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Application of Conducting Polymer (Polypyrrole) as an Electrode in Li Rechargeable Batteries K. P. Vidanapathirana, Kumudu Perera and M. A. Careem Department of Physics, University of peradeniya, Peradeniya

Li rechargeable cell was fabricated with a conducting polymer cathode. For that, conducting polymer polypyrrole (PPy) has been electropolymerized in the presence of large surfactant an ion dodecylbenzene sulfonate. A solid polymer electrolyte (SPE) was used as the electrolyte while Li was served as the anode. Cyclic voltammetry, continuos charge discharge tests and impedance measurements showed better cyclingcapacity and long cycling life.