## 北海道大学での共同研究

理学系研究科化学専攻 博士課程 2 年 KRASIENAPIBAL Thantip S.

Thanks for ALPS program. I had a chance to collaborate the research with Hokkaido University, Graduate school of engineering under advice of Prof. Nagahama Taro. The stay last about 1 month from 11 Jan – 10 Feb 2015. The project was about spintronics using oxide semiconductor. During the time, I have learn and been advised many things about TMR and GMR devices and also experimental technique such as details of molecular beam epitaxy and micro-patterning process. Although, at first, there was a problem of noise level signal, the measurement was improved and the results can be obtained. In addition, I also have a chance to observe other experiments such as fabricating film by chemical vapor deposition (CVD) and also how to doped diamond with an element. In addition, I have a chance to see many hand-made machines giving me new prospective of researching.

All members in the research group are kind with warm welcoming. I am appreciated all assistances to my experiment and daily life during staying.

