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Dr. Marpongahtun, M.Sc., was born in Berastagi, Karo, on November 15, 1961, and is a lecturer in Chemistry at Universitas Sumatera Utara. She completed a Doctoral Program in Electrochemistry at UTM in 2005.

Publications

2024

Jurnal internasional bereputasi

Synthesis and characterization of BC-ZnO and antibacterial activity test

MARPONGAHTUN , TAMRIN , Athanasia Amanda Septevani , Hermawan Purba

2021

Artikel ilmiah

Effect of variation temperature at burning rice husk to obtain silica

MARPONGAHTUN

2019

Prosiding seminar internasional

Fabrication of Composite Nanofibre PEO/Lignin for Exhaust Gas Emissions by Electrospinning

MARPONGAHTUN , SAHARMAN GEA

2022

Jurnal nasional

Pengelolaan Integrasi Ekologi Lubuk Larangan Tambangan Jae Kabupaten Mandailing Natal

AMEILIA ZULIYANTI SIREGAR , MARPONGAHTUN , ZULKIFLI , MUHAMMAD TURMUZI

2018

Prosiding seminar internasional

Preparation of Semi-IPN Hidrogel from Starch Nanoparticles of Magrove Fruit and Monomer Acrylic Acid Using Crosslinker N, N'Methylene Bisacrylamide

MARPONGAHTUN , TAMRIN , DARWIN YUNUS NASUTION , ABDILLAH , GIMELLIYA SARAGIH

2023

Jurnal internasional bereputasi

The role of biocatalysts in the synthesis of graphene nanosheets from sub-bituminous coal

Isnaeni , MARPONGAHTUN , Ir. VIVI PURWANDARI, M.Si , MAHYUNI HARAHAP , MARTHA RIANNA

2025

Jurnal internasional bereputasi

Facile synthesis of reduced graphene oxide using natural plant extracts as green reducing agents

MARPONGAHTUN , SAHARMAN GEA , ANDRIAYANI , A. MUHAMMAD AFDHAL SAPUTRA , Ronn Goei , Alfred Iing Yoong Tok , Stergios Goutianos

2023

Prosiding seminar internasional

Rice husk is renewable source in synthesis nanosilicon and its application as

potential anode lithium-ion batteries

MARPONGAHTUN , ANDRIAYANI , SAHARMAN GEA

2021

Artikel ilmiah

Morphology of Bacterial Cellulose-Curcuma longa Linn from Acetobacter xylinum for Wound Healing

MARPONGAHTUN , TAMRIN , LAMEK MARPAUNG

2019

Artikel ilmiah

Effect of epoxidised natural rubbers on curing characteristics of kaolin-filled natural rubber composites

MARPONGAHTUN , LILIS SUKEKSI , INDRA SURYA

2020

Jurnal internasional bereputasi

Phytochemical screening and toxicity of ethanolic extract of mangrove (Rhizophora mucronata) leaves from Langsa, Aceh Timur

MARPONGAHTUN

2023

Jurnal internasional bereputasi

Promoting Electrospun Lignin/PEO Nanofiber for High-Performance CO Filtration

SAHARMAN GEA , MARPONGAHTUN

2024

Jurnal internasional bereputasi

Facile synthesis and electrochemical performance of bacterial cellulose/reduced graphene oxide/NiCo-layered double hydroxide composite film for self-standing supercapacitor electrode

SAHARMAN GEA , MARPONGAHTUN , DIANA ALEMIN BARUS , ANDRIAYANI , A. MUHAMMAD AFDHAL SAPUTRA , MUHAMMAD IBADURRAHMAN , Ronn Goei , Alfred Ling Yoong Tok

2023

Jurnal nasional terakreditasi

SYNTHESIS OF CARBON DOTS FROM EMPTY FRUIT BUNCH BIOCHAR VIA AN ACID-FREE HYDROTHERMAL METHOD

MARPONGAHTUN , SAHARMAN GEA , AMRU DAULAY , RUFINA PRAMUDITA

2025

Prosiding seminar internasional

The making of ethanolamine-modified stearin and its application in natural rubber technology

MARPONGAHTUN , INDRA SURYA

2022

Jurnal nasional terakreditasi

Processing of Palm Midrib Waste into Animal Feed with a Fermentation Process that is integrated with a chopper in Siapang Village, Deli Serdang Regency

