ABSTRACT

The use of technology will never be separated from human life, especially in this modern era, technological progress continues to develop rapidly as time goes by. As technology develops, energy needs also grow.

One source of energy is batteries. The use of batteries is directly proportional to technological developments, where the more technology develops, the greater the use of batteries. However, batteries that are widely used today will still be hazardous waste and difficult to recycle.

In this final project, a prototype of an aluminum air battery was created which could be a solution to the increasingly massive use of batteries. Aluminum air batteries are considered more environmentally friendly than the batteries currently widely used.

Making a prototype of 10 aluminum air battery cells using two electrolyte materials NaCL and KOH, obtained an average voltage of 0.77 V for each cell from using the NaCl electrolyte material and an average voltage of 1.53 V for each cell from Using KOH electrolyte material, the aluminum air battery prototype created also produces a current of 0.204 mA for two cells, 0.668 mA for three cells, 1.28 mA for four cells, 1.67 mA for five cells, and 2.29 mA for six cells. batteries connected in series. When connected in series parallel, current data was obtained of 0.616 mA for two cells, 2.25 mA for three cells, and 3.42 mA for four battery cells.

Keywords: Energy, Air aluminum battery, Battery. Electrolyte