

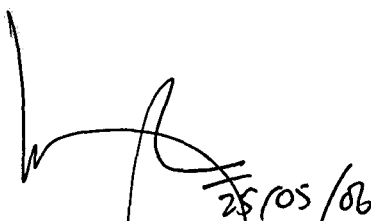
**RING CAVITY ERBIUM DOPED FIBER LASER**

**SITI NORSABRINA BT ABDUL GAFFUR**

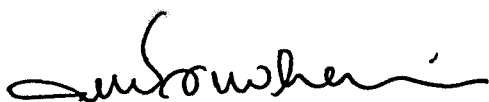
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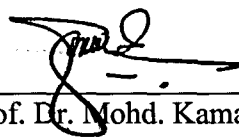
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## **ABSTRACT**

### **RING CAVITY ERBIUM DOPED FIBER LASER**

The performance of Erbium Doped Fiber (EDF) and ring cavity lasers have been investigated. A 4-meter length of erbium doped fiber (EDF), which pumped from 980nm laser diode, was used as a gain medium in the construction of a fiber laser using ring cavity configuration in different position isolator. The characteristics of the output power with laser diode pump power are discussed. The fiber laser performance and the quality of the signal generated were measured by using optical spectrum analyzer (OSA). The output characteristics of the laser were determined in term of threshold level, slope efficiency and signal-to-noise ratio.

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