SITI UTARI RAHAYU , MARPONGAHTUN , SUSILAWATI , SUHARMAN

2018

Artikel ilmiah

The preparation and characterization of bentonite nanoparticle from Bener Meriah, Indonesia

MARPONGAHTUN

2026

Prosiding seminar internasional

Carbon quantum dots surface decorated molybdenum disulfide by hydrothermal synthesis for tetracycline detector

MARPONGAHTUN , SAHARMAN GEA , YUNI ALDRIANI LUBIS , AISYAH RAMADHANI , ANISA NABILAH HARAHAHAP , AYUNDA AULIA ARSYAH , SEKAR AZHANI

2018

Artikel ilmiah

The preparation and characterization of bentonite nanoparticle from Bener Meriah, Indonesia

SAHARMAN GEA , MARPONGAHTUN

2020

Jurnal internasional bereputasi

PHYTOCHEMICALS SCREENING AND ANTIBACTERIAL ACTIVITY OF Curcuma Longa Linn, Ziziphus Mauritiana AND Centella Asiatica L.Urban EXTRACT

MARPONGAHTUN

1997

Artikel ilmiah

The use of prompt gamma activation analysis in sediment samples from a polluted marine environment

MARPONGAHTUN

2025

Jurnal internasional bereputasi

Graphene oxide-bacterial cellulose composites for enhanced adsorption of rhodamine B from aqueous solutions

SAHARMAN GEA , MARPONGAHTUN , ANDRIAYANI , A. MUHAMMAD AFDHAL SAPUTRA , MUHAMMAD IRVAN HASIBUAN , FARDA NATA SYAKIRA , SALWA AQILAH LUTHFIYAH , SAFIRA AZKIA , Sumiyah Sabar , Ronn Goei

2023

Book chapter nasional

Inovasi revolusioner elektrokatalis berbasis grafena batubara

Ir. VIVI PURWANDARI, M.Si , MARPONGAHTUN , MAHYUNI HARAHAP

2022

Jurnal internasional bereputasi

Synthesis and application of silicon nanoparticles prepared from rice husk for lithium-ion batteries

ANDRIAYANI , MARPONGAHTUN , SAHARMAN GEA

2023

Jurnal nasional terakreditasi

Synthesis of Carbon Dots From Empty Fruit Bunch Biochar an Acid-Free Hydrothermal Method

MARPONGAHTUN , SAHARMAN GEA , RUFINA PRAMUDITA , AMRU DAULAY

2018

Prosiding seminar internasional

Abdillah, 2018. Preparation of Semi-IPN Hidrogel from Starch Nanoparticles of Magrove Fruit and Monomer Acrylic Acid Using Crosslinker N, N'Methylene Bisacrylamide

MARPONGAHTUN , TAMRIN , DARWIN YUNUS NASUTION , ABDILLAH , GIMELLIYA SARAGIH

2021

Jurnal internasional bereputasi

INFLUENCE OF ACETYLATED CELLULOSE NANOCRYSTAL INCORPORATED INTO POLY(E-CAPROLACTONE) NANOCOMPOSITES ON ITS THERMAL, MECHANICAL, AND PHYSICOCHEMICAL PROPERTIES

MARPONGAHTUN

2023

Jurnal internasional bereputasi

IMPROVING CARBON DOTS OPTICAL PROPERTIES OF MOLASSES USING EDTA AS A PASSIVATION AGENT WITH THE MICROWAVE METHOD

IRAWATI PUTRI H. SIREGAR , MARPONGAHTUN

2024

Jurnal internasional bereputasi

Synthesis, properties, and utilization of carbon quantum dots as photocatalysts on degradation of organic dyes: A mini review

ANDRIAYANI , AVERROES FAZLUR RAHMAN PILIANG , A. MUHAMMAD AFDHAL SAPUTRA , DELLYANSYAH , Ronn Goei , RISKY RAMADHAN HTS , SAHARMAN GEA , MARPONGAHTUN

2024

Jurnal internasional bereputasi

Pioneering bio-oil extraction: The role of transition metal oxide zeolite catalysts in co-pyrolyzing palm fronds and high-density polyethylene

SAHARMAN GEA , MARPONGAHTUN , ANDRIAYANI , DIANA ALEMIN BARUS , MUHAMMAD IRVAN HASIBUAN , ALWI KHAIRUNSYAH PINEM , A. MUHAMMAD AFDHAL SAPUTRA , FARAH ARFANI DAULAY , SHIPLU SARKER

