

## Investigation of Carbon Material for Capacitive Deionization

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### Summary

Capacitive deionization is a technique for the making fresh water from sea water. So far, many research works about the CDI technique have been reported as a kind of the making fresh. However, there is few report related to CDI in Japan. Because the deionization process of CDI is the same phenomenon as the electrical storage process of electric double layer capacitor, the deionization process of the CDI technique can be used as the electrical storage process. Therefore, CDI technique has an advantage in the energy cost for the running process. The amount of the water which can be treated with CDI apparatus is small because the ions removed from water deposit on the surface of the electrode. The amount of the removed ions strongly depends on the kind of the electrode. Therefore, the material development for CDI process should be progressed. In this study, the experimental technique for CDI has been studied.