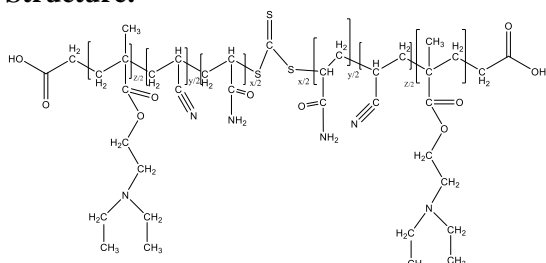


**Sample Name:** Random Copolymer  
**Poly(acrylamide-co acrylonitrile-co--N,N-diethylaminoethylmethacrylate acrylamide)**

**Sample #:** P42914A-AAmANDEAEMArAn

### Structure:



### Composition:

Feed molar ratio			Mn (g mol <sup>-1</sup> )	Mw/Mn
AAm	AN	DEAEMA	57,000	1.18
77.0	19.6	3.1		

5mg polymer in Water gives not a clear solution with some insoluble particles. By bubbling CO<sub>2</sub> it gives clear solution immediately.

### Synthesis Procedure:

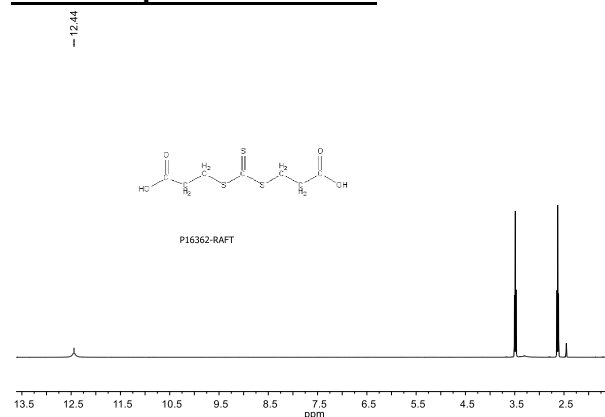
The polymer is prepared by RAFT process using RAFT reagent.

### Characterization:

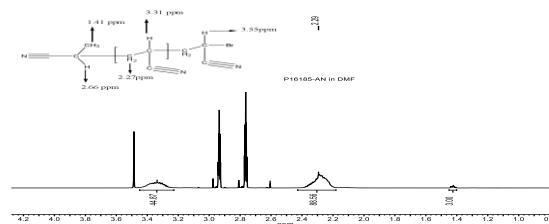
The molecular weight and polydispersity index (PDI) were calculated by SEC using water as eluent. The copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy.

**Solubility:** The polymer is soluble in water.

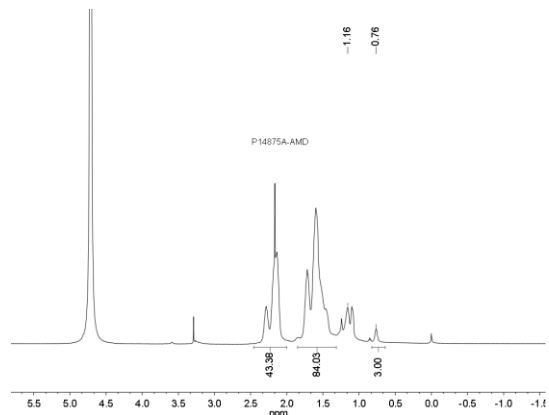
### <sup>1</sup>H-NMR spectrum of RAFT:



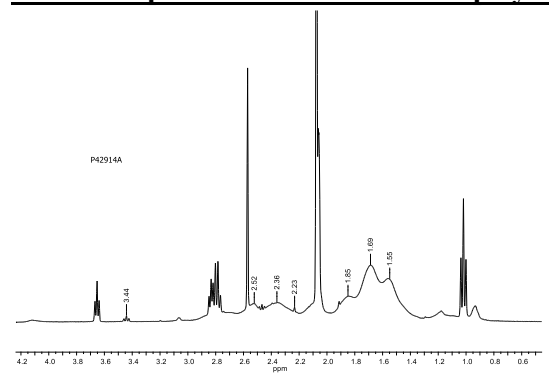
### <sup>1</sup>H-NMR Spectrum of PAN in d<sup>7</sup>-DMF:



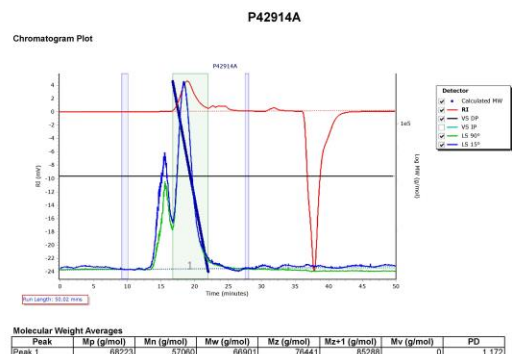
### <sup>1</sup>H-NMR Spectrum of PAAm in D<sub>2</sub>O:



### <sup>1</sup>H-NMR Spectrum of the random copolymer



### SEC elugram of the random copolymer carried out in water:



**FT-IR spectrum of the sample:**

