

## Supplementary Information

### Notes

<sup>#</sup> **Materials.** Aniline (Aldrich) was distilled and stored under dinitrogen prior to use. (1*S*)-(+)- and (1*R*)-(-)-10-camphorsulfonic acid (HCSA) were purchased in the purest forms available from Aldrich Chemical Co. and used as supplied. Millipore water was employed for the preparation of all aqueous solutions. Indium tin oxide (ITO) - coated glass was purchased from Delta Technology, USA. It was sputter coated with platinum at 30 mA for 5 sec in order to obtain uniform and strongly deposited polyaniline emeraldine salt films in the subsequent aniline electropolymerisations.

<sup>§</sup> **Preparation of Emeraldine Salt Films.** Electrochemical polymerisations were carried out in a one-compartment cell using the three electrode configuration and a BAS CV-27 potentiostat. ITO-coated glass, sputter coated with Pt, was employed as the working electrode (3 cm<sup>2</sup>), while Pt-mesh and Ag/AgCl<sub>(3M NaCl)</sub> were used as auxiliary and reference electrodes, respectively. The initial thin PAn.(+)-HCSA {or PAn.(-)-HCSA} films were potentiostatically deposited from aqueous 0.20 M aniline containing 1.0 M (+)-HCSA {or PAn.(-)-HCSA} using an applied potential of +0.9 V and passing 25 mC/cm<sup>2</sup> of charge. The polymerisation temperature was 18-20°C. The thin PAn.HCSA films were washed well with methanol to remove excess aniline monomer and unincorporated (+)-HCSA by dipping in a large amount of methanol for 15 seconds 10 times. Further electrodepositions of PAn.(±)-HCSA, PAn.HCl, or PAn.PTSA on top of the initial thin PAn.(+)-HCSA {or PAn.(-)-HCSA} films were carried out from aqueous 0.20 M aniline containing 1.0 M (±)-HCSA, HCl, or PTSA, respectively, using an applied potential of +0.9 V and various deposition charges ( between 50 and 300 mC/cm<sup>2</sup>).

<sup>\*\*</sup> **UV-visible and CD Spectra of Films.** After electrodeposition, the polyaniline emeraldine salt films were washed with MeOH to remove oligomers, excess monomer and unincorporated acid dopants. Their UV-visible (300-1100 nm) spectra were then recorded using a Shimadzu UV-1601 spectrophotometer. CD spectra (330-800 nm) spectra were measured with a Jobin-Yvon Dichrograph 6.