## GLUCOSE OXIDASE ACTIVITY AFTER IMMOBILIZATION ONTO POLYMER SUPPORTS MODIFIED BY GAMMA RADIATION

A.C.D. Rodas; M. Taoda; O.Z. Higa.

Coordenadoria de Bioengenharia-IPEN/CNEN-SP. CP11049-SP

Pellets of low density polyethylene (LDPE) and polypropylene (PP) were used in the immobilization of glucose oxidase. Acrylic Acid (AA) was grafted onto the polymers by simultaneous irradiation technique with <sup>60</sup>Co gamma rays. Copolymers of LDPE-g-AA and PP-g-AA with various grafting levels were used for the enzyme immobilization, through the chemical activation by the method of Coulet et al. The activity of glucose oxidase were measured by o-dianisidine method. The activity of immobilized glucose oxidase was observed during 26 days on PP-g-AA with grafting level of 2.4%. The enzyme activity was observed for about 12 days on LDPE-g-AA pellets grafted at the level of 3.46%. The data showed a better immobilization of the enzyme onto PP-g-AA pellets.

Supported by CNPq

2802