**Report on HFBS data on Polystyrene and Toluene**

**We have done Elastic scan on PS, PSd3, PSD5 and PSD8 with different loading of toluene’s mainly 0, 0.19, 0.3 and 0.39 toluene molecules per styrene. For exact loading please check the Table-1.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sample No** | **Sample** | **Loading of toluene molecules/styrene molecule** | **Tg as obtained from Elastic scan** | **Comments** |
| **3** | **PSd3** | **0** |  | **20150501\_06.hscn** |
| **1A** | **PSd3+toluene (d8)** | **0.19** |  | **20150505\_04.hscn** |
| **1** | **PSd3+toluene (d8)** | **0.29** |  | **20150502\_02.hscn** |
| **2** | **PSd3+toluene (d8)** | **0.39** |  | **20150501\_04.hscn** |
|  |  |  |  |  |
| **4** | **PSd5** | **0** |  | **20150429\_03.hscn** |
| **5A** | **PSd5+toluene (d8)** | **0.19** |  | **20150504\_04.hscn** |
| **5** | **PSd5+toluene (d8)** | **0.31** |  | **20150430\_04.hscn** |
| **6** | **PSd5+toluene (d8)** | **0.38** |  | **20150430\_02.hscn** |
|  |  |  |  |  |
| **9** | **PSd8** | **0** |  | **20150503\_04.hscn** |
| **7A** | **PSd8+toluene (d3)** | **0.20** |  | **20150506\_02.hscn** |
| **7** | **PSd8+toluene (d3)** | **0.28** |  | **20150502\_05.hscn** |
| **8** | **PSd8+toluene (d3)** | **0.44** |  | **20150503\_02.hscn** |
|  |  |  |  |  |
| **Madhu** | **PS ( old data from Madhu)** | **0** |  | **20140122\_02.hscn** |
| **11** | **PS+toluene (d8)** | **0.3** |  | **20150505\_02.hscn** |
| **10** | **PS+toluene (d8)** | **0.37** |  | **20150504\_02.hscn** |

**Experiment : Elastic scan have been carried out on HFBS, ramping rate=0.6 K/min and counted time for 150 sec. Therefore each data point or temperature resolution would be 1.5 K. All elastic scan have been carried out in Heating cycle.**