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Prof. Dr. Ir. Renita Manurung, M.T. was born in Pematangsiantar on December 14, 1968, and is a lecturer at the Universitas Sumatera Utara majoring in Chemical Engineering-Oleochemical Process Technology. She completed a Doctoral Program in Chemical Engineering at the Faculty of Engineering of the Universitas Sumatera Utara in 2017.

Publications

2026
Jurnal internasional bereputasi

Optimized Lithium-Impregnated Silica Catalyst from Corn Cob Waste for Enhanced Biodiesel Production: StructuralTuning and Circular Economy Application

ALWI GERY AGUSTAN SIREGAR , RENITA MANURUNG , SRI ZAHRANI DWI MAULIYAH PARINDURI

2026
Prosiding seminar internasional

Ultrasound-assisted extraction of pomegranate peel pectin: Influence of process parameters and solvent choice

RENITA MANURUNG , NADIATUL MUFIDAH LUBIS , BOBY HARTANTO

2025
Jurnal nasional terakreditasi

Pengaruh Waktu Reaksi Katalis Silika Berbasis Tongkol Jagung Terhadap Densitas Dan Viskositas Biodiesel Sawit

ALWI GERY AGUSTAN SIREGAR , RENITA MANURUNG

2025
Jurnal internasional bereputasi

Extraction of essential oil from red ginger (Zingiber officinale var rubrum) by solvent-free microwave extraction method

ALWI GERY AGUSTAN SIREGAR , RENITA MANURUNG

2025
Jurnal internasional bereputasi

Catalyst reuse in biomass-based Biodiesel: Life cycle and economic implications for a circular bioenergy economy

RENITA MANURUNG , AFFILA

2025
Prosiding seminar internasional

Extraction of tannin from guava leaves (Psidium Guajava L) by soxhletation method and application as iron corrosion inhibitor in sea water medium

RENITA MANURUNG , YUSUF BIMANTORO SIMANUNGKALIT , FITHRAH AMELIA

2025
Prosiding seminar internasional

Effect of solid base catalyst based silica from palm leaves in biodiesel production

RENITA MANURUNG , ROSDANELLI HASIBUAN

2025
Prosiding seminar internasional
Effect of solid base catalyst based silica from palm leaves in biodiesel production
ALWI GERY AGUSTAN SIREGAR , RENITA MANURUNG , ROSDANELLI HASIBUAN

2024
Jurnal internasional bereputasi
THE POTENTIAL OF CATALYST BASED ON PALM LEAVES IN BIODIESEL PRODUCTION AS PART OF PALM OIL LIFE CYCLE ASSESMENT
RENITA MANURUNG

2024
Prosiding seminar internasional
The Effect of Contact Time and Microwave Power on Spent Bleaching Earth Desorption Using Microwave-Assisted Extraction Method
SITI MAISARAH , HAMIDAH HARAHAP , RENITA MANURUNG

2024
Jurnal internasional bereputasi
Preparation and characterization of lithium, sodium, and potassium silicate from palm leaf as a potential solid base catalyst in developed biodiesel production
RENITA MANURUNG , ROSDANELLI HASIBUAN

2024
Prosiding seminar internasional
Application of Sodium Silicate from Palm Leaf Ash as Heterogeneous Catalyst in Transesterification of Palm Oil
RENITA MANURUNG

2024
Prosiding seminar internasional
Production of biosurfactant sodium lignosulfonate (NaLS) using elephant grass based lignin (Pennisetum purpureum) and NaHSO3
SYAHRA KHAIRANI LUBIS , WAFI MUFADHAL , RENITA MANURUNG

2023
Jurnal internasional bereputasi
Preparation and characterization of lithium, sodium, and potassium silicate from palm leaf as a potential solid base catalyst in developed biodiesel production
ROSDANELLI HASIBUAN , RENITA MANURUNG

2023
Jurnal internasional
Synthesis of nano-CaO catalyst with SiO2 matrix based on palm shell ash as catalyst support for one cycle developed in the palm biodiesel process
RENITA MANURUNG , ROSDANELLI HASIBUAN , BODE HARYANTO

2023
Jurnal internasional bereputasi
Drying Kinetic Models of Rice Applying Fluidized Bed Dryer
RENITA MANURUNG , ROSDANELLI HASIBUAN

2022
Jurnal internasional
Utilization of Conventional Battery Framework with Bioelectrolyte Based on Blood Shell and Sugarcane Bagasse
RENITA MANURUNG

2022
Jurnal nasional terakreditasi
Tuasan Bentuk Kearifan Lokal Nelayan Tradisional Untuk Peningkatan Hasil

Tangkapan Juga Pelestarian Biota Laut

AGUSTRISNO , ZULKIFLI DRS MA , RENITA MANURUNG

2022
Jurnal internasional

ESTERIFICATION OF REFINED GLYCEROL BIODIESEL BYPRODUCT USING HETEROGENEOUS CATALYST POLYSTYRENE SULFONIC ACID WASTE-BASED EPS FOAM

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2022
Jurnal internasional bereputasi

