

Supporting information

**Synthesis and characterization of polyamide/polyester thin-film nanocomposite membrane achieved by functionalized TiO₂
nanoparticles for water vapor separation**

Pravin G. Ingole, Muhammad Irshad Baig, Won Kil Choi, and Hyung Keun Lee*

Korea Institute of Energy Research, 71-2 Jang-dong, Yuseong-gu, Daejeon, Republic of Korea

*Corresponding author: Tel.: +82-42-860-3647; Fax: +82-42-860-3134

Email address: hklee@kier.re.kr

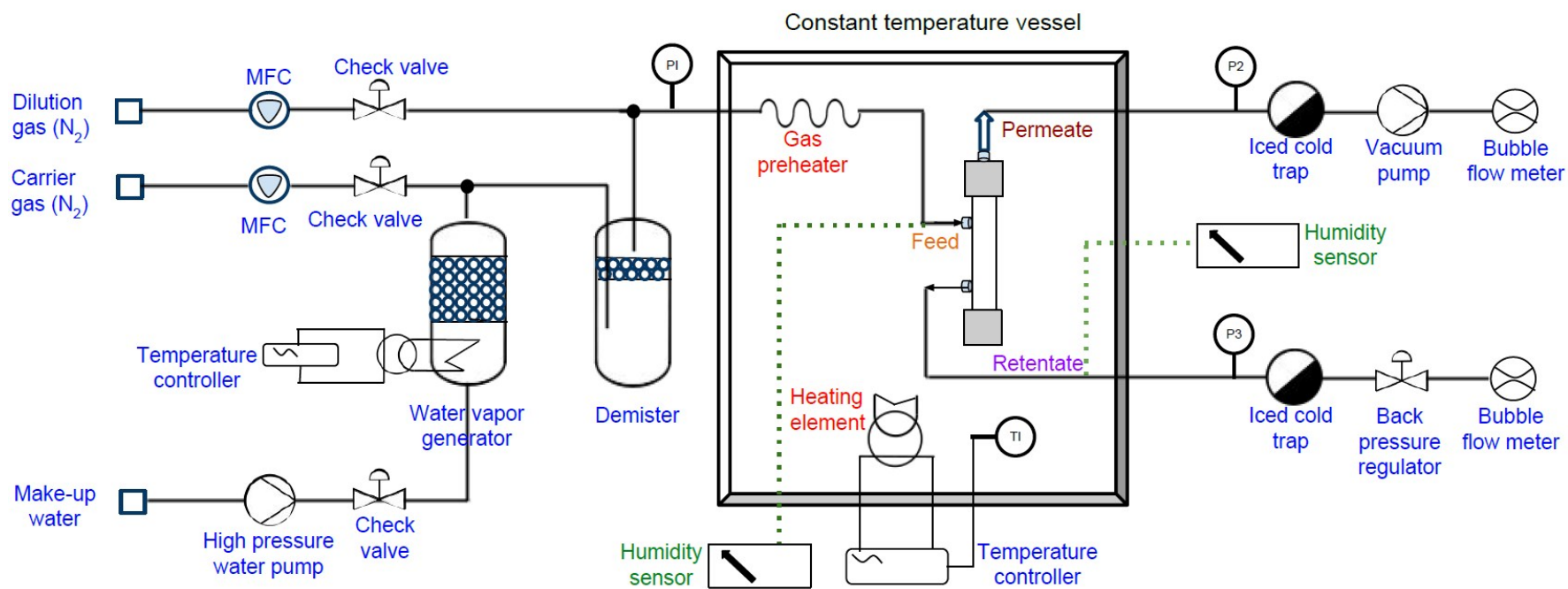


Fig. S11: Experimental set-up for the water vapor/ N_2 mixed gas separation experiment.

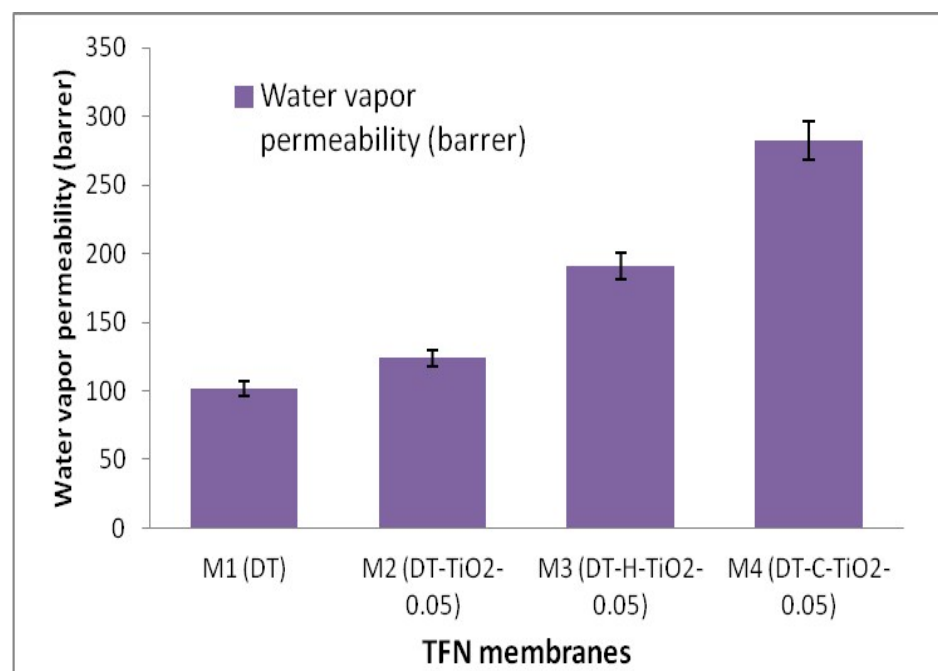


Fig. S12: Water vapor permeability (barrer) of thin film composite and nanocomposite membrane at Temperature = 30 °C, operating pressure = 3 kg-f/cm², feed absolute humidity = 25-27 g/m³, feed flow rate = 1000 cm³/min.