Advances in studies of gas hydrates by dielectric spectroscopy

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Supplementary Material (SM)

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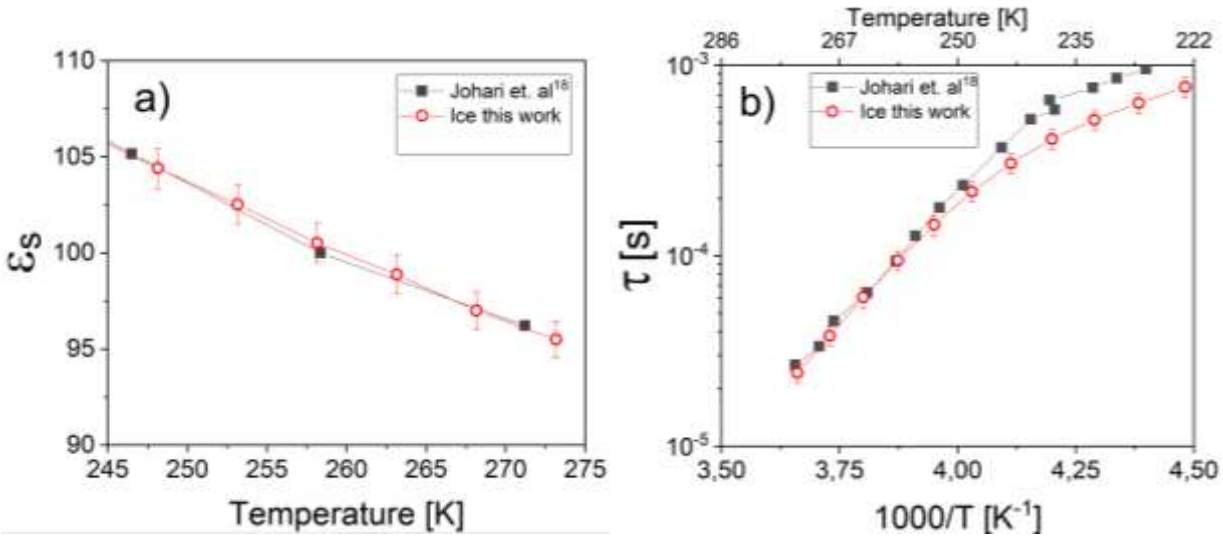

a) b)

Figure S1. Temperature dependences **(a)** ε_s (T) and **(b)** τ (1000/T) for ice I*h*. Black squares data taken from Johari et. al.[1], red empty circles experimental data measured in this work, in the developed measuring dielectric cell.

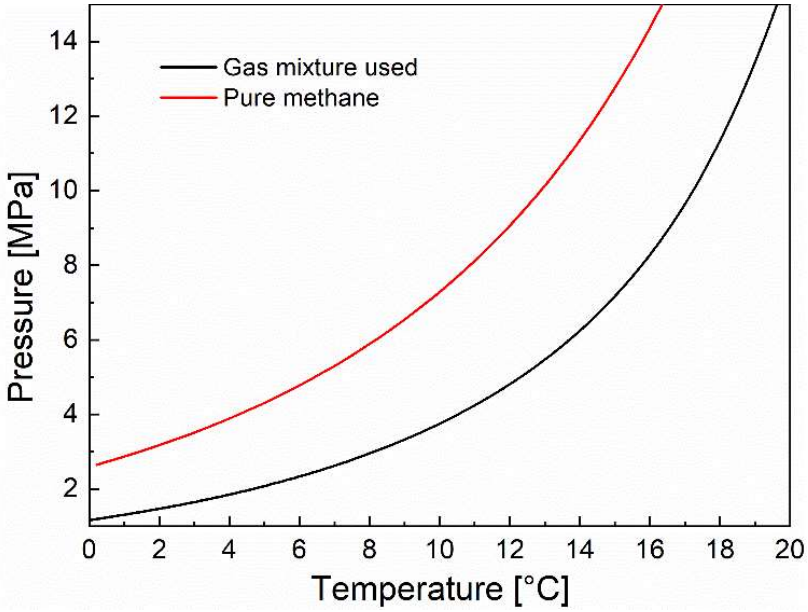

Figure S2. Equilibrium conditions of hydrate formation for the studied gas mixture (CSMGem); equilibrium for methane hydrate is given for comparison.

