Beneficiation of Dye Sensitized Solar Cell as Energy Saving from Apple Skin with TiO2 Electrolysis

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Abstract : In Indonesian climates that have the tropic climate, one of the potential energy sources is coming from solar energy. From the solar energy, we can convert it into the others energy, such as electrical energy. In this topic, we want to do the research about Dye Sensitized Solar Cell (DSSC). The materials that we use as sensitizer is anthocyanin that we extract from apple skin, because the anthocyanin is one of the most effective as a sensitizer for DSSC. The variable in this research is pH. The pH that we used are pH 0,5; pH 1; pH 1,5; pH 2; pH 2,5. The method is electrolysis, and we use TiO2 as sensitized material. The hypothesis from this research is the smaller pH can make higher the efficiency of the absorbent of the solar energy.

Keywords : anthocyanin, TiO2, DSSC, apple skin
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