

## Electronic supporting information

### Electroanalytical study of a family of carbosilane dendrimers at the interface between two immiscible electrolyte solutions

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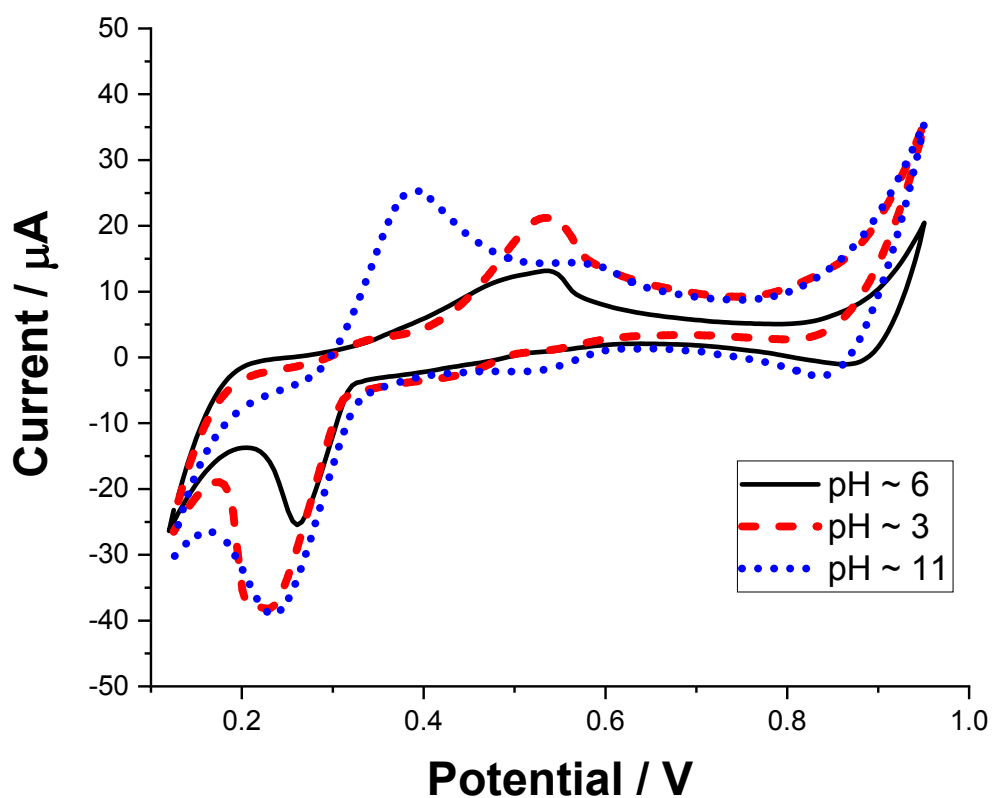