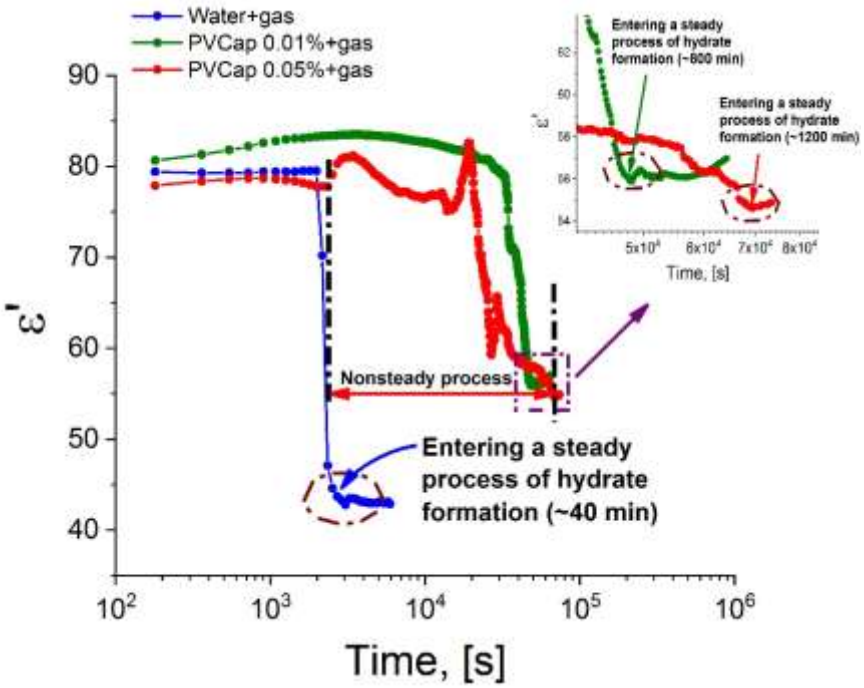

Figure S3. Comparison of time diagrams of hydrate formation at 9 MPa versus inhibitor concentration. Blue symbols - distilled water; green symbols - 0.01% PVCap; red symbols - 0.05% PVCap.

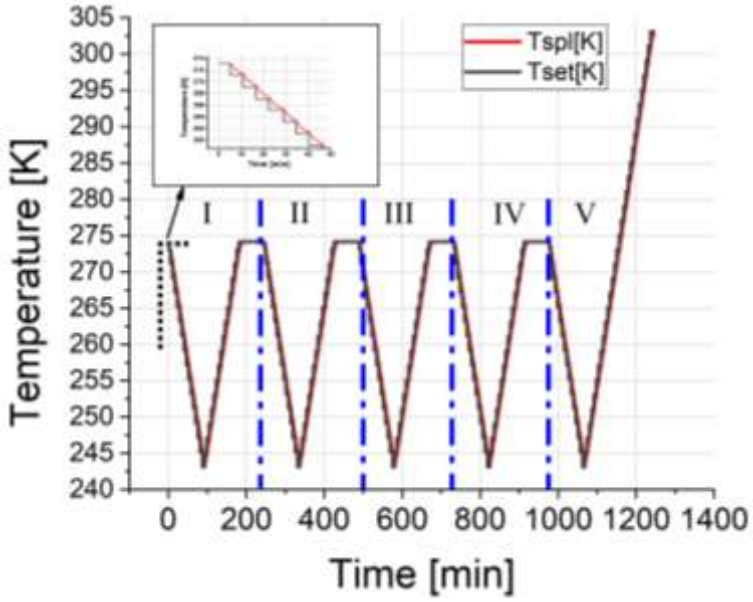

Figure S4. Temperature protocol for cooling and heating the measuring cell during five measurement cycles. The red line is the cell temperature, the black line is the setpoint temperatures.

REFERENCES

1. Johari, G.; Whalley, E. The dielectric properties of ice Ih in the range 272–133 K. *J. Chem. Phys.* **1981**, *75*, 1333-1340.