Synthesis and Characterization of Polystyrene Sulfonic Acid from Expanded Polystyrene Foam as a Catalyst in the Synthesis of Triacetin

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2022
Jurnal internasional

Synthesis and Characterization of Phosphoric Silica Catalyst from Bamboo Leaves for Production of Triacetin

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2021
Prosiding seminar internasional

Usage of eutectic solvents throughout the dehydration reaction of durian seeds (Durio zibethinus) in producing 5-hydroxymethylfurfural

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2021
Jurnal internasional bereputasi

Menthol-carboxylic acid deep eutectic solvent for extraction of carotenoids from palm ester

RENITA MANURUNG

2021
Jurnal internasional bereputasi

Synthesis of 5-hydroxymethylfurfural from cassava (Manihot utilissima pohl) peels through dehydration reaction using deep eutectic solvent based on choline chloride/citric acid

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2021
Jurnal internasional bereputasi

Synthesis and characterization of sodium silicate produced from corncobs as a heterogeneous catalyst in biodiesel production

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2021
Jurnal internasional bereputasi

Production of 5-hydroxymethylfurfural derived cassava peels using deep eutectic solvent based Choline chloride

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2019
Jurnal internasional bereputasi

Measurement of anti-stripping agent content in asphalt mixture with Colorimetric test

ADINA SARI LUBIS , RENITA MANURUNG , ZULKARNAIN A MUIS

2018
Jurnal internasional bereputasi

Minor component extraction from palm methyl ester using potassium carbonate glycerol based Deep Eutectic Solvent (DES).

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2017
Jurnal internasional bereputasi

Crude palm oil biodiesel by transesterification process using choline hydroxide catalyst.

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Researches

2024
Penelitian Fundamental

Produksi Mono-Diasilgliserol Sebagai Emulsifier Kompetitif Menggunakan Pelarut Eutectic Sebagai Upaya Mewujudkan Teknologi Ramah Lingkungan

RENITA MANURUNG , DWINA RAHMAYANI HASIBUAN

2021
Penelitian Dana Lokal Perguruan Tinggi

PENGARUH REAKTIVASI SPENT BLEACHING EARTH (SBE) TERHADAP PROSES ADSORPSI BETA KAROTEN PADA CRUDE PALM OIL (CPO)

RENITA MANURUNG , HAMIDAH HARAHAP , SITI MAISARAH

Community Services

2025
Penelitian Disertasi Doktor

Asesor Akreditasi Program Studi Diploma 3 Teknologi Proses Industri Petrokimia Politeknik Industri Petrokimia Banten Politeknik Industri Petrokimia Banten

DWINA MOENTAMARIA , RENITA MANURUNG

2025
Penelitian Fundamental

Asesor Program Studi Sarjana Teknik Kimia Fakultas Teknik Universitas Syiah Kuala untuk LAM Teknik

MOH. FAHRURROZI , RENITA MANURUNG

2025
Ipteks Bagi Masyarakat

Asesor Akreditasi Program Studi Diploma 3 Teknologi Proses Industri Petrokimia Politeknik Industri Petrokimia Banten Politeknik Industri Petrokimia Banten

DWINA MOENTAMARIA , RENITA MANURUNG

2025
Ipteks Bagi Masyarakat

Asesor akreditasi Program Studi Magister Teknik Kimia Program Pascasarjana Universitas Muhammadiyah Palembang

EDY SAPUTRA , RENITA MANURUNG

2024

Asesor Program Studi Teknik Kimia ITERA

MOH. FAHRURROZI , RENITA MANURUNG

2023

Pemberdayaan Petani Melon Dalam Meningkatkan Perekonomian Masyarakat Di Desa Pasar Rawa

AMEILIA ZULIYANTI SIREGAR , ZULKIFLI , RENITA MANURUNG , MUKHLIS

2022

Audit/Pemeriksaan

RENITA MANURUNG , JULIZA HIDAYATI

2017
Ipteks Bagi Inovasi Kreativitas Kampus

PPUPIK Pusat Produksi Sabun Cair Pencuci Piring Menggunakan Bahan Baku Turunan kelapa Sawit, Pewarna dan Pewangi Alami

RENITA MANURUNG , JULIZA HIDAYATI , ROSDANELLI HASIBUAN

Intellectual Property Rights

2024
Paten nasional

PEMBUATAN KATALIS BASA PADAT LITIUM,NATRIUM DAN KALIUM SILIKA DARI DAUN KELAPA SAWIT

RENITA MANURUNG , ROSDANELLI HASIBUAN , ALWI GERY AGUSTAN SIREGAR

2023
Paten nasional

Pembuatan Biodiesel Dari CPO Menggunakan Katalis Heterogen Abu Kulit Markisa

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2023
Paten nasional

Metode Pembuatan Pasta Bioelektrik Dari Limbah Ampas Tebu dan Cangkang Kerang Darah

RENITA MANURUNG

2023
Paten nasional

Biokomposit Dari Pati Biji Durian Berpebgisi Nanoserat Limbah Ampas Teh Sebagai Aplikasi Pengganti Styrofoam

RENITA MANURUNG , HAMIDAH HARAHAP