

**DEVELOPING OF STUDENTS WORKSHEET BASED ON INQUIRY IN
TEMPERATURE AND HEAT MATERIAL IN CLASS XI
TEACHING YEAR 2020/2021**

**Tiovani Ariesta Pasaribu
(NIM 4163121017)**

ABSTRACT

This development research aims to produce inquiry-based physics student worksheets on temperature and heat material that are feasible to be applied in the physics learning process at school and to find out students' responses after using the developed student worksheets. The subjects in this study were 20 students of 11th-grade sciences class in Nasrani Private School 3 Medan. This type of research is a research development or Research and Development (R&D) using 4D Models. The instruments used in this study consisted of a validated questionnaire for material experts and learning experts, a physics teacher assessment questionnaire, and a student response questionnaire to inquiry-based physics student worksheets. The data analysis technique used in this research is descriptive. From the results of data analysis, it was obtained that the validation of material experts was 85%, learning experts was 65%, the physics teacher's assessment was 86% with each of these presentations included in the very good and good categories. The response of students in a limited trial with a sample of 5 people was 74% in good criteria. Whereas in the broad trial the percentage response of students with a sample of 20 people was 91.5% with very good criteria, so that based on the results of the validation, physics teacher assessment, and student responses, it can be concluded that the worksheets of physics students based on inquiry learning on the subject matter of temperature and heat worthy of use in the learning process.

**Keywords: Development, student worksheets, Inquiry Learning,
Temperature and Heat**