Prof. Dr. Eng. Himsar Ambarita, S.T., M.T.

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

himsar@usu.ac.id

USU Faculty of Engineering

082161054043

ft.usu.ac.id/en/lecturer/himsar-ambarita

Himsar Ambarita was born in Kampung Jagung, on the outskirts of the PTPN IV plantation in Simalungun, on June 10, 1972. He is a professor at the Universitas Sumatera Utara (USU) in the Faculty of Engineering and ranks 44th in the category of influential scientists worldwide. Himsar is listed among the top two percent of influential scientists globally, according to Elsevier BV and Stanford University.

He completed his undergraduate studies in Mechanical Engineering at USU, from July 1991 to September 1997. He earned his master's degree in Mechanical Engineering at the Bandung Institute of Technology (ITB) from August 1998 to June 2001, and pursued his doctoral studies at Muroran Institute of Technology, Japan.

Himsar has also served as an expert team member in various projects, including the preparation of the Regional Action Plan for Greenhouse Gas (GHG) Emission Reduction for the Government of North Sumatra in 2012, the Development of Nationally Appropriate Mitigation Actions (NAMAs) on Small-Scale Renewable Energy in Indonesia in 2013, and the preparation of the USU Long-Term Plan (RJP) 2014–2039, the Strategic Plan (Renstra) 2014–2019, and the Strategic Plan 2020–2024. Additionally, he has held the position of Chair of the World Class University (WCU) Team at USU. Now, he serves as a Director at the Directorate of Internationalization and Global Partnerships.

Publications

2024
Prosiding seminar internasional

Comparative analysis of coffee drying on quality with variations in dryers made solar collectors

PARULIAN SIAGIAN , HIMSAR AMBARITA

2023
Jurnal internasional bereputasi

Integration of a Gamma-Type Stirling Engine with LPG Cooking Stove for Micro-Scale Combined Heat and Power Generation

JUFRIZAL , SUPRIATNO , FAREL HASIHOLAN NAPITUPU , ILMI , HIMSAR AMBARITA

2023
Prosiding seminar internasional

Experimental study of solar powered dryer with and without phase change material (PCM)

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA , WANDANIEL SIMANULLANG , YOELNA MEINDAR PUTRI ZEBUA

2023
Jurnal internasional bereputasi

Effect of blanching treatment on drying time and the quality of hybrid system solar dried red chilli

HOTMAN MANURUNG , HIMSAR AMBARITA

2023
Prosiding seminar internasional

Experimental study on open cycle heat pump chilli dryer with refrigerant R32

HIMSAR AMBARITA , NAUAS DOMU MARIHOT ROMAULI

2022

Jurnal internasional

Ideal Cycle Thermodynamic Analysis for Gamma-Type Stirling Engine

JUFRIZAL , FAREL HASIHOLAN NAPITUPU , ILMI , HIMSAR AMBARITA

2022
Jurnal internasional bereputasi

Investigation of the effect of a solar collector, nozzle, and water cooling on solar still double slope

HIMSAR AMBARITA , FAREL HASIHOLAN NAPITUPU

2022
Jurnal internasional bereputasi

DEVELOPMENT OF TIN COPPER ALLOYS IN SHELL AND TUBE EVAPORATOR HEAT EXCHANGER SYSTEMS IN OCEAN THERMAL ENERGY CONVERSE POWER PLANT

HIMSAR AMBARITA , BASUKI

2022
Jurnal nasional

Uji Potensi Limbah Panas dari Kompor Gas Satu dan Dua Tungku yang Dibuang ke Lingkungan

JUFRIZAL , FAREL HASIHOLAN NAPITUPU , ILMI , HIMSAR AMBARITA

2022
Prosiding seminar internasional

Effects of Winglet on the Aerodynamic Characteristics of Airfoil Wing NACA 4415

HIMSAR AMBARITA , FAREL HASIHOLAN NAPITUPU

2022
Prosiding seminar internasional

Thermodynamic Analysis of a Gamma - Type Stirling Engine for mCHP Application

HIMSAR AMBARITA , ILMI

2021
Jurnal internasional bereputasi

Utilization of Renewable and Conventional Energy in Palm Oil Industry in Indonesia

HIMSAR AMBARITA

2021
Jurnal internasional bereputasi

Experimental study of seawater evaporation using natural convection principles

HIMSAR AMBARITA

2021
Prosiding seminar internasional

Thermal Analysis on Heat Pump Chili Drying Chamber with variations in the direction of air flow using Computational Fluid Dynamics

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA

2020
Jurnal nasional terakreditasi

Utilization of hands free wash basin as Covid-19 prevention in public health center

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA , KARINA NOLA SINAMO

2020
Jurnal internasional

FEM analysis of the HAZ temperature by heat source modeling on buttjoint process using msc marc mentat

HIMSAR AMBARITA , CHARLES SP MANURUNG , RICHARD A M NAPITUPULU

2020

Prosiding seminar internasional

Study on Experimental of continuous solar dryer with dessicant Cacl2 thermal storage

HIMSAR AMBARITA , NAUAS DOMU MARIHOT ROMAULI

2020
Prosiding seminar internasional

The potency of implementation resource efficient and cleaner production in a Palm Oil Mill with capacity 30 ton per hour

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA

2020
Prosiding seminar internasional

Assessment of drying method and pretreatment size on characteristic of dried chilli powder

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA

2020
Jurnal internasional

FEM analysis of the HAZ temperature by heat source modeling on butt-joint process using msc marc mentat

CHARLES SP MANURUNG , HIMSAR AMBARITA , RICHARD A M NAPITUPULU

2019
Jurnal nasional terakreditasi

Utilization of Technology in Donuts Business

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA , KARINA NOLA SINAMO

2019
Prosiding seminar internasional

Experimental study on candleberry shell and areca palm fibre as a solid fuel for boiler

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA

2019
Prosiding seminar internasional

Study on the convective drying of potato cube

NAUAS DOMU MARIHOT ROMAULI , HIMSAR AMBARITA

2018
Jurnal internasional bereputasi

Variability of organoleptic quality of genotypes of Arabica coffee

ROSNAWYTA SIMANJUNTAK , MARIA RUMONDANG SIHOTANG , BENIKA NAIBAHO , SAMSE PANDIANGAN , ALBINER SIAGIAN , HIMSAR AMBARITA , BILTER SIRAIT

2018
Prosiding seminar internasional

Social and technical barriers that affect the growth of small-scale hydropower independent power producers in Indonesia

IKHSAN SIREGAR , MUHAMMAD ARIFIN NASUTION , HIMSAR AMBARITA

Researches

2021
Penelitian Disertasi Doktor

Pengembangan Sistem Mikro Combine Heat and Power (micro-CHP) berbasis Energi Panas dari Kompor Masak LPG

HIMSAR AMBARITA , FAREL HASIHOLAN NAPITUPU , ILMI , RYAN CHANDRA , YOELNA MEINDAR PUTRI ZEBUA

2021

Kajian Pengaruh Suhu dan Waktu