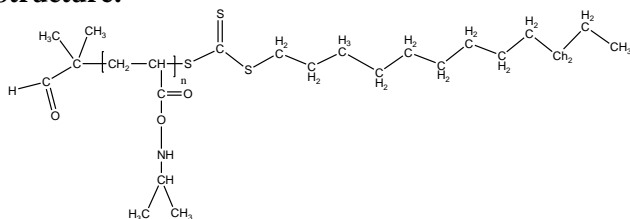


**Sample Name:**  $\alpha$ -carboxy-terminated Poly(N-isopropyl acrylamide)

**Sample #:** P10480CF1-NIPAMCOOH

**Structure:**



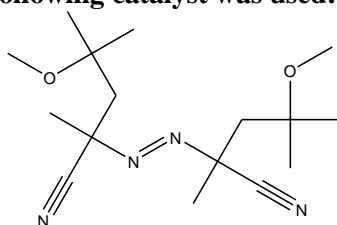
**Composition:**

Mn x 10 <sup>3</sup>	PDI
46.0	1.3

**Synthesis Procedure:**

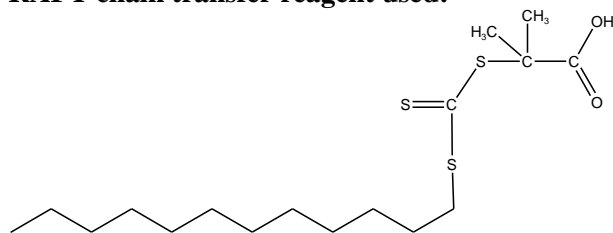
$\alpha$ -carboxy-terminated Poly(N-isopropyl acrylamide) is obtained by RAFT polymerization process.

**Following catalyst was used:**



2,2'-azobis (2,4-dimethyl-4-methoxyvaleronitrile)

**RAFT chain transfer reagent used:**



2-dodecylsulfonyl-2-methylpropionic acid

**Characterization:**

The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography (SEC) in DMF equipped with refractive index, viscometer and light scattering detectors at 50 °C degree.

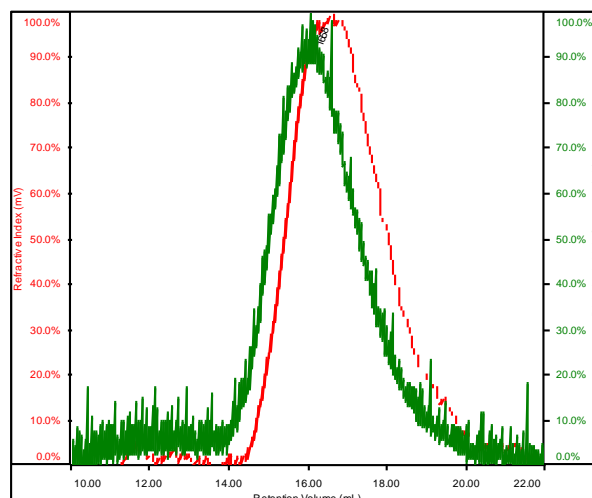
**Purification of polymer:**

Unreacted monomer was removed by dissolving the product in cold water than warming the solution. The polymer is separated out. This procedure was repeated two times to remove the unreacted monomer. The obtained polymer was dissolved in acetone and precipitated from hexane.

**SEC elugram of the Polymer:**

P10480C-F1

Conc	1.9650
dn/dc	0.0770
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99k_2018-05-30-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P10480CF1_01.vdt	46,123	60,987	47,134	1.322	0.6661