2019

Artikel ilmiah

Fluorescent Property of Carbon Nanodots Synthesized by Microwave Method from Crystal Nanocellulose as Precursor

MARPONGAHTUN , SAHARMAN GEA

2019

Jurnal internasional

Bioactive Compounds in Pegagan Leaf (*Centella asiatica* L. Urban) for Wound Healing

MARPONGAHTUN , TAMRIN , LAMEK MARPAUNG

2025

Jurnal internasional bereputasi

A Green Approach to N, S-doped Carbon Dots from Jengkol Peel (*Archidendron pauciflorum*) for Ratiometric Sensing of Amaranth Dye

AGUS RIMUS LIANDI , MARPONGAHTUN , AMIR HAMZAH SIREGAR , ANIZA SALVIANA PRAYUGO , RIRIN ANNISA , Salmiati , Amru Dauly

2023

Prosiding seminar internasional

Charaterization of Nanocellulose from Liquid Wasted of Tofu by *Acetobacter xylinum*

MARPONGAHTUN , ANDRIAYANI

2018

Prosiding seminar internasional

Preparation of semi-IPN hydrogel from starch nanoparticles of magrove fruit and monomer acrylic acid using crosslinker N,N- ϵ methylene bisacrylamide

MARPONGAHTUN

2026

Jurnal internasional bereputasi

Green one-pot synthesis of rGO/AgNPs- β -cyclodextrin nanocomposites using *Miconia crenata* leaf extract: Insights into structural, interfacial, optical, and textural evolution.

SAHARMAN GEA , MARPONGAHTUN , YENI WAHYUNI HARTATI , A. MUHAMMAD AFDHAL SAPUTRA , Stergios Goutianos , Ni Luh Wulan Septiani

2023

Jurnal internasional bereputasi

IMPROVING CARBON DOTS OPTICAL PROPERTIES OF MOLASSES USING EDTA AS A PASSIVATION AGENT WITH THE MICROWAVE METHOD

MARPONGAHTUN , WARDATUL HUSNA IRHAM , SRI WAHYUNA SARAGIH , IRAWATI PUTRI H. SIREGAR

2023

Prosiding seminar internasional

The properties of hardness and swelling of styrene butadiene rubber/silica/oleamide composites

MARPONGAHTUN , INDRA SURYA

2020

Prosiding seminar internasional

Characterization of bacterial cellulose from coconut water supplemented

<i>Curcuma Longa Linn</i> and <i>Ziziphus Mauritiana</i> extract

MARPONGAHTUN

2023

Prosiding seminar internasional

Charaterization of nanocellulose from liquid wasted of tofu by Acetobacter xylinum

MARPONGAHTUN , ANDRIAYANI , HERMAWAN PURBA

2021

Jurnal internasional bereputasi

A Review on Emerging Pollutants in the Water Environment: Existences, Health Effects and Treatment Processes. Water, 13, 3258

MARPONGAHTUN

2025

Jurnal nasional terakreditasi

Indonesian Journal of Chemical Research

SAHARMAN GEA , MARPONGAHTUN , YUNI ALDRIANI LUBIS , Woei Wu Larry Pai , Muhammad Frassetia Lubis

2023

Buku referensi

CARBON DOTS: Sintesis, Karakterisasi dan Aplikasinya.

MARPONGAHTUN

2025

Jurnal internasional bereputasi

Optimising cellulose nanofiber extraction from water hyacinth (Eichhornia crassipes) stems: Effects of steam explosion pretreatment and ultrasonication time

CUT FATIMAH ZUHRA , SAHARMAN GEA , MARPONGAHTUN

2023

Jurnal internasional bereputasi

Distribution of Silver (Ag) and Silver Nanoparticles (AgNPs) in Aquatic Environment

MARPONGAHTUN

2019

Artikel ilmiah

Improvements in the degree of filler dispersion and tensile properties of N550 and N220 carbon blacks-filled natural rubber composites using alkanolamide

INDRA SURYA , MARPONGAHTUN

2025

Jurnal internasional bereputasi

ENVIRONMENTALLY SYNTHESISED YELLOW FLUORESCENT CARBON DOTS FOR ANTIBACTERIAL APPLICATIONS

SAHARMAN GEA , Heri Sutanto , ANIZA SALVIANA PRAYUGO , MARPONGAHTUN

2019

Artikel ilmiah

Bioactive Compounds In Pegagan Leaf (Centella asiatica L. Urban) for Wound Healing

