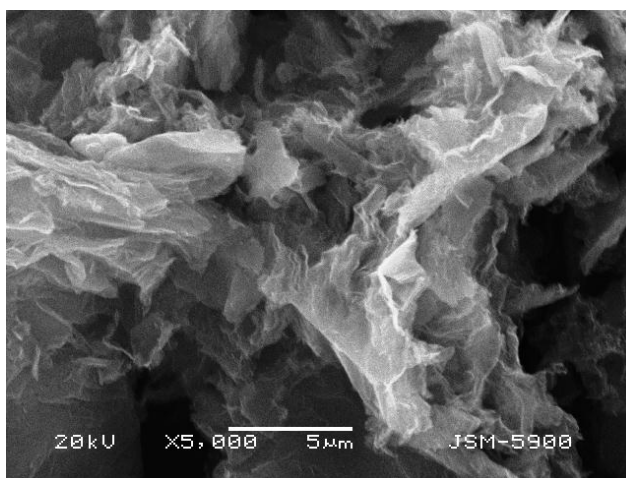# Development of Multi-channels Carbon Nanofibers as Effective Electrosorpitive Electrodes for Capacitive Deionization Process
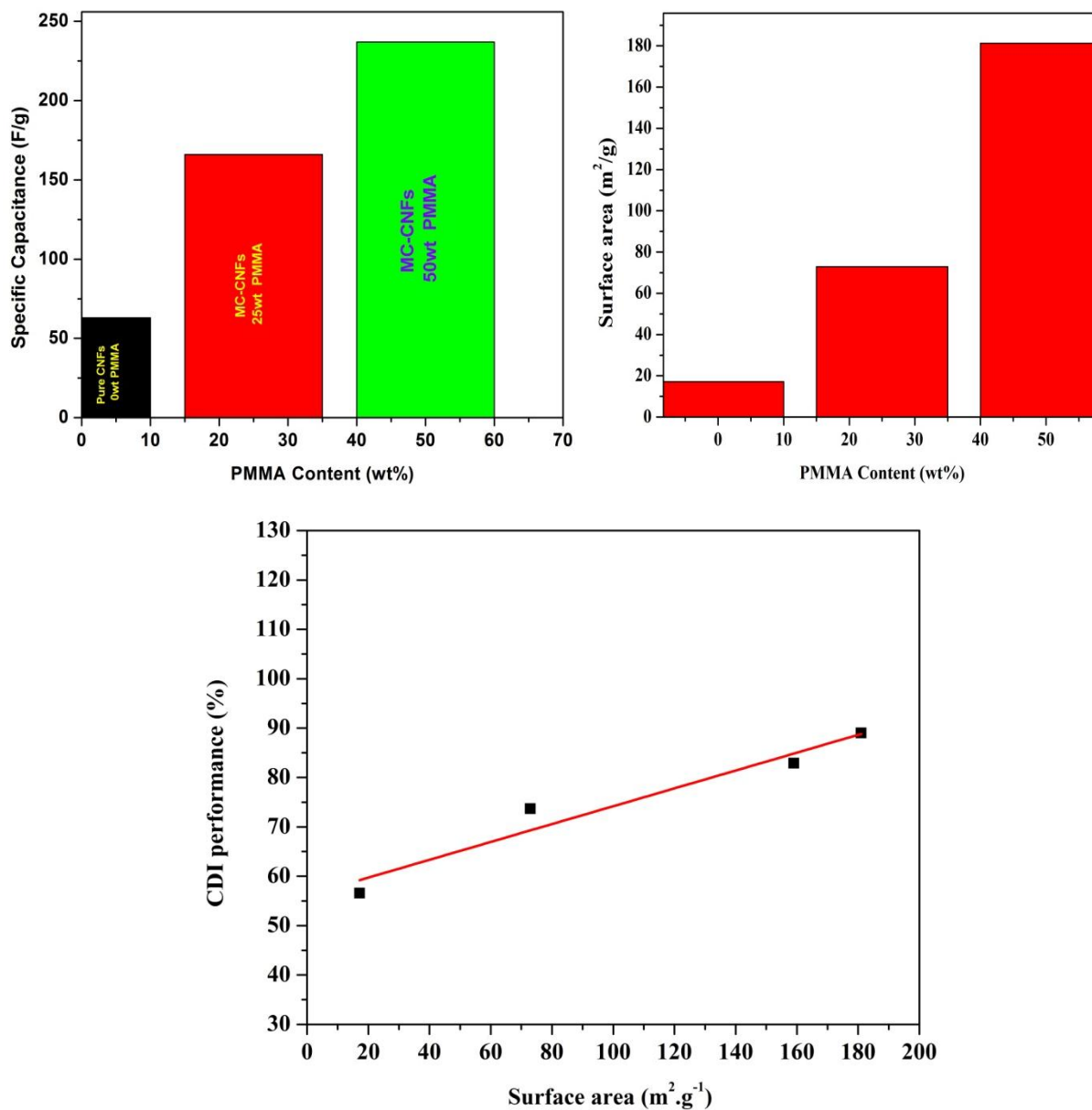
**Ahmed G. El-Deen, Nasser A. M. Barakat, Khalil Abdelrazek Khalil, and Hak Yong Kim**

S1 SEM images of the exfoliated graphene oxide nanosheets.

