

# Prof. Ir. Seri Maulina, M.Si., Ph.D

Lecturer of Master's Program in Chemical Engineering Study Program  
Faculty of Engineering  
Universitas Sumatera Utara

✉ serimaulina@usu.ac.id

🌐 [ft.usu.ac.id/en/lecturer/seri-maulina](http://ft.usu.ac.id/en/lecturer/seri-maulina)

*Prof. Ir. Seri Maulina, M.Si., Ph.D. was born in Medan on January 4, 1961. She is a lecturer in Chemical Engineering at Universitas Sumatera Utara. She completed a Doctoral Program in Chemical Engineering at Universiti Malaya in 2014.*

---

## Publications

---

2026

Jurnal internasional

### **EKSTRAKSI ASAP CAIR DARI PELEPAH KELAPA SAWIT MENGGUNAKAN PELARUT ETIL ASETAT DAN HEKSANA**

SERI MAULINA

2019

Jurnal internasional

### **Comparison of Functional Group and Morphological Surface of Activated Carbon from Oil Palm Fronds Using Phosphoric Acid (H<sub>3</sub>PO<sub>4</sub>) and Nitric Acid (HNO<sub>3</sub>) as an Activator**

SERI MAULINA

2026

Jurnal internasional

### **Study on Hydrolysis of Oil Palms Empty Fruit Bunch using**

SERI MAULINA

2018

Jurnal internasional

### **Talenta**

SERI MAULINA

2019

Jurnal internasional

### **Business development for household scale liquid bath soap**

SERI MAULINA

2020

Jurnal internasional

### **Extraction of Phenol Compounds in the Liquid Smoke by Pyrolysis of Oil Palm Fronds**

SERI MAULINA

2018

Jurnal internasional

### **HIDROLISIS SELULOSA MENGGUNAKAN KATALIS KARBON TERSULFONASI BERBASIS CANGKANG KEMIRI**

SERI MAULINA

2018

Jurnal internasional

### **Adsorption-desorption system for CO<sub>2</sub> removal in biogas using natural zeolite-based adsorb**

SERI MAULINA

2026

Jurnal internasional

**KARAKTERISTIK KARBON AKTIF DARI PEMANFAATAN LIMBAH TANAMAN KELAPA SAWIT DENGAN PENAMBAHAN AKTIVATOR NATRIUM KARBONAT (Na<sub>2</sub>C...**

SERI MAULINA

2019

Jurnal internasional

**Comparison of Functional Group and Morphological Surface of Activated Carbon from Oil Palm Fronds Us**

SERI MAULINA

2017

Jurnal internasional

**Characterizations of activated carbon produced from Bagasse and Banana Stem using H<sub>3</sub>PO<sub>4</sub>**

SERI MAULINA

2010

Jurnal internasional

**Impacts of natural resources on climate change: case in latex concentrate processing**

SERI MAULINA

2019

Jurnal internasional

**The Opportunities of Oil Palm Fronds Become a Commercial Liquid Smoke**

SERI MAULINA

2018

Jurnal internasional

**Perbandingan Gugus Fungsi dan Morfologi Permukaan Karbon Aktif dari Pelepah Kelapa Sawit Menggunakan Aktivator Asam Fosfat (H<sub>3</sub>PO<sub>4</sub>) dan Asam Nitrat (HNO<sub>3</sub>)**