MARPONGAHTUN

2020

Prosiding seminar internasional

Characterization of bacterial cellulose from coconut water supplemented Curcuma Longa Linn and Ziziphus Mauritiana extract

MARPONGAHTUN , LAMEK MARPAUNG , TAMRIN , WARDATUL HUSNA IRHAM

2021

Prosiding seminar internasional

Antibacterial analysis and thermal properties of polycaprolactone/chitosan/TiO₂ porous composite

2020

Jurnal internasional bereputasi

The Synthesis of Superabsorbent Polymer from Carboxymethyl Selulose, Aluminum Sulfate and Oxidized Bread Fruit Starch

DARWIN YUNUS NASUTION , MARPONGAHTUN

2025

Jurnal nasional

Exploring the Effect of Ethylenediamine Concentration on the Optical Properties of Carbon Dots Synthesized from Candlenut Shell Biomass

MARPONGAHTUN , AMIR HAMZAH SIREGAR , TJUT SITI SAFHURA

2025

Prosiding seminar internasional

Absorbance spectral analysis of obtained nitrogen doped carbon dots from Jengkol pee

MARPONGAHTUN , SAHARMAN GEA , ANIZA SALVIANA PRAYUGO

2022

Jurnal internasional bereputasi

Synthesis Si nanoparticles from rice husk as material active electrode on secondary cell battery with X-Ray diffraction analysis

SAHARMAN GEA , MARPONGAHTUN , ANDRIAYANI

2020

Jurnal internasional bereputasi

Phytochemicals screening and antibacterial activity of Curcuma longa Linn, Ziziphus mauritiana and Centella asiatica L. Urban extract.

MARPONGAHTUN , TAMRIN , LAMEK MARPAUNG , WARDATUL HUSNA IRHAM

2023

Buku referensi

CARBON DOTS. Sintesis, Karakterisasai dan Aplikasinya.

MARPONGAHTUN

2018

Artikel ilmiah

Acetylation of breadfruit utarch by Using Acetic Anhydride

MARPONGAHTUN

2013

Jurnal internasional bereputasi

Physical-Mechanical Properties And Microstructure Of Breadfruit Starch Edible Films With Various Plasticizer

MARPONGAHTUN

2021

Jurnal internasional bereputasi

A review on emerging pollutants in the water environment: Existences, health effects and treatment processes

MARPONGAHTUN

2022

Jurnal nasional terakreditasi

Coconut oil effect on the hygroscopic properties of Simalambuo wood (Lophopetalum spp.)

SAHARMAN GEA , APRI HERI ISWANTO , MARPONGAHTUN

2025

Jurnal internasional bereputasi

COAL-DERIVED GRAPHENE@POLIANILIN-ZINC OXIDE HYBRID NANOCOMPOSITE: A NEW MATERIAL WITH HIGH PERFORMANCE FOR PHOTOCATALYTIC APPLICATIONS

MARPONGAHTUN , Ronn Goei , Isnaeni , MAHYUNI HARAHAP , HENNY SYAPITRI , Ir. VIVI PURWANDARI, M.Si

2021

Prosiding seminar nasional

ANALISA MORFOLOGI CARBON DOTS (C-Dots) DARI AIR TEBU

MARPONGAHTUN , CHAIRUL AMRI

2021

Prosiding seminar internasional

Effect of Particle Size From Oil PalmWood Powder as Pore Forming Agent on Porosity and Hardness of Porous Ceramics Based on Clay and Polyvinyl Alcohol

MARPONGAHTUN , DARWIN YUNUS NASUTION , TAUFIK HIDAYAT

2026

Jurnal internasional bereputasi

Enhancement of the Photocatalytic Activity of TiO₂ Modified with Carbon Dots from Tamarind Seeds (Tamarindus indica L.) for Eco-friendly Naphthol B Dye Degradation

SAHARMAN GEA , MARPONGAHTUN , ANDRIAYANI

2024

Jurnal internasional bereputasi

Pioneering bio-oil extraction: The role of transition metal oxide zeolite catalysts in co-pyrolyzing palm fronds and high-density polyethylene

ANDRIAYANI , SAHARMAN GEA , MARPONGAHTUN , DIANA ALEMIN BARUS , MINTO SUPENO , MUHAMMAD IRVAN HASIBUAN , ALWI KHAIRUNSYAH PINEM , FARAH ARFANI DAULAY , A. MUHAMMAD AFDHAL SAPUTRA , SHIPLU SARKER

