

Influence of structural and textural parameters of carbon nanofibers on their capacitive behavior

Adam Moyseowicz, Agata Śliwak, Grażyna Gryglewicz*

Department of Polymer and Carbonaceous Materials, Faculty of Chemistry, Wrocław University of Technology, Gdańska 7/9, 50-344 Wrocław, Poland

Table S1

The CCVD process conditions for synthesis of CNFs of different structures.

CNF	Catalyst	Carbon source	T _{reduction} °C	T _{synthesis} °C	Yield g _{CNF} /g _{cat}
HCNF1	Ni/Al ₂ O ₃	CH ₄	550	650	5.10
HCNF2	Ni/Al ₂ O ₃	C ₃ H ₈	550	500	2.93
PCNF	Ni/Al ₂ O ₃	C ₃ H ₈	550	450	3.34
CNT	Fe/Al ₂ O ₃	C ₂ H ₄	-	650	1.70

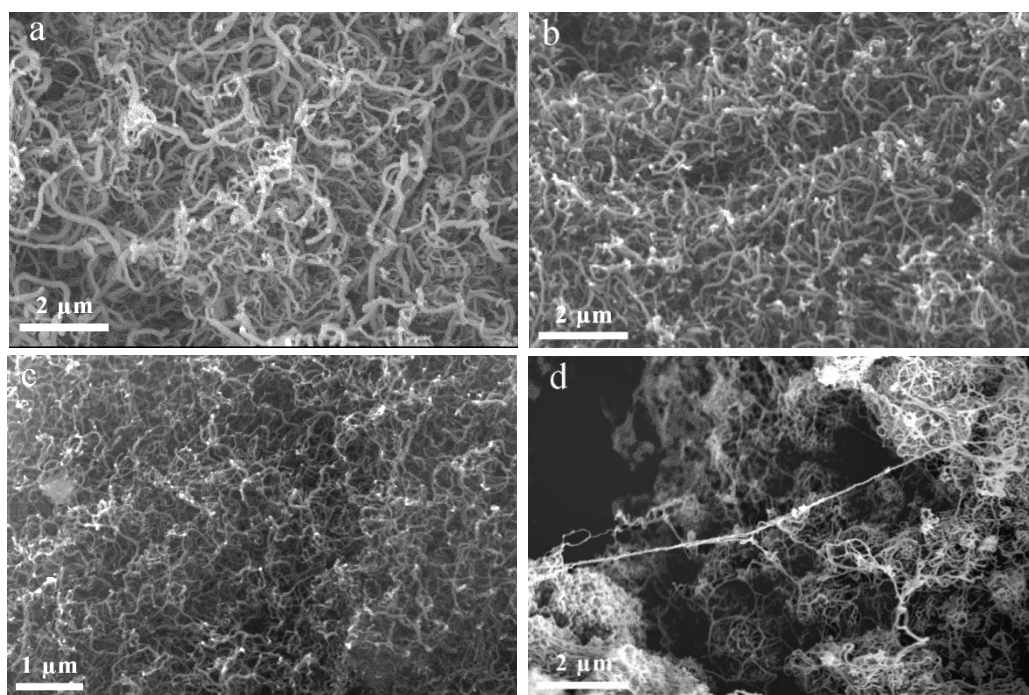


Fig. S1 SEM images of HCNF1 (a), HCNF2 (b), PCNF (c) and CNT (d)

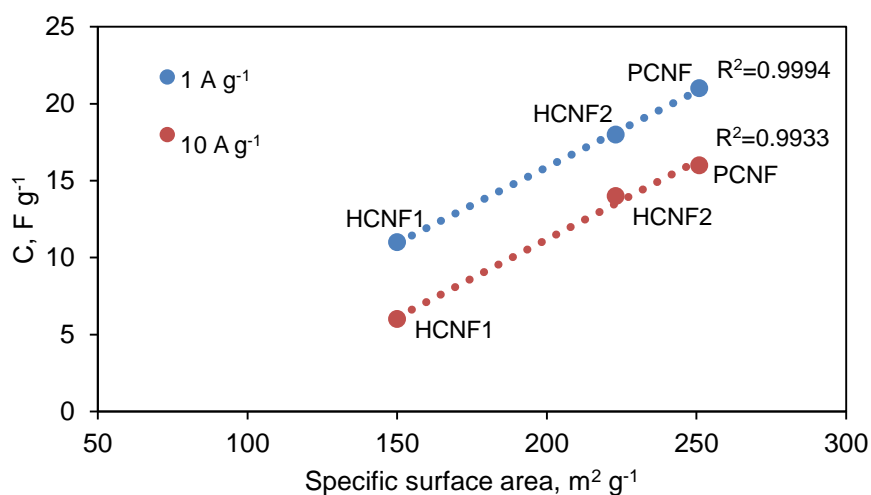


Fig. S2 The relationship between the capacitance and the BET surface area for open-type CNF at different current loads

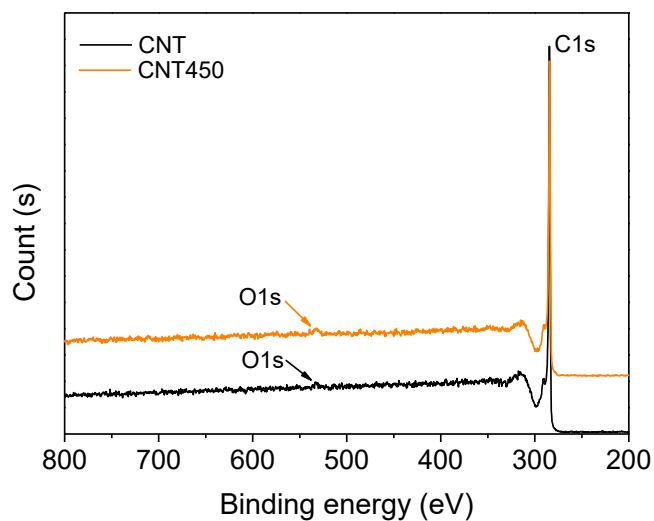


Fig. S3 XPS survey spectra of CNT and CNT450

ACKNOWLEDGEMENTS

This work was financed by a statutory activity subsidy from the Polish Ministry of Science and Higher Education for the Faculty of Chemistry of Wrocław University of Technology.

*Corresponding author. grazyna.gryglewicz@pwr.edu.pl (G. Gryglewicz).