**Table S1: XPS elemental analysis of Graphene Oxide and Reduced graphene Oxide**

Sample	Carbon %	Oxygen %	Nitrogen %	C/O ratio
GO	68.8	31.2	0.00	2.20
rGO	88.14	9.6	2.24	9.18

S.2 Effect of PMMA content in the introduced nanofibers on the specific capacitance; (A) and surface area; (B). Panel C displays the influence of the surface area of the introduced carbon nanofibers on the CDI performance
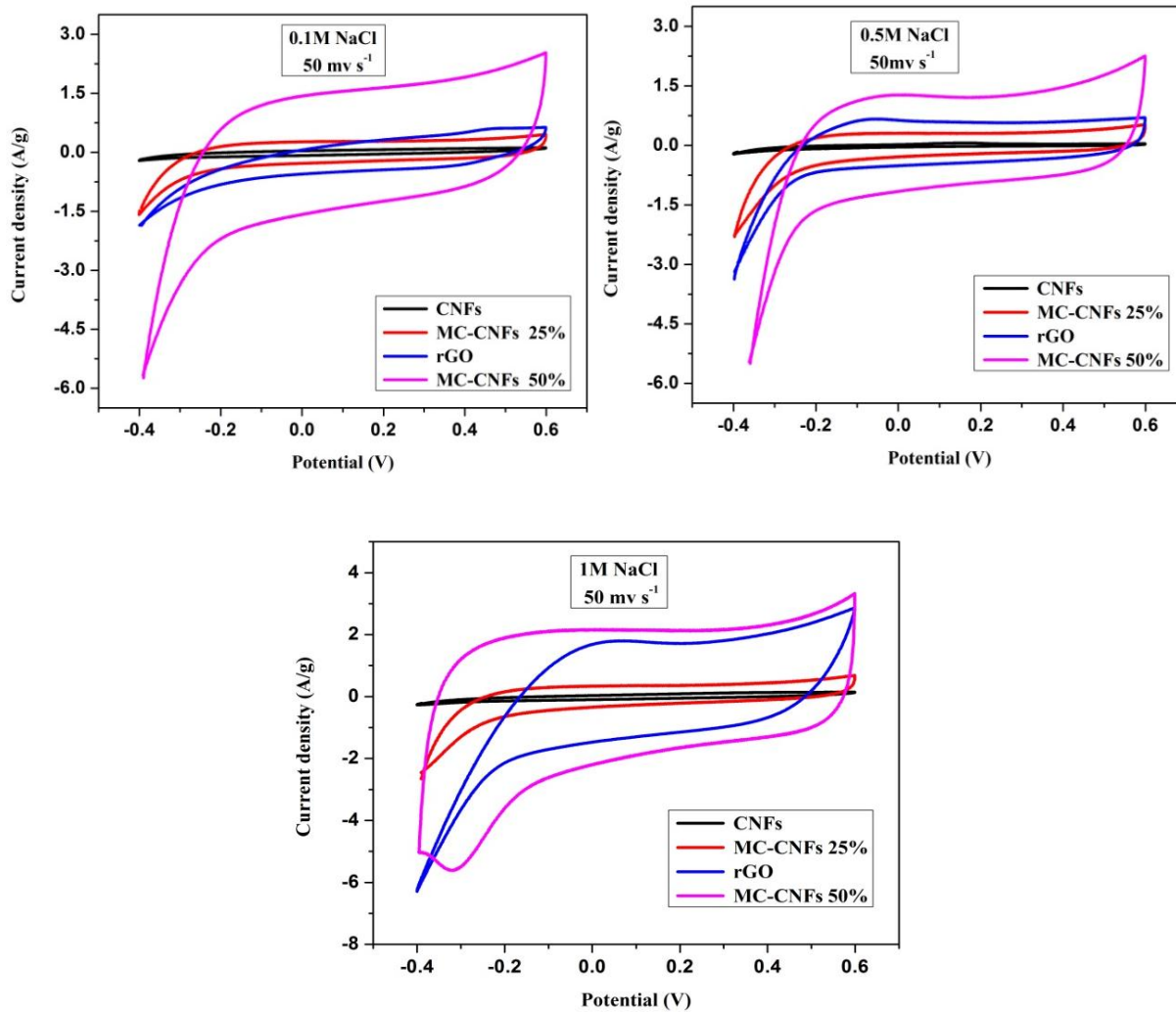
S.3 Cyclic voltammetry results for the prepared materials at 0.1, 0.5 and 1M NaCl concentration with sweep rat 50 mV/s.
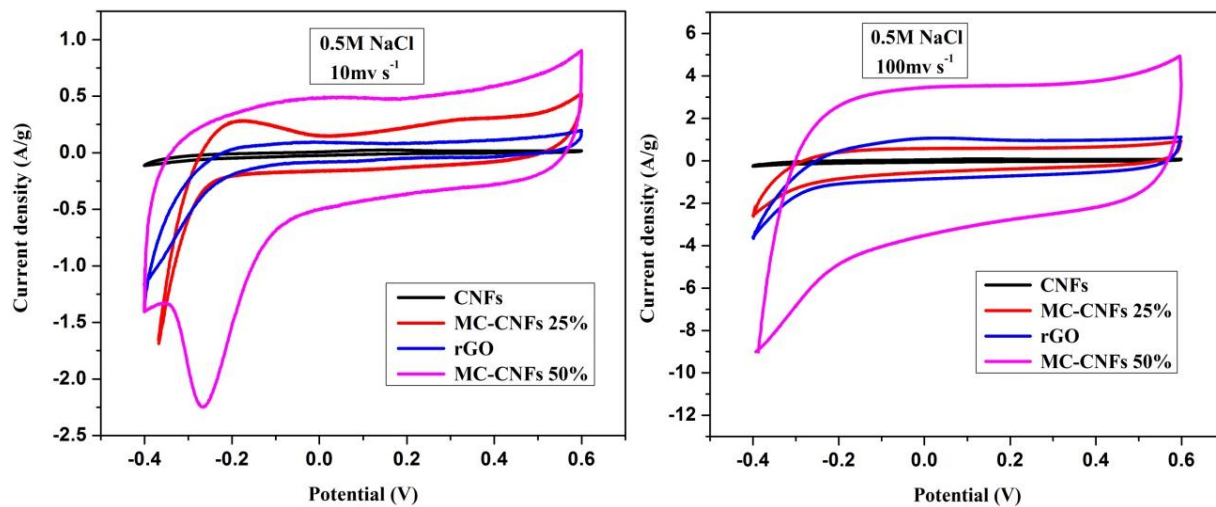
S.4 Cyclic voltammetry results for the prepared materials at 0.5M NaCl concentration with 10 and 50 mV/s sweep rat.