2020

Jurnal internasional bereputasi

Green Synthesis of Silver Nanoparticles Using Muntingia calabura Leaf Extract and Evaluation of Antibacterial Activities

MARPONGAHTUN

2021

Jurnal internasional bereputasi

EXTRACTION SILICA FROM RICE HUSK WITH NaOH LEACHING AGENT WITH TEMPERATURE VARIATION BURNING RICE HUSK

MARPONGAHTUN , ANDRIAYANI , SAHARMAN GEA

2023

Prosiding seminar internasional

Improving mechanical properties of bacterial cellulose with supplemented Curcuma Longa Linn extract for wound healing

MARPONGAHTUN , WARDATUL HUSNA IRHAM , SAJARATUD DUR

2022

Jurnal internasional

METHANOL MASS VARIATION OF MESOPOROUS SILICA SYNTHESIS USING RICINOLEIC METHYL ESTER AS A TEMPLATE

MARPONGAHTUN , YUGIA MUIS , ANDRIAYANI

2025

Prosiding seminar internasional

The application of ethanolamine-modified stearin on the compounding of natural rubber: Mechanical and Crosslinking behaviours

INDRA SURYA , MARPONGAHTUN

2022

Jurnal internasional bereputasi

METHANOL MASS VARIATION OF MESOPOROUS SILICA SYNTHESIS USING RICINOLEIC METHYL ESTER AS A TEMPLATE

MARPONGAHTUN , ANDRIAYANI , AMRU DAULAY

2023

Prosiding seminar internasional

Improving mechanical properties of bacterial cellulose with supplemented Curcuma Longa Linn extract for wound healing

2023

Prosiding seminar internasional

Charaterization of nanocellulose from liquid wasted of tofu by Acetobacter xylinum

HERMAWAN PURBA , ANDRIAYANI , MARPONGAHTUN

2022

Jurnal internasional bereputasi

ANALYSIS FABRICATION OF POROUS CERAMICS FROM CLAY AND COPPER POWDER USING PALM OIL POWDER AS A PORE-FORMING AGENT FOR FILTERS IN MOTOR VEHICLE GAS

DARWIN YUNUS NASUTION , MARPONGAHTUN , Ir. VIVI PURWANDARI, M.Si

2022

Jurnal internasional bereputasi

ANALYSIS FABRICATION OF POROUS CERAMICS FROM CLAY AND COPPER POWDER USING PALM OIL POWDER AS A PORE-FORMING AGENT FOR FILTERS IN MOTOR VEHICLE GAS

MARPONGAHTUN , DARWIN YUNUS NASUTION

2018

Jurnal internasional bereputasi

Characterization of composite boards made of oil palm trunk flour/maleic anhydride grafted polypropylene

MARPONGAHTUN

2021

Prosiding seminar internasional

Synthesis and Characterization of Superabsorbent Polymer based on Carboxymethyl Cellulose, Breadfruit Starch and Aluminum Sulfate

MARPONGAHTUN , DARWIN YUNUS NASUTION , DEDE IBRAHIM MUTHAWALI

2023

Prosiding seminar internasional

Oleamide as an Environment-friendly Additive for Styrene Butadiene Rubber/Silica Compound: The Strength and Elasticity Behaviours

MARPONGAHTUN , INDRA SURYA

2025

Prosiding seminar internasional

Green Synthesis of Bacteria Cellulose Using Liquid Wasted of Tofu Impregnated Ag₂O-ZnO and Antibacterial Activity Tests for Staphylococcus aureus

MARPONGAHTUN , HERMAWAN PURBA , Athanasia Amanda Septevani

2021

Jurnal internasional bereputasi

A Review on Emerging Pollutants in the Water Environment: Existences, Health Effects and Treatment Processes

MARPONGAHTUN

2022

Jurnal internasional bereputasi

Synthesis of fluorescent citric acid carbon dots composites derived from empty fruit bunches of palm oil tree and its anti-bacterial property

MARPONGAHTUN , SAHARMAN GEA , MAHYUNI HARAHAHAP

2023

Jurnal internasional bereputasi

Stability of Mesoporous Silica Using Ricinoleic Methyl Ester as a Template with the Addition of HCl and Application of Cd²⁺ Adsorption Optimized by Box-Behnken design

MARPONGAHTUN , ANDRIAYANI

2025

Prosiding seminar internasional

ZIF-8 modified with N-doped Carbon Dots using the direct mixing method at room temperature

