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## Publications

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2026

Prosiding seminar internasional

### **Fatigue life estimation of Bina Marga standard steel bridge structures through finite element analysis**

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , DERRY WILYANDA NASUTION , CUT ATIKA PUTRI , NURSYAMSI , DANIEL PATRICK SITOHAHANG

2026

Jurnal internasional bereputasi

### **Effect of Storage Time on Asphalt Modified by KKK60 Prevulcanized Latex**

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , DERRY WILYANDA NASUTION , ADINA SARI LUBIS , M. Fadil Natoras Nasution

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### **Effect of Storage Time on Asphalt Modified by KKK60 Prevulcanized Latex Latex**

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2025

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### **Fatigue life estimation of Bina Marga standard steel bridge structures through finite element analysis**

DERRY WILYANDA NASUTION , MUTHIAH PUTRILAN SYAMNAH HARAHAHAP

2024

Jurnal nasional

### **The Evaluation of the Use PET and HDPE Plastic Waste as Coarse Aggregate of Lightweight Concrete**

NURSYAMSI , MUTHIAH PUTRILAN SYAMNAH HARAHAHAP

2024

Prosiding seminar internasional

### **Static Convergence Behaviour of Discrete Kirchhoff-Mindlin Triangular Element on Rectangular Functionally Graded Material Plates**

IMAM JAUHARI MAKNUN , MUTHIAH PUTRILAN SYAMNAH HARAHAHAP

2022

Jurnal internasional bereputasi

### **Kajian Struktur Istana Maimun dalam merspon Gaya Gempa**

NURSYAMSI , MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , ING JOHANNES TARIGAN

2022

Jurnal internasional

### **The Traditional House in North Sumatera Against the Earthquake: A Case Study of Karo and Toba**

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , ING JOHANNES TARIGAN , NURSYAMSI

2022

## Structural Analysis of Maimun Palace Against Earthquake

ING JOHANNES TARIGAN , MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , NURSYAMSI

2021

Prosiding seminar internasional

### Buckling analysis of square Functionally Graded Material (FGM) plate using Discrete Kirchhoff Mindlin Triangular (DKMT) element

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP

2020

Prosiding seminar internasional

### Static analysis of skew Functionally Graded Material (FGM) plate using triangular element

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP

## Researches

2024

Penelitian Dana Lokal Perguruan Tinggi

### Studi Umur Layan Struktur Jembatan Standar Bina Marga Terhadap Kriteria Fatik

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , NURSYAMSI , DERRY WILİYANDA NASUTION , TIUR AGNES M SIANIPAR , DANIEL PATRICK SITOANG

## Intellectual Property Rights

2025

Paten nasional

### GORONG-GORONG BETON PRACETAK PADA JALAN KELAS III

MUTHIAH PUTRILAN SYAMNAH HARAHAHAP , ING JOHANNES TARIGAN , NURSYAMSI , SHEILA HANI , Muhammad Farhan