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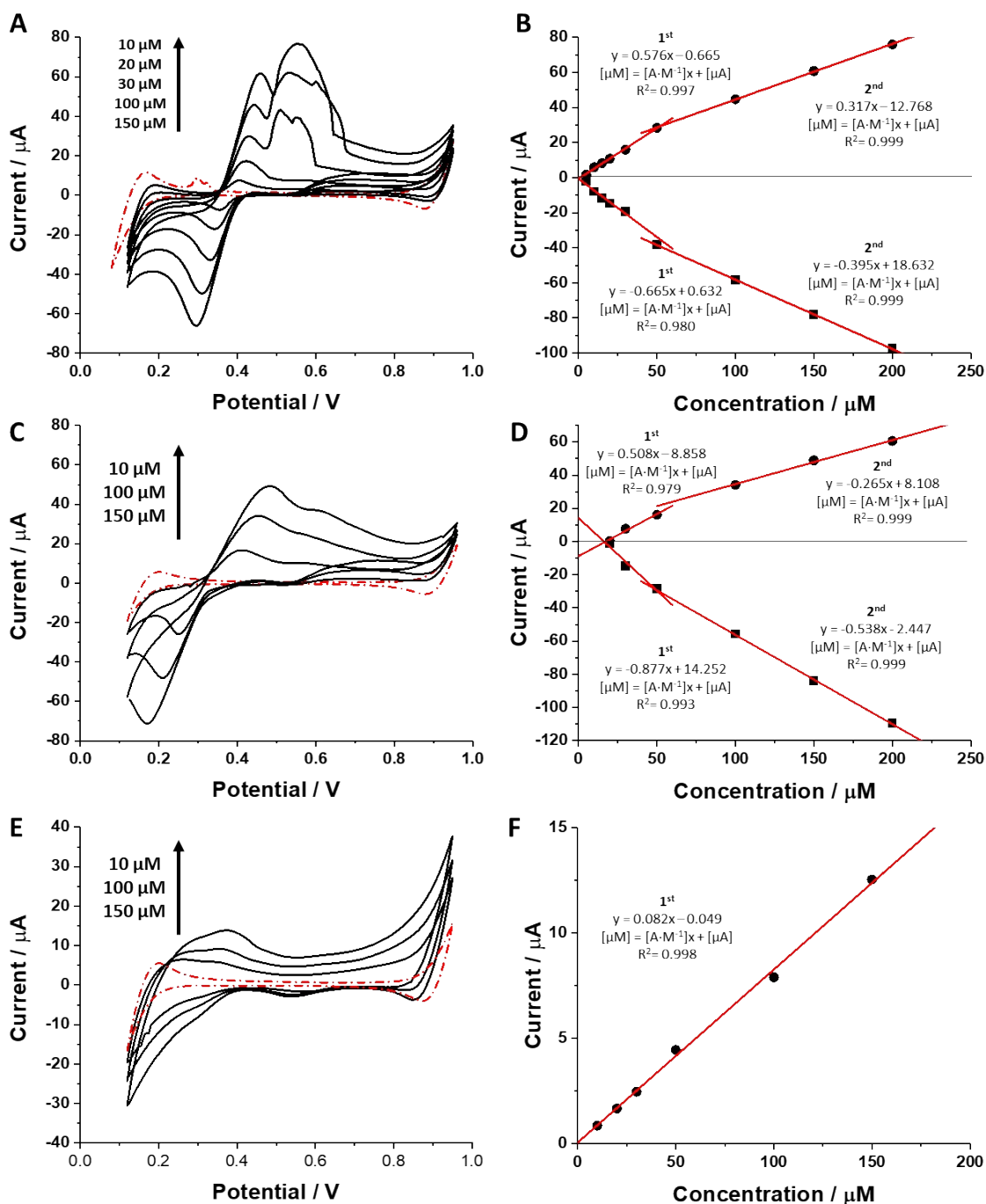
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**Table 1.** The summary of the experimental results of the diffusion ordered spectroscopy-NMR study. Hydrodynamic radii was calculated using Einstein-Stokes equation. MeOH stands for methanol.

