Template method has been used as an important method to prepare porous materials [1, 2]. However, there are few reports about template method employing potassium chloride as template. Here, potassium chloride is employed as a template to prepare the porous carbon, and transition metal nitrates (Fe(NO$_3$)$_2$, Co(NO$_3$)$_2$, Ni(NO$_3$)$_2$) are introduced to catalyze graphitization and to result different carbon structure during carbonization (denoted as Fe@C, Co@C and Ni@C). The Fe@C shows a formicary-like structure with an about 20 nm pore diameter and the Co@C displays a completely compact structure. Whereas, the Ni@C exhibits a foam-like structure with hierarchical porous structure consisting of macroporous frameworks, mesopores and ultrathin porous walls (~5 nm). Its macropore and mesopore diameter is around 100 nm and 4 nm, respectively, its specific surface area is 464.5 m$^2$ g$^{-1}$. When adopted as anode material, the Ni@C presents much outstanding rate and cycling capability for lithium and sodium storage than Fe@C and Co@C, the capacity for sodium storage is 260 mAh g$^{-1}$ after 100 cycles at 100 mA g$^{-1}$ and 92 mAh g$^{-1}$ after 1000 cycles at 1A g$^{-1}$, and the capacity for lithium storage is 683 mAh g$^{-1}$ after 1000 cycles at a current density of 1 A g$^{-1}$.

References: