



Figure 7: Snapshots of hydrophobic gel with  $\text{pH} - \text{p}K = 1, \varepsilon = 0.5$  correspond to the systems from at densities marked by vertical lines. Each row corresponds to a certain salt concentration  $c_s$  and each column – gel density. Approximate values of the gel density  $\varphi$  corresponded to the region of the phase transition are calculated after the Maxwell construction (see Fig. 2): [0.07 – 23.26] at  $c_s = 0.002$ , [0.09 – 23.26] at  $c_s = 0.003$ , [0.14–22.73] at  $c_s = 0.006$ , [1.25–22.22] at  $c_s = 0.01$ , [3.85–14.71] at  $c_s = 0.015$ .