

Supplementary Materials

Fast-Curing Geopolymer Foams with an Enhanced Pore Homogeneity Derived by Hydrogen Peroxide and Sodium Dodecyl Sulfate Surfactant

Kyung Won Kim ^{1,2}, Hyung Mi Lim ¹, Seog-Young Yoon ^{2,*} and Hyunseok Ko ^{3,*}

¹ Advanced Materials R&D Division, Korea Institute of Ceramic Engineering and Technology, Jinju 52851, Korea; kgw@kicet.re.kr (K.W.K.); lim@kicet.re.kr (H.M.L.)

² School of Materials Science and Engineering, Pusan National University, Busan 46241, Korea

³ Center of Materials Digitalization, Korea Institute of Ceramic Engineering and Technology, Jinju 52851, Korea

* Correspondence: sy3@pusan.ac.kr (S.-Y.Y.); hko@kicet.re.kr (H.K.)

Table S1. Formulation molar ratio of fast curing geopolymer discussed in previous study.

Components	SiO ₂ /Al ₂ O ₃	Ca(OH) ₂ /Al ₂ O ₃	K ₂ O/SiO ₂	H ₂ O/K ₂ O
ratio	4.2	0.2	0.3	9.4

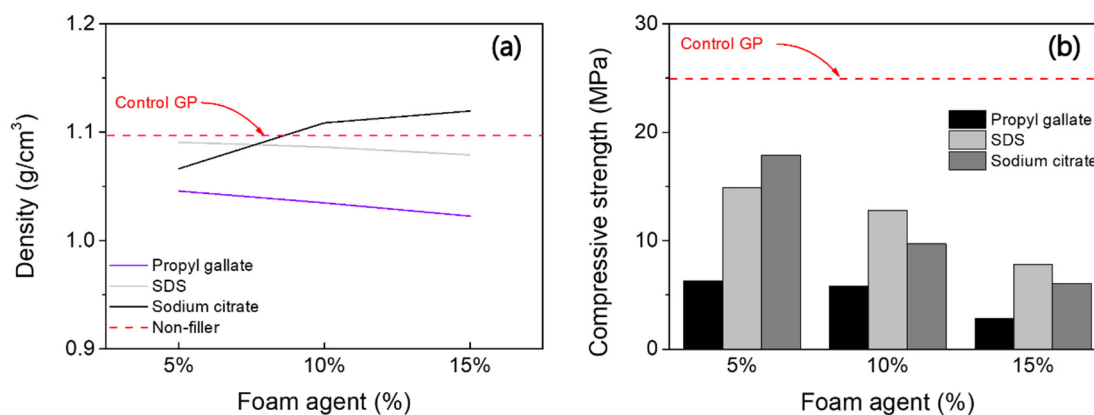


Figure S1. (a) Density of GP with varying foaming agent content, and (b) compressive strength as a function of the content of foaming agents with 3 types of foaming agents.

