

### Fluorene based electroluminescent polymer with pendant ionic groups- Photophysical and thin film characteristics

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Electroluminescent materials have attracted researchers because of their peculiar photo- and electroluminescent characteristics. Due to the lack of inherent ionic conductivity, these materials are still very far away from commercial applications. In order to compensate this drawback, we synthesized polyfluorene with pendant ionic groups [1, 2] and studied its photo-physical and electroluminescent characteristics in solution as well as thin film. Light emitting electrochemical cells (LEC) were made using these polymers and emission behaviors were studied. Indium tin oxide sputtered glass slab was used as anode and vacuum deposited aluminum on top of polymer film as cathode in LEC.

#### References

- 1) S. H. Oh et al. Organic Electronics 8 (2007) 773-783
- 2) F. Huang et al. Polymer 46 (2005) 12010-12015