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*Dr. Perdinan Sinuhaji, M.S. dilahirkan di Karo pada tanggal 10 Maret 1959. Saat ini, beliau menjabat sebagai dosen Fisika di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya, yakni Doktorat (S3) Fisika, di Universitas Sumatera Utara (USU) pada tahun 2010.*

## Publications

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2023

Prosiding seminar internasional

### **Synthesis BaFe12O19/RGO Composite As Microwave Absorber For Ku-Band**

PERDINAN SINUHAJI

2026

Prosiding seminar internasional

### **Properties of low-cost MgB2 superconducting wires fabricated by high reduction cold rolling**

PERDINAN SINUHAJI

2023

Jurnal internasional bereputasi

### **Optimization of Palm Oil Boiler Ash Biomass Waste as a Source of Silica with Various Preparation Methods**

SYAHRUL HUMAIDI , ERNA FRIDA , PERDINAN SINUHAJI

2021

Prosiding seminar internasional

### **Degradation studies of MASbCl3 with a variety of DMF and DMSO solvents: A lead-free perovskite**

PERDINAN SINUHAJI , Dr. KERISTA TARIGAN, M.Eng.Sc.

2023

Jurnal internasional bereputasi

### **Carboxymethyl Cellulose Nanoadsorbent for Remediation of Polluted Water**

ERNA FRIDA , KHAIRIAH, SSI, MSI , PERDINAN SINUHAJI , PUTUT MARWOTO, DR., MSI , SYAHRUL HUMAIDI , KERISTA SEBAYANG

2025

Prosiding seminar internasional

### **Preparation and Characterization of Nanochitosan Derived from Shrimp Shell Waste**

TIMBANGEN SEMBIRING , SUSILAWATI , PERDINAN SINUHAJI , ERNA FRIDA , TENGKU MACHDHALIE SOFIE , IRPANSYAH SIREGAR , ISMAIL AB , HARIYATI LUBIS

2020

Artikel ilmiah

### **Study of Physical and Magnetic Properties of Barium Hexaferrite Substituted by Nd2O3**

POPI SASNIATI , TIMBANGEN SEMBIRING , PERDINAN SINUHAJI

2023

Prosiding seminar internasional

## **Lead-Free Perovskite Using Formamidinium Iodide (FAI) and Antimony Trichloride (SbCl<sub>3</sub>) By Inverse Temperature Crystallization Method: Bandgap Value UV/VIS Spectroscopy**

PERDINAN SINUHAJI , Dr. KERISTA TARIGAN, M.Eng.Sc.

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2022

Jurnal internasional bereputasi

## **Optimization of Palm Oil Boiler Ash Biomass Waste as a Source of Silica with Various Preparation Methods**

SYAHRUL HUMAIDI , PERDINAN SINUHAJI , ERNA FRIDA

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2022

Jurnal internasional bereputasi

## **Carboxymethyl Cellulose Nanoadsorbent for Remediation of Polluted Water Pengarang**

ERNA FRIDA , SYAHRUL HUMAIDI , PERDINAN SINUHAJI

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2023

Jurnal nasional terakreditasi

## **Design of Analytical Balance for Calibration of Measuring Cup of Observatory Type Rain Gauge with Automatic Pump**

YAHYA DARMAWAN , SYAHRUL HUMAIDI , MARHAPOSAN SITUMORANG , MUHAMMAD WILDAN ABDULMAJID , PERDINAN SINUHAJI , Dr. KERISTA TARIGAN, M.Eng.Sc.

