

OPTICAL SPECTROSCOPY OF AN M-TYPE STAR

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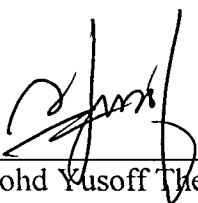
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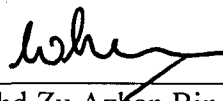
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ABSTRACT

OPTICAL SPECTROSCOPY OF AN M-TYPE STAR

In this research, the researcher performs the astronomical spectroscopy of an M-type star aided by 20 inch telescope, CCD and spectrograph. The researcher were successfully obtained absorption lines spectrum of the M-type star (Betelgeuse) at 3 different ranges and exposure time. Analysis of the M-type star spectrum resulting 7 TiO (at 5409.483, 5823.811, 5753.659, 6126.678, 6181.934, 6221.255, 6326.464 Å), 3 Fe (at 5806.795, 6412.544, 6422.108 Å) and 2 NaI (at 5890.018, 5896.425 Å) absorption lines were identified in the M-type star spectrum. Analysis also shows that the radial velocity of the stars on the night of observation (22nd to 28th December 2007 at LNO) was $+29.121 \times 10^3$ m/s means that the star was moving away from earth. The error in obtaining the spectra were reduced by lowering the CCD's temperature, subtracting the dark current and flat fielding the image obtained.

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