SAHARMAN GEA , ANIZAR , MARPONGAHTUN , Heri Sutanto

2015

Jurnal internasional bereputasi

Determination of para-arsanilic acid with improved diazotization reaction using differential pulse cathodic stripping voltammetry in aqueous system

MARPONGAHTUN

2018

Prosiding seminar internasional

The influence of hydrolisis time on the crystallinity degree of cellulose and Î±-cellulose of oil palm wood (Elais guinensis Jack)

MARPONGAHTUN , DARWIN YUNUS NASUTION , YULY PUJIARTI , NAMI PANINDIA

2023

Prosiding seminar internasional

Application mesoporous silica with methyl ester ricinoleate castor oil (Ricinus communis) as template in absorbent of Cd ions

SAHARMAN GEA , ANDRIAYANI , MARPONGAHTUN

2025

Jurnal internasional bereputasi

rGO/ZnO nanocomposite with XRD-structural characterization for electrochemical detection of palmitic acid as Ganoderma boninense biomarker

MARPONGAHTUN , SAHARMAN GEA , ANDRIAYANI , A. MUHAMMAD AFDHAL SAPUTRA , MUHAMMAD HARSA , MUTIARA SANI HARAHAHAP , Sumiyah Sabar , Ronn Goei

2023

Jurnal internasional bereputasi

Highly fluorescent nitrogen-doped carbon dots derived from jengkol peels (Archidendron pauciflorum) by solvothermal synthesis for sensitive Hg²⁺ ions detection

MARPONGAHTUN , ANIZA SALVIANA PRAYUGO , Ronn Goei , MAHYUNI HARAHAHAP , SAHARMAN GEA

2021

Jurnal internasional bereputasi

PREPARATION AND CHARACTERIZATION OF BACTERIAL CELLULOSE SUPPLEMENTED Centella Asiatica L. Urban EXTRACT TO IMPROVE MECHANICAL PROPERTIES

MARPONGAHTUN , TAMRIN , LAMEK MARPAUNG

2023

Prosiding seminar internasional

Oleamide as palm-oil based substance for silica-loaded styrene butadiene rubber compound: The cure and crosslinks behaviors

MARPONGAHTUN , INDRA SURYA

2025

Prosiding seminar internasional

Comparison of B, S, and N-doped carbon dots from palm sugar and its optical properties

MARPONGAHTUN

2024

Jurnal internasional bereputasi

Facile synthesis and electrochemical performance of bacterial cellulose/reduced graphene oxide/NiCo-layered double hydroxide composite film for self-standing supercapacitor electrode

MARPONGAHTUN , SAHARMAN GEA , DIANA ALEMIN BARUS , ANDRIAYANI , A. MUHAMMAD AFDHAL SAPUTRA , MUHAMMAD IBADURRAHMAN , Ronn Goei , Alfred Ling Yoong Tok

2025

Green synthesis of N-doped carbon dots from cocoa fruit skin as antibacterial

MARPONGAHTUN

2022

Artikel ilmiah

Coconut oil effect on the hygroscopic properties of Simalambuo wood (Lophopetalum spp.)

APRI HERI ISWANTO , MARPONGAHTUN , SAHARMAN GEA

2020

Jurnal internasional bereputasi

PHYTOCHEMICAL SCREENING AND TOXICITY OF ETHANOLIC EXTRACT OF MANGROVE (Rhizophora mucronata) LEAVES FROM LANGSA, ACEH TIMUR

GIMELLIYA SARAGIH , ABDILLAH , TAMRIN , MARPONGAHTUN , DARWIN YUNUS NASUTION

2018

Prosiding seminar internasional

The analysis of thermal and mechanical properties of biocomposite policaprolactone/ cellulose nanofiber from oil palm empty fruit bunches

SAHARMAN GEA , MARPONGAHTUN

2018

Prosiding seminar internasional

Preparation of Semi-IPN Hidrogel from Starch Nanoparticles of Mangrove Fruit and Monomer Acrylic Acid Using Crosslinker N, N'Methylene Bisacrylamide

MARPONGAHTUN

2020

Jurnal internasional bereputasi

Phytochemical screening and toxicity of ethanolic extract of mangrove (Rhizophora mucronata) leaves from Langsa, Aceh Timur

MARPONGAHTUN , DARWIN YUNUS NASUTION , TAMRIN

2023

Jurnal internasional bereputasi

Bacterial cellulose-based paper production coated with poly-ethylene oxide/poly-vinyl alcohol

