

Study of the physical properties of Largest Stars using the DSLR camera with a small Refracted telescope

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In this study of the physical properties of large stars, information from all five (5) stars were capture by shooting with a DSLR and through the Star Analyser SA-100 grating spectrometer. The observations were performed with a small 152 mm refracting telescope at the rooftop of Building 23, Faculty of Science, Lampang Rajabhat University. The data were then analyzed using the RSpec program in the visible range. It was found that the studied stars had elemental spectral absorption lines as well as the surface temperature of the stars. Sirius was classified in the spectra of the A2V star with a temperature of 8,219 Kelvin. Pollux K0III with a surface temperature of 4,980 kelvins, Aldebaran K5III with a surface temperature of 3.845 Kelvin, Rigel B8I with a surface temperature of 7,603 Kelvin and Betelgeuse M2I with a surface temperature of 3,851 kelvins. These data are consistent with the data of the international standard. This study can be utilized as a basis for low-cost stellar spectroscopy that can be applied in the study of astronomy in schools.

Keywords : Large Stars, Spectrum Type, Chemical Composition, Surface Temperature, Digital Single Lens Reflex

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