

## Efek Fraksi Volume Al<sub>2</sub>O<sub>3</sub> terhadap Kualitas Komposit Isotropik Al/Al<sub>2</sub>O<sub>3</sub> dengan Metode Metalurgi Serbuk

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20304716&lokasi=lokal>

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### Abstrak

Aluminum matrix composite which was reinforced by ceramic is one of MMCs which is developed as automotive part. This current research use aluminum as matrix: and alumina (Al<sub>2</sub>O<sub>3</sub>) powder reinforced with volume fraction of 10%, 20%, 30%, 40%. With-Almg coated by electroless. The result show that composite with Al+Mg coating owned better interfacial bonding than composite without coating. The highest elasticity moduli of Al<sub>2</sub>O<sub>3</sub> is forward at volume fraction of 40% is 259.9 GPa. However elasticity modulus of composite without coating treatment with volume fraction 40% is 178,8 GPa, or increased about 45%.