SAHARMAN GEA , DARWIN YUNUS NASUTION , MARPONGAHTUN , Khatarina Meldawati Pasaribu

2019

Prosiding seminar internasional

Marpongahtun. bioactive compounds in pegagan leaf (Centella asiatica L. Urban) for wound healing

MARPONGAHTUN , TAMRIN , LAMEK MARPAUNG , WARDATUL HUSNA IRHAM

2025

Prosiding seminar internasional

The effects of ethanolamine-modified stearin on tensile and ageing behaviours of natural rubber

INDRA SURYA , MARPONGAHTUN

2022

Jurnal internasional bereputasi

Scalable synthesis of porous silicon nanoparticles from rice husk with the addition of KBr as a scavenger agent during reduction by the magnesiothermic method as anode lithium-ion batteries with sodium alginate as the binder

MARPONGAHTUN , ANDRIAYANI , TAMRIN , SAHARMAN GEA

2023

Jurnal internasional bereputasi

Highly fluorescent nitrogen-doped carbon dots derived from jengkol peels (Archidendron pauciflorum) by solvothermal synthesis for sensitive Hg²⁺ ions detection

2024

Jurnal nasional terakreditasi

Synthesis and Characterization Nitrogen-doped Carbon Dots from Candlenut Shells using Hydrothermal and Solvothermal Methods

RISKA , SAHARMAN GEA , MARPONGAHTUN

Researches

2025

Efektivitas Nanokomposit Fe₃O₄/ N- Doped Carbon Dots/ ZIF-67 sebagai Fotokatalis dalam Degradasi Pewarna Kongo Merah

MINTO SUPENO , AMIR HAMZAH SIREGAR , MARPONGAHTUN , RAHMADANI FITRI , ANIZA SALVIANA PRAYUGO

2023

Penelitian Dana Lokal Perguruan Tinggi

SINTESIS S,N-DOPED CARBON DOTS DARI KULIT JENGKOL UNTUK MENDETEKSI PEWARNA AMARANTH PADA MINUMAN BERWARNA

AMIR HAMZAH SIREGAR , MARPONGAHTUN

2020

Penelitian Unggulan Perguruan Tinggi

Modifikasi Carbon-dots dari Selulosa Nanokristal Tandan Kosong Sawit sebagai Prekursor dengan Metode Pirolisis

ANDRIAYANI , MARPONGAHTUN

2025

Efektivitas Nanokomposit Fe₃O₄/N-Doped Carbon Dots sebagai Fotokatalis dalam Degradasi Pewarna Kongo Merah: Sintesis, Karakterisasi, dan Kinerja di Bawah Sinar UV

ANDRIAYANI , MARPONGAHTUN , RAHMADANI FITRI

2023

Penelitian Kompetensi

Preparasi Hidrogel Polivinil alkohol dengan bahan pengisi grafena batubara untuk aplikasi foto-elektrokatalis

MUHAMMADIN HAMID , MAHYUNI HARAHAHAP , Ir. VIVI PURWANDARI, M.Si , MARPONGAHTUN

2019

Penelitian Unggulan Perguruan Tinggi

Modifikasi Carbon-dots dari Selulosa Nanokristal Tandan Kosong Sawit sebagai Prekursor dengan Metode Pirolisis

ANDRIAYANI , YUGIA MUIS , MARPONGAHTUN

2018

Penelitian Unggulan Perguruan Tinggi

Pemanfaatan Serbuk Batang Kelapa Sawit Sebagai Agen Pembentuk Pori Pada Pembuatan Keramik Berpori Dari Tanah Liat Dan Polivinyl Alkohol Untuk Filter Gas Buangan Kendaraan Bermotor

DARWIN YUNUS NASUTION , MARPONGAHTUN

2021

Penelitian Disertasi Doktor

Imobilisasi Enzim Glukosa Oksidase dan Horseradish Peroxidase dalam Nanocellulosa (NC-GOX/HRP) Sebagai Biosensor Glukosa Secara Kolorometri

ANDRIAYANI , MARPONGAHTUN

2022

Penelitian Tim Pasca Sarjana

LIMBAH KULIT JENGKOL (ARCHIDENDRON PAUCIFLORUM) SEBAGAI PREKURSOR CARBON DOTS UNTUK DETEKSI LOGAM MERKURI PADA

KOSMETIK

SAHARMAN GEA , MARPONGAHTUN

2020

Ipteks Unggulan Perguruan Tinggi

Modifikasi Carbon-dots dari Selulosa Nanokristal Tandan Kosong Sawit sebagai Prekursor dengan Metode Pirolisis

