ITSF

Indonesia Toray Science Foundation
'AWARDING PROPOSAL'

1. **Title** : The Effectivity of Quantum Calculator Media on Quantum Number Learning

2. **Subject** : CHEMISTRY

3. **Receiver**

Name : **RUSLAN, S.SI**
Sex : Male
Place/Date of Birth : Rai Oi, 24 April 1979
School : SMA Negeri 2 Lambu
School Address : Jl. Dam Diwu Moro Simpasai Kec. Lambu Kab. Bima - Nusa Tenggara Barat 84182
Phone/Fax Number : 085292797103 Fax No: -
Email Address : rruslan20@yahoo.com

4. **Proposal Summary (± 200 words)**:

Kalkulator Kuantum media is an equipment which designed to student learning easily on chemistry especialy for quantum number learning. It consist of the quantum number ring, electron spin card and a pointing nail. The quantum number ring is consist of two different rings size. For small ring put of principal quantum number (n), azimuth quantum number (l) and magnetic quantum number (m) put in the bigger ring. Even though spin quantum number was seem by spin electron card. Quantum number learning by Kalkulator Kuantum media, is more easier to understand for deciding the quantum number of electron. Also, to increase proces quality and learning result compare with the other methods such as deliver a lecture, which needed for long time and remedial to mastery learning.

The result of learning by helping Kalkulator Kuantum media, to increase the process quality learning. The result of observation shows that increasing of learning motivation from 26 % to 89%, motivation of asking from 5% to 24%, cooperate of learning from 26% to 48% and motivation on doing the task from 35% to 89%. The result of final test also showing the increasing from 21% to 89%. So, the student reaction and response, describe that all of students are recognize the Kalkulator Kuantum media is effectively