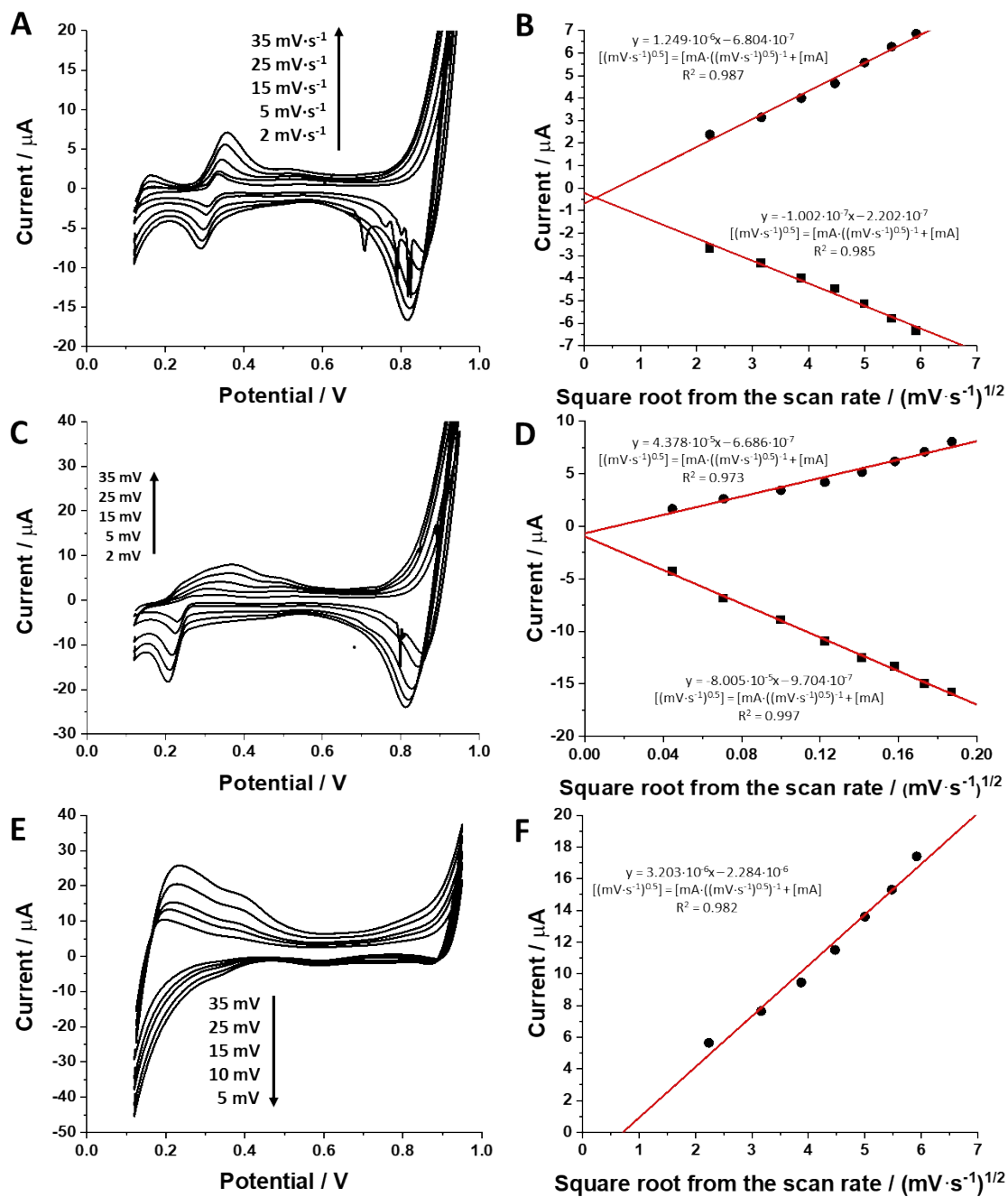
Compound	Diffusion coefficient / $\text{m}^2\text{s}^{-1}$	Hydrodynamic radii / nm	Solvent	Temperature (K)
BDTR1	$2.9 \cdot 10^{-10}$	0.9	D <sub>2</sub> O	298
BDTR2	$5.3 \cdot 10^{-10}$	0.7	MeOH	298
BDTR3	$1.4 \cdot 10^{-10}$	1.8	D <sub>2</sub> O	298
BDTR4	$3.9 \cdot 10^{-10}$	0.9	MeOH	298
BDTR5	$1.1 \cdot 10^{-10}$	2.3	D <sub>2</sub> O	298



**Figure ESI1.** Ion transfer voltammograms recorded for the BDTR-5 at different pH values. Scan rate was set to  $20 \text{ mV}\cdot\text{s}^{-1}$ .  $[\text{BDTR-5}] = 100 \text{ }\mu\text{M}$ .



**Figure ES12.** Ion transfer voltammograms (A, C and E) recorded at different concentrations and corresponding calibration curves for the BDTR-1 (A and B), BDTR-3 (C and D) and BDTR-4 (E and F) dendrimers. Red dash-dot line is the blank recorded in the absence of dendrimers. Scan rate was equal to  $20 \text{ mV}\cdot\text{s}^{-1}$ . Linear fit equations are displayed next to calibration curves.



**Figure ESI 3.** A, C and E are ion transfer voltammograms recorded at indicated scan rate values. B, D and F show current versus square root from the scan rate dependencies. Graphs A and B correspond to BDTR-1 (20  $\mu\text{M}$ ); C and D to BDTR-3 (50  $\mu\text{M}$ ) and E and F to BDTR-4 (50  $\mu\text{M}$ ) dendrimer. Linear fit equation are displayed next to the corresponding experimental data points.