

ABSTRAK

**PENGUKURAN INDEKS BIAS PRISMA MEMANFAATKAN
PRINSIP PEMANTULAN TOTAL, DEVIASI MINIMUM,
DAN DEVIASI MAKSIMUM**

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Penelitian mengenai indeks bias prisma memanfaatkan tiga prinsip optik, yaitu prinsip pemantulan total melalui pengukuran sudut kritis, prinsip deviasi minimum, dan prinsip deviasi maksimum telah dilakukan. Sudut kritis, sudut deviasi minimum, dan sudut deviasi maksimum diukur menggunakan cakra optik, layar dan laser. Indeks bias yang diperoleh melalui pengukuran sudut kritis sebesar $(1,65 \pm 0,04)$, melalui pengukuran sudut deviasi minimum sebesar $(1,51 \pm 0,02)$, dan melalui pengukuran sudut deviasi maksimum sebesar $(1,52 \pm 0,02)$.

Kata kunci : indeks bias, pemantulan total, sudut kritis, deviasi minimum, deviasi maksimum, cakra optik

ABSTRACT

**THE MEASUREMENT OF INDEX REFRACTION OF PRISM
USING TOTAL INTERNAL REFLECTION, MINIMUM
DEVIATION,
AND MAXIMUM DEVIATION PRINCIPLE**

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A research about refractive index of the prism utilizing three optics principles, namely the principle of total reflection through the measurement of the critical angle, the principle of minimum deviation, and maximum deviation principle has been done. Critical angle, minimum deviation angle, and maximum deviation angle measuring using the rotation stage, the screen, and the laser. The refractive index obtained by measuring the critical angle of $(1,65 \pm 0,04)$, by measuring the angle of minimum deviation of $(1,51 \pm 0,02)$, and by measuring the angle of maximum deviation of $(1,52 \pm 0,02)$.

Keywords : index refraction, total internal reflection, critical angle,
minimum deviated, maximum deviated, rotation stage