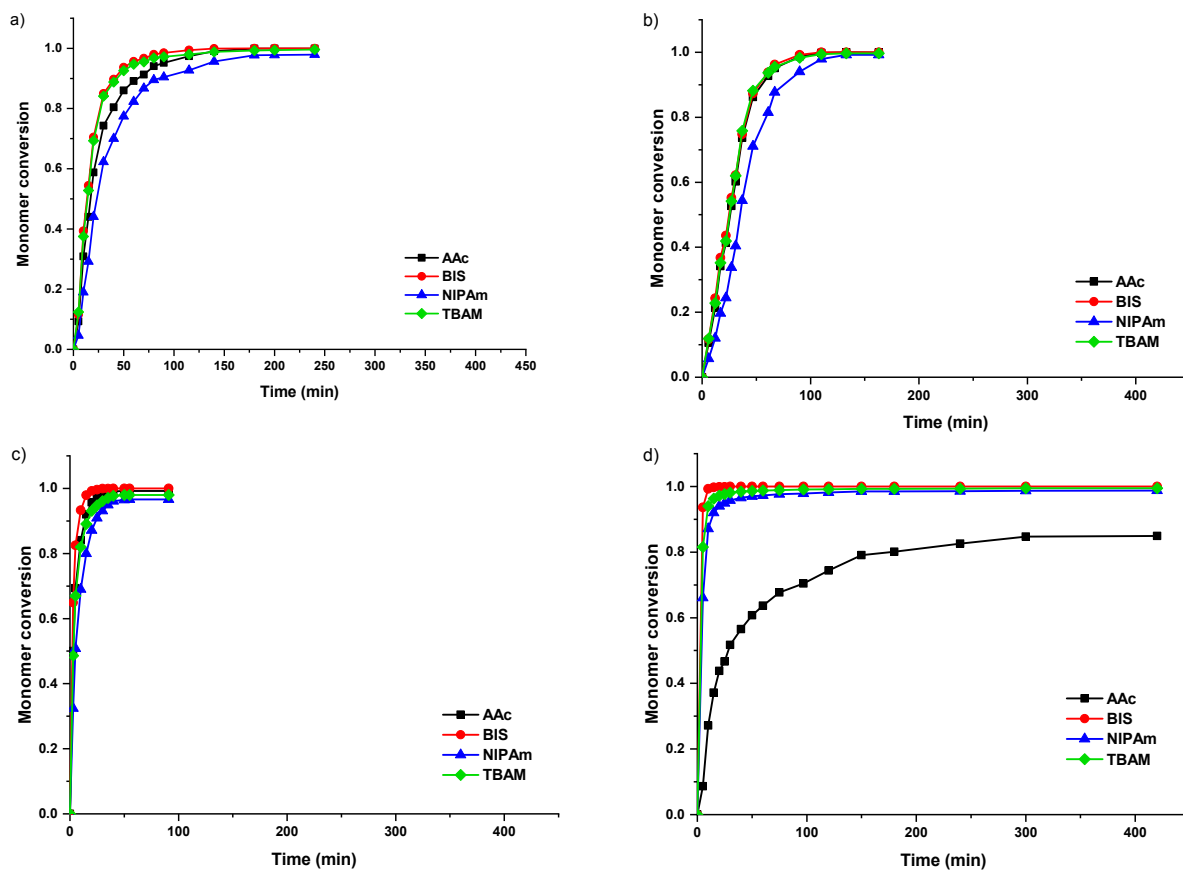


Fig. S2 Conversion of the individual monomers with time in a) NP1 prepared with SDS at 60 °C; b) NP2 prepared at 60 °C; c) NP3 prepared with SBS at 40 °C; d) NP5 prepared with TEMED at 40 °C (for comparison all conversion plots are shown on the same scale)