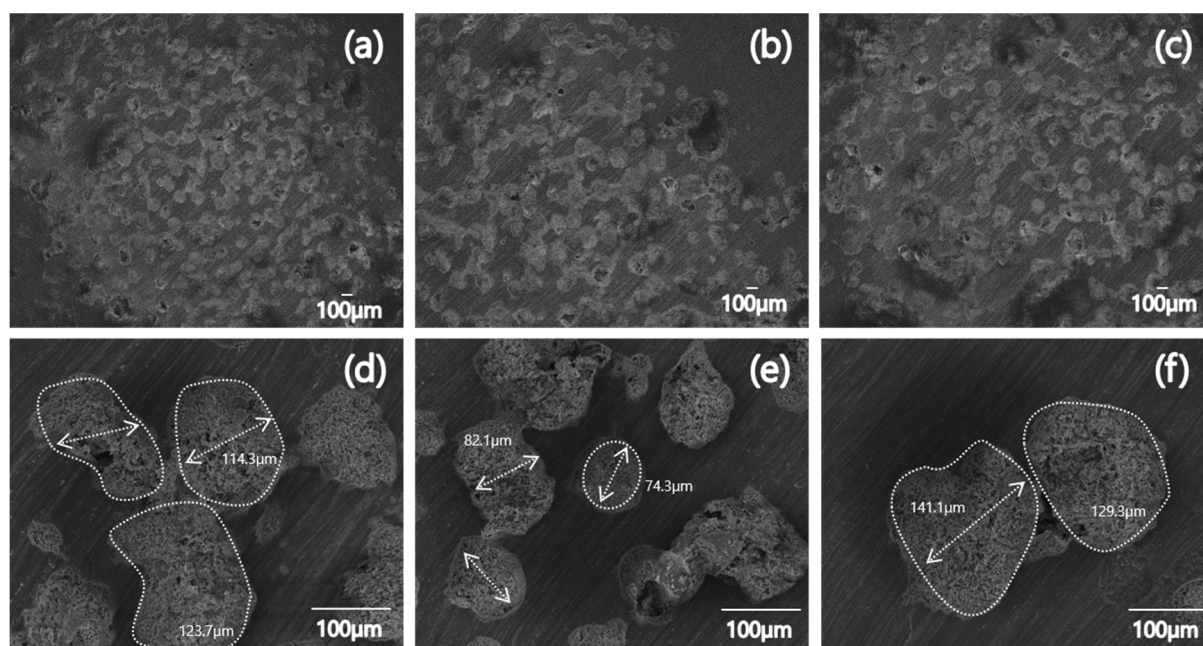


Figure S2. (a–c) and (d–f) show surfaces at different magnifications of the *HS* sample. The pore distribution and size due to the effect of adding a surfactant(SDS) can be visually estimated.

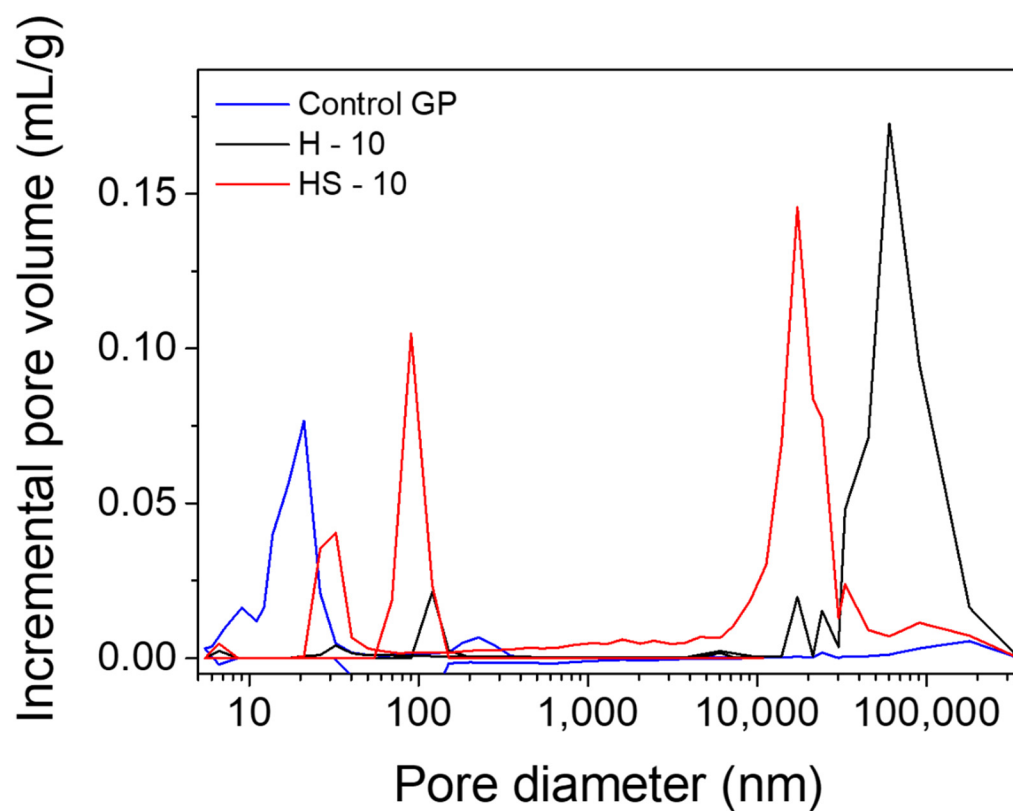


Figure S3. Mercury intrusion porosimetry test cumulative volume curve graph of Control GP, *H-10*, *HS-10*.