

# Dian Morfi Nasution, S. T., M. T.

Lecturer of Undergraduate Program in Mechanical Engineering Study Program  
Faculty of Engineering  
Universitas Sumatera Utara

✉ dianmorfinasution@usu.ac.id

🏢 USU Faculty of Engineering

🌐 [ft.usu.ac.id/en/lecturer/dian-morfi-nasution](http://ft.usu.ac.id/en/lecturer/dian-morfi-nasution)

*Dian Morfi Nasution, S.T., M.T was born in Medan on September 14, 1987. Currently, he is a Mechanical Engineering lecturer at the Universitas Sumatera Utara. He completed his master's degree in Mechanical Engineering in 2016.*

---

## Publications

2017

Prosiding seminar internasional

### **Experimental study on performance of a box solar cooker with flat plate collector to boil water**

DIAN MORFI NASUTION , HIMSAR AMBARITA

2021

Jurnal nasional terakreditasi

### **KAJIAN TEORITIS PENGGUNAAN TURBOCHARGER TERHADAP PERFORMANSI MESIN BENSIN TIPE 3SZ-VE 1500 CC DAIHATSU TERIOS**

DIAN MORFI NASUTION

2020

Prosiding seminar internasional

### **Corrective Maintenance of Worm Gear a Screw Press Machine with a capacity of 30 tons per hour using Wear Analysis and its response to Conus Pressure**

FARIDA ARIANI , DIAN MORFI NASUTION

2018

Jurnal internasional bereputasi

### **Room air conditioning performance using liquid-suction heat exchanger retrofitted with R290**

DIAN MORFI NASUTION , MUHAMMAD IDRIS , NUGROHO AGUNG PAMBUDI , WERIONO

2017

Prosiding seminar internasional

### **Performance and characteristics of heat pump clothes drier**

HIMSAR AMBARITA , DIAN MORFI NASUTION , ABDUL HALIM NASUTION

2017

Jurnal nasional

### **STUDI AWAL DESAIN DAN PENGUJIAN MESIN PENGERING KERUPUK OPAK SISTEM POMPA KALOR**

ELISABET SIAHAAN , DIAN MORFI NASUTION , HIMSAR AMBARITA , TEKAD SITEPU

2023

Prosiding seminar internasional

### **Analysis and Experimental Study of Compact Heat Exchangers in 1500cc Vehicle Radiators Fin Louver Type**

TERANG U H SOLIHIN G M , DIAN MORFI NASUTION , TULUS BURHANUDDIN SITURUS

2019

Jurnal internasional

# Process Analysis of High Speed Steel Cutting Calculation (HSS) with S45 C Material on Universal Machine Tool

INDRA ROZA , DIAN MORFI NASUTION , JUNAIDI , WERIONO

2016

Prosiding seminar nasional

## Studi Awal Desain dan Pengujian Sebuah Mesin Pengering Hibrida Pompa Kalor dan Tenaga Surya

DIAN MORFI NASUTION , HIMSAR AMBARITA

2026

Jurnal internasional bereputasi

## Grid convergence analysis of an H-Darrieus wind turbine for multiple blade configurations

SANJAYA BAROAR SAKTI NASUTION , DIAN MORFI NASUTION , ELANG PRAMUDYA WIJAYA , OKI SUPRADA OMPUSUNGGU

2016

Prosiding seminar internasional

## A numerical study on combustion process in a small compression ignition engine run dual-fuel mode (diesel-biogas)

DIAN MORFI NASUTION , HIMSAR AMBARITA

2018

Prosiding seminar nasional

## Optimasi Pengering Pakaian Sistem Pompa Kalor dengan Penambahan Alat Penukar Kalor

FAREL HASIROLAN NAPITUPU , DIAN MORFI NASUTION , HIMSAR AMBARITA

## Researches

2021

Penelitian Dosen Pemula

## Karakteristik Menara Pendingin Tipe Induced Draft dengan Kombinasi Bahan Pengisi Sekat Berlubang dan Plastik Berongga

ACMAD HUSEIN SIREGAR , DIAN MORFI NASUTION

2025

Penelitian Dosen Pemula

## Optimasi Jumlah Sudu dan Panjang Chord Line untuk Meningkatkan Koefisien Daya Turbin Angin Vertikal Tipe Darrieus

DIAN MORFI NASUTION , SANJAYA BAROAR SAKTI NASUTION , HOTDIAN SINAMBELA , HENDRO DARMONO

2023

Penelitian Dosen Pemula

## Modifikasi AC Split 1 PK menjadi Mesin Pembuat Es Balok kapasitas 100 kg per hari menggunakan Refrigeran Hidrokarbon R290

DIAN MORFI NASUTION

2025

Ipteks Bagi Kewirausahaan

## Penilaian Peralatan Mesin SWRO

M. SABRI , DIAN MORFI NASUTION , ILMI

2022

Penelitian Dosen Pemula

## RANCANG BANGUN MESIN PENERING UDANG REBON SISTEM POMPA KALOR

DIAN MORFI NASUTION , MUHAMMAD SAFRIL , FIKRI SAFRUDDIN LUBIS

## Community Services

2022

Ipteks Bagi Masyarakat

## **BANTUAN PERAHU MOTOR UNTUK KELOMPOK NELAYAN MUARA PAUH DI DUSUN V PALUH MANAN KECAMATAN HAMPARAN PERAK KABUPATEN DELI SERDANG**

DIAN MORFI NASUTION , FARIDA ARIANI , SUPRIANTO

---

2023

Ipteks Bagi Masyarakat

## **Penerapan Mesin Pencacah Rumput Untuk Kelompok Usaha Ternak Kambing Sepakat Bersama Di Dusun V Paluh Manan Kecamatan Hamparan Perak Kabupaten Deli Serdang**

DIAN MORFI NASUTION , FARIDA ARIANI , SUPRIANTO

---

## **Intellectual Property Rights**

---

2018

Karya desain

## **Penelitian Kinerja Induced Draft Cooling Tower Dengan Potongan Pipa PVC 1 Inci Sebagai Filling Material**

DIAN MORFI NASUTION

---