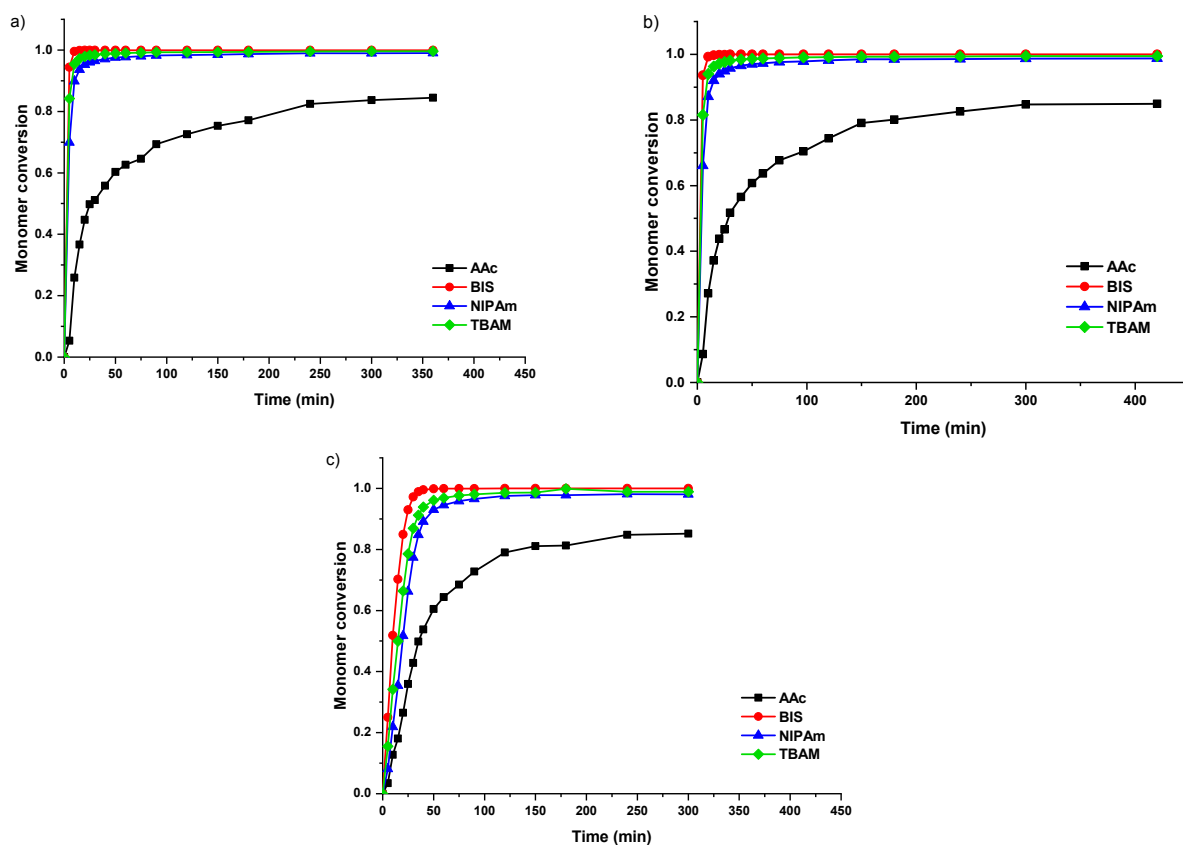
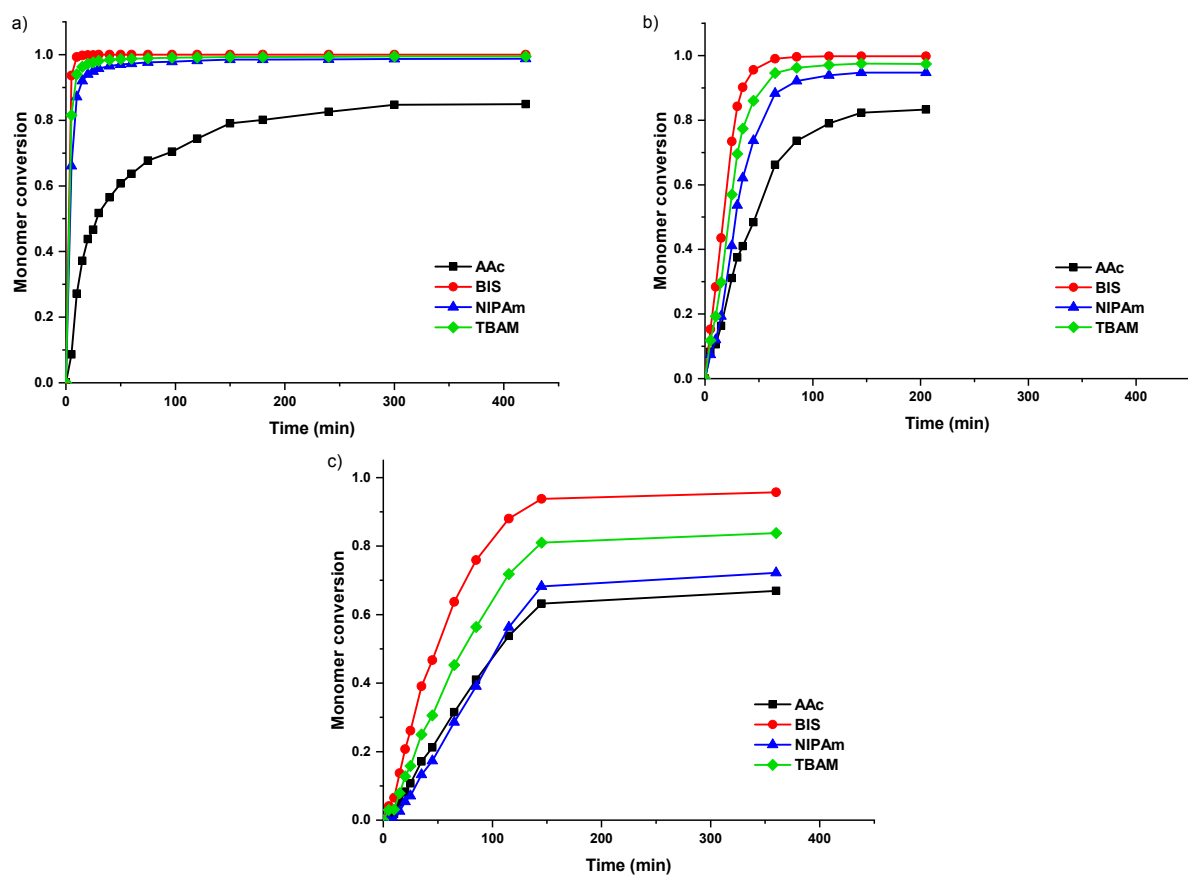


Fig. S3 Conversion of the individual monomers with time in a) NP7 containing 2.5 % AAc, prepared with TEMED at 40 °C; b) NP5 containing 5 % AAc, prepared with TEMED at 40 °C; c) NP8 containing 10 % AAc, prepared with TEMED at 40 °C



**Fig. S4** Conversion of the individual monomers with time in a) NP5 with 1:1 APS/TEMED molar ratio; b) NP9 with 1:0.5 APS/TEMED molar ratio; c) NP10 with 1:0.25 APS/TEMED molar ratio