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2024

Prosiding seminar internasional

## **Physical characteristics of extrudate with treatment composition ratio of mixed corn grit-soybean flour and extruder barrel temperature**

PERDINAN SINUHAJI

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2026

Prosiding seminar internasional

## **Optimization synthesis and characterization of silica nanoparticles (SNPs) from rice husk ash for sustainable environmental material**

TIMBANGEN SEMBIRING , SUSILAWATI , PERDINAN SINUHAJI , ISMAIL AB , ERNA FRIDA , SYAHRUL HUMAIDI , HARIYATI LUBIS

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2025

Jurnal internasional bereputasi

## **Desalination of Seawater using Pahae Natural Zeolite-Activated Carbon derived from Kepok Banana Peel (Musa paradisiaca Linn.)**

SUSILAWATI , MERPISELDIN NITSAE , PERDINAN SINUHAJI , HARIYATI LUBIS , FAJAR RINALDI , MUHAMMAD RAFLY IHSAN AS SIDDIQ , Mutia Irma

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2021

Jurnal internasional bereputasi

## **Obtaining tin (II) oxide by a chemical method**

PERDINAN SINUHAJI

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2024

Prosiding seminar internasional

## **Silica Sol as a Filler in Process of Materializing Mullite Fiber (SiO<sub>2</sub>.Al<sub>2</sub>O<sub>3</sub>)**

PERDINAN SINUHAJI

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2023

Jurnal internasional bereputasi

## **Banana peels activated carbon performance for the remediation of lead contaminated heavy metal water (Pb)**

PERDINAN SINUHAJI , KHAIRIAH, SSI, MSI , ERNA FRIDA , SYAHRUL HUMAIDI

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2022

Jurnal internasional bereputasi

## **Selfcleaning and antibacterial activities of textiles using nanocomposite oil palm boiler ash (OPBA), TiO<sub>2</sub> and chitosan as coating**

PERDINAN SINUHAJI , SYAHRUL HUMAIDI , ERNA FRIDA

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2023  
Prosiding seminar internasional

## **Effect of Urea and Chitosan Doping on Red Bean Carbon Dots as Heavy Metal Detectors**

PERDINAN SINUHAJI

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## **Researches**

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2023  
Penelitian Fundamental

### **Pembuatan Dan Karakterisasi Zeolit Alam Pahae Dan Arang Aktif Kulit Pisang Kepok Sebagai Absorben Untuk Menurunkan Salinitas Air Laut Di Pantai Cermin Deli Serdang Sumatera Utara**

SUSILAWATI , MERPISELDIN NITSAE , PERDINAN SINUHAJI

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2021  
Penelitian Disertasi Doktor

### **PREPARASI DAN KARAKTERISASI KAIN DENGAN SIFAT SELFCLEANING DAN ANTIBAKTERI MENGGUNAKAN NANOKOMPOSIT ABU BOILER KELAPA SAWIT DAN TITANIUM DIOKSIDA SERTA KITOSAN**

SYAHRUL HUMAIDI , ERNA FRIDA , PERDINAN SINUHAJI

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## **Community Services**

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2019  
KKN Pembelajaran Pemberdayaan Masyarakat

### **Pemberdayaan Masyarakat Berupa Pembuatan Sabun Cuci Tangan dan Penyuluhan Cuci Tangan Pakai Sabun Sebagai Upaya Meningkatkan Kesadaran Hidup Sehat Masyarakat Desa Sei Siarti Kecamatan Panai Tengah Kabupaten Labuhanbatu**

MANIS SEMBIRING , PERDINAN SINUHAJI

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## **Intellectual Property Rights**

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2023  
Hak cipta nasional

### **Teknologi Film Tipis**

PERDINAN SINUHAJI

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2023  
Paten nasional

### **Proses melapisin kain dengan sifat pembersih diri dan aktibakteri**

PERDINAN SINUHAJI

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2023  
Paten nasional

### **Metode Pembuatan Nano Komposit Termoplastik Elastomer**

ERNA FRIDA , PERDINAN SINUHAJI

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2023  
Paten nasional

### **Metode Pembuatan Nano Absorben Untuk Remediasi Air Tercemar Logam Berat**

PERDINAN SINUHAJI , ERNA FRIDA , SYAHRUL HUMAIDI

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