

Figure 1: Left: growth rates for both magnesicene flavours at a deposition temperature of 125°C. Right: Growth rates for both magnesicene flavours in the temperature window of 100-250°C.

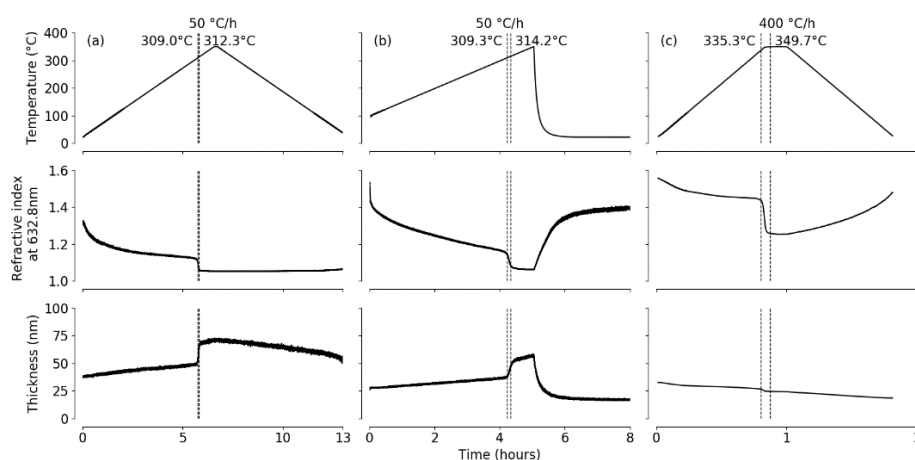


Figure 2. Annealing of EG films investigated by RTSE. From top to bottom, the graph shows temperature profiles, refractive indices and the fitted thickness in nm of the films. Three regimes can be distinguished: (a) moderate heating and cooling rate, leading to porous films, (b) rapid cool-down, leading to collapse of the films and (c) rapid heating rate not leading to porous films.

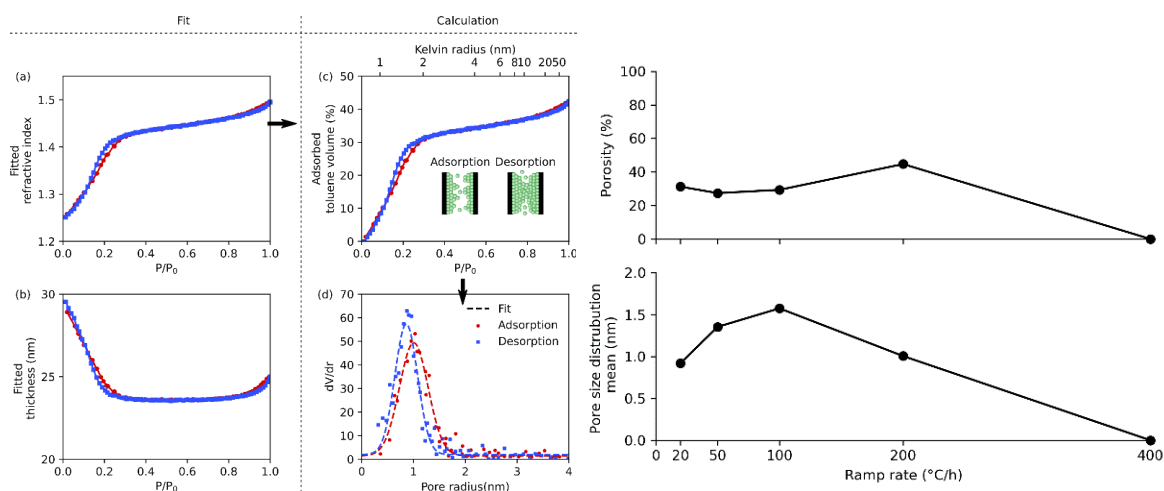


Figure 3. (Left) Analysis procedure of an EP measurement. Fitting of the SE data provides the refractive index and thickness. With this, the adsorbed volume of toluene can be calculated. Using the Kelvin equation, and BET theory, assuming a cylindrical pore shape, the pore size distribution can now be calculated. (Right) Porosity and pore size distributions for different heating- and cooling rates. An optimum in pore size is achieved at a ramp rate of 100°C/h while still maintaining a decent porosity of 29%.