SERI MAULINA

2009

Jurnal internasional

**Life Cycle Assessment and Eco-efficiency: Case in Latex Concentrate Processing**

SERI MAULINA

2018

Jurnal internasional

**Activated carbon production from bagasse and banana stem at various times of carbonization**

SERI MAULINA

2026

Jurnal internasional

**Production of Biogas From Palm Oil Mill Effluent, From Laboratory Scale To Pilot Scal**

SERI MAULINA

2017

Jurnal internasional

**Pengaruh Suhu, Waktu, Dan Kadar Air Pada Pirolisis Pelepah Kelapa Sawit**

SERI MAULINA

2018

Jurnal internasional

**Ekstraksi Kalium dari Kulit Buah Kapuk (Ceiba petandra)**

SERI MAULINA

---

2018

Jurnal internasional

**Characteristics of activated carbon resulted from pyrolysis of the oil palm fronds powder**

SERI MAULINA

---

2025

Prosiding seminar internasional

**Material Flow Analysis in Palm Oil Plantation**

ILHAM PERKASA BAKO , SERI MAULINA

---

2017

Jurnal internasional

**Study on hydrolysis of Oil Palm s Empty Fruit Bunch using microwave irradiation**

SERI MAULINA

---

2017

Jurnal internasional

**Characterizations of Activated Carbon Produced from Bagasse and Banana Stem using H<sub>2</sub>O<sub>2</sub> as Activating Agent Erni Misran,Seri Maulina,Sari Farah Dina, Sur...**

SERI MAULINA

---

2018

Jurnal internasional

**Development of anaerobic digestion of palm oil mill effluent with heated recycle sludge**

SERI MAULINA

---

2016

Jurnal internasional

**pembuatan asam oksalat dari pelepah kelapa sawit menggunakan metode peleburan alkali**

SERI MAULINA

---

2018

Jurnal internasional

**Production of biogas from palm oil mill effluent: From laboratory scale to pilot scale**

SERI MAULINA

---

2020

Jurnal internasional

**Potential of durian, avocado and jackfruit seed as raw material of bioethanol: a review**

SERI MAULINA

---

2018

Jurnal internasional

**Production of biogas from palm oil mill effluent at pilot scale: Effect of recycle sludge**

SERI MAULINA

---

2020

Jurnal internasional

**Quality Comparison of Activated Carbon Produced From Oil Palm Fronds by Chemical Activation Using Sodium Carbonate versus Sodium Chloride**

SERI MAULINA

---

2017

Jurnal internasional

**Pembuatan Asam Oksalat dari Pelepah Kelapa Sawit (Elaeis guineensis) Melalui Reaksi Oksidasi Asam Nitrat**

SERI MAULINA

2026  
Jurnal internasional

### **Study on Hydrolysis of Oil Palms Empty Fruit Bunch Using Microwave Irradiation**

SERI MAULINA

2018  
Jurnal internasional

### **Production of biogas from palm oil mill effluent at pilot scale: effect of recycle sludge.**

SERI MAULINA

2018  
Jurnal internasional

### **Utilization of oil palm fronds in producing activated carbon using $\text{Na}_2\text{CO}_3$ as an**

SERI MAULINA

2018  
Jurnal internasional

### **Effects of alkanolamide and epoxidation in natural rubber and epoxidized natural rubbers compounds**

SERI MAULINA

2019  
Jurnal internasional

### **Calorific Value of Oil Palm Frond Through Bio-Charcoal Briquette as Renewable Energy**

SERI MAULINA

2019  
Jurnal internasional

### **Characteristics of Activated Carbon from Oil Palm Fronds with the Addition of Sodium Carbonate ( $\text{Na}_2\text{CO}_3$ ) and Sodium Chloride ( $\text{NaCl}$ ) as an Activator**

SERI MAULINA

2017  
Jurnal internasional

### **PEMANFAATAN ASAP CAIR DARI PELEPAH KELAPA SAWIT UNTUK MENINGKATKAN KUALITAS BAHAN OLAH KARET PETANI KARET**

SERI MAULINA

2023  
Prosiding seminar internasional

### **Citronella oil extraction using microwave-assisted extraction (MAE) with various solvents**

SERI MAULINA

2019  
Jurnal internasional

### **Comparing Characteristics of Charcoal and Activated Carbon from Oil Palm Fronds**

SERI MAULINA

2018  
Jurnal internasional

### **Liquid smoke characteristics from the pyrolysis of oil palm fronds**

SERI MAULINA

2017  
Jurnal internasional

### **Characterizations of Activated Carbon Produced from Bagase and Banana Stem Using $\text{H}_3\text{PO}_4$ as Activating Agent**

SERI MAULINA

2020

**Preparation and Characterization of Sulfonated Carbon from Candlenut Shell as Catalyst for Hydrolysis of Cogon Grass Cellulose into Glucose**