ANDRIAYANI , YUGIA MUIS , MARPONGAHTUN

Community Services

2012

Ipteks Bagi Masyarakat

Pelatihan Pembuatan Sabun Colek Dan Sabun Cair Untuk Skala Kecil Dan Menengah Di Desa Percut, Kecamatan Percut Sei Tuan, Kabupaten Deli Serdang

YUGIA MUIS , SAHARMAN GEA , DARWIN YUNUS NASUTION , MARPONGAHTUN

2013

Pelatihan Pemeriksaan Formalin Dalam Bahan Makanan Dan Pembuatan Sabun Cair Pada Kelurahan Rambung Dalam, Kota Binjai

YUGIA MUIS , SAHARMAN GEA , AMIR HAMZAH SIREGAR , DARWIN YUNUS NASUTION , MARPONGAHTUN

2011

PPelatihan Pemeriksaan Formalin Dalam Bahan Makanan Dan Pembuatan Sabun Cair Pada Siswa-Siswa SMA Negeri Tanjung Tiram Kabupaten Batubara

YUGIA MUIS , AMIR HAMZAH SIREGAR , DARWIN YUNUS NASUTION , MARPONGAHTUN , HARLEM MARPAUNG

2019

Ipteks Bagi Masyarakat

Penyuluhan Cara Pengolahan Limbah Minyak Goreng Bekas Menjadi Minyak Goreng Layak Konsumsi

MARDININGSIH , DARWIN YUNUS NASUTION , MARPONGAHTUN , DEDE IBRAHIM MUTHAWALI

2011

Ipteks Bagi Masyarakat

Penyuluhan Tentang Penggunaan Pestisida di Desa Lumban Matio Kecamatan Sipahutar Tapanuli Utara

HERLINCE SIHOTANG , NURHAIDA PASARIBU , AMIR HAMZAH SIREGAR , RUMONDANG BULAN , MARPONGAHTUN , EMMA ZAIKAR , ALBERT PASARIBU

2011

Ipteks Bagi Masyarakat

Penyuluhan Tentang Penggunaan Pestisida Di Desa Lumban Matio Kecamatan Sipahutar Tapanuli Utara

HERLINCE SIHOTANG , NURHAIDA PASARIBU , AMIR HAMZAH SIREGAR , RUMONDANG BULAN , MARPONGAHTUN , EMMA ZAIKAR , ALBERT PASARIBU

2014

Ipteks Bagi Masyarakat

Pelatihan Pembuatan Shampo Untuk Kendaraan Bermotor Pada Siswa-Siswa Sma Negeri Tanjung Tiram Kabupaten Batubara

YUGIA MUIS , MARPONGAHTUN

2022

Ipteks Bagi Masyarakat

Pengelolaan Integrasi Ekologi Lubuk Larangan Tambangan JAE, Kabupaten Mandailing Natal

MUHAMMAD TURMUZI , MARPONGAHTUN

Intellectual Property Rights

2024

Paten nasional

**PROSES PEMBUATAN SELULOSA BAKTERI-EKSTRAK RIMPANG KUNYIT
DENGAN METODE STIRRING**

MARPONGAHTUN , WARDATUL HUSNA IRHAM

2024

Paten nasional

**Metode Pembuatan Carbon Dots dan Nitrogen Doped Carbon Dots dari Bottom
Ash Batubara Menggunakan Teknik Ultrasonikasi dan Hidrotermal**

MARPONGAHTUN , WIDAYATI , ANIZA SALVIANA PRAYUGO

2024

Paten nasional

**Metode Pembuatan Carbon Dots dan Nitrogen Doped Carbon Dots dari Bottom
Ash Batubara Menggunakan Teknik Ultrasonikasi dan Hidrotermal**

ANIZA SALVIANA PRAYUGO , WIDAYATI , MARPONGAHTUN

2024

Paten nasional

**KOMPOSIT BERPORI BIOKERAMIK POLIKAPROLAKTON , KITOSAN TiO₂
MENGUNAKAN TEKNIK FREEZE-DRYING**

Ir. VIVI PURWANDARI, M.Si , MARPONGAHTUN , SYAHMAN ZHAFIRI
