

Figure caption

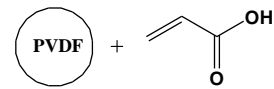
Scheme 1. Reaction scheme of PVDF-g-PAA-mTEG-P11 synthesis.

Fig. 1. FESEM image of PVDF nanoparticles recorded without metallization at 1000V.

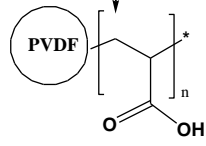
Fig. 2. EPR spectra of PVDF nanoparticles irradiated under vacuum and put in contact with air for 5 minutes (25 kGy and virgin 200 kGy) and for 3 months (50 kGy).

Fig. 3 : DSC curves of PVDF virgin films and irradiated nanoparticles.

Fig. 4: HRMAS 500 MHz NMR proton spectra of PVDF (...), PVDF-g-PAA (---) and PVDF-g-PAA-mTEG (—) in DMF-*d*₇. ● and † correspond to DMF and water residual solvents respectively. HRMAS NMR experiments were carried out on a Bruker Avance 500 MHz equipped with an HRMAS dual probe (¹H/¹³C) and 4 mm HRMAS rotor (ZrO₂).

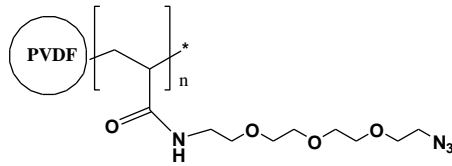


Mohr's salt
1h, 60°C

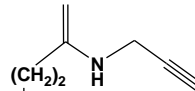


PVDF-g-PAA [1]

H2N(CH2)3O(CH2)2O(CH2)3O(CH2)3N3
EDC, H₂O, 24 hours, RT



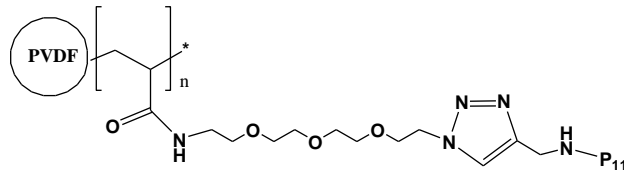
PVDF-g-PAA-mTEG [2]



CuSO₄, sodium ascorbate
*t*BuOH/H₂O, 3 days, 40°C

(D)F-P-Q-I-M-R-I-K-P-H-Q-G-Q-H-I-G-E

modified CBO-P11 [3]



PVDF-g-PAA-mTEG-P11 [4]