SERI MAULINA

---

2020

**Effect of pyrolysis temperature and time on liquid smoke characteristics**

SERI MAULINA

---

2018

**Utilization of oil palm fronds in producing activated carbon using Na<sub>2</sub>CO<sub>3</sub> as an activator**

SERI MAULINA

---

2014

**Enhancement of eco-efficiency through life cycle assessment in natural rubber latex concentrate processing**

SERI MAULINA

---

2023

**Empowerment of Housewives Through Shibori Weaving Skills and Upgrading Knowledge Related to Dyes and Their Wastes**

SERI MAULINA , ERNI MISRAN , MAYA SARAH

---

2017

**Pengaruh Suhu, Waktu, Dan Kadar Air Bahan Baku Terhadap Pirolisis Serbuk Pelepah Kelapa Sawit**

SERI MAULINA

---

2015

**Enhancement of Eco-Efficiency Through Life Cycle Assessment in Crumb Rubber Processing**

SERI MAULINA

---

2017

**Karakteristik Karbon Aktif dari Pemanfaatan Limbah Tanaman Kelapa Sawit dengan Penambahan Aktivator Natrium Karbonat (Na<sub>2</sub>CO<sub>3</sub>) dan Natrium Klorida (NaCl)**

SERI MAULINA

---

2018

**Effect of epoxidised natural rubbers on calcium carbonate-filled natural rubber compounds**

SERI MAULINA

---

2015

**PEMBUATAN ASAM OKSALAT DARI PELEPAH KELAPA SAWIT (*Elaeis guineensis*) DENGAN KALSIMUM HIDROKSIDA**

SERI MAULINA

---

2020

**Quality improvement of liquid smoke from oil palm frond pyrolysis through the adsorption-distillation process using activated carbon as adsorbent**

SERI MAULINA

---

2017

Jurnal internasional

**Characterizations of Activated Carbon Produced from Bagasse and Banana Stem using H<sub>2</sub>PO<sub>4</sub> as Activating Agent** Erni Misran, Seri Maulina, Sari Farah Dina, Surya Adi Anggi

SERI MAULINA

2017

Jurnal internasional

**The utilization of oil palm fronds in producing oxalic acid through oxidation**

SERI MAULINA

2017

Jurnal internasional

**Characterizations of activated carbon produced from Bagasse and Banana Stem using H<sub>3</sub>PO<sub>4</sub> as activating agent**

SERI MAULINA

2020

Jurnal internasional

**Improving the quality of liquid smoke from oil palm fronds through adsorption and distillation processes**

SERI MAULINA

2020

Jurnal internasional

**Quality improvement of smoke liquid from oil palm fronds pyrolysis through adsorption-distillation process by using zeolite as adsorbent**

SERI MAULINA

2018

Jurnal internasional

**PIROLISIS PELEPAH KELAPA SAWIT UNTUK MENGHASILKAN FENOL PADA ASAP CAIR**

SERI MAULINA

---

## Researches

---

2023

**Kluster Keilmuan Penilaian Daur Hidup (Life Cycle Assessment)**

SERI MAULINA

2024

**Euro-Mediterranean Conference for Environmental Integration (EMCEI-24)**

SERI MAULINA

2024

Penelitian Unggulan Perguruan Tinggi

**Pengembangan Kluster Keilmuan**

SERI MAULINA

2024

Penelitian Unggulan Perguruan Tinggi

**Penelitian Kemitraan Unggul Universitas**

SERI MAULINA

2016

**PEMANFAATAN KARBON AKTIF DARI LIMBAH BIOMASSA DALAM PEMBUATAN MEMBRAN HIBRIDA NAFION/KARBON AKTIF UNTUK PROTON EXCHANGE MEMBRANE FUEL CELL (PEMFC)**

SERI MAULINA

---

# Intellectual Property Rights

---

2018  
Patent nasional

**Pemanfaatan Pelepah Kelapa Sawit Sebagai Pengawet Alami Bahan Makanan**  
SERI MAULINA

---