## G02.12

## Nafion/Sulfonated Aromatic Polymer Blend Membranes for the Direct Methanol Fuel Cell

\*Sung Chul Kim (a), Jisu Choi (a), Il Tae Kim (b), Toung Taik Hong (c)

(a) Department of Chemical and Biomolecular Engineering, Korea Advanced Institue of Science and Technology, Korea
(b) Korea Institute of Science and Technology, Korea
(c) Korea Research Institute of Chemical Technology, Korea

The purpose of the present work is to reduce methanol crossover of Nafion memebrane by solution blending with sulfonated poly(arylene ether). The morphology was controlled by controlling blend ratio and the degree of sulfonation of poly(arylene ether). The effect of the composition and the drying condition of the blend solution on the morphology of the membrane will be discussed. The mechanical properties as well as the methanol permeability and proton conductivity of the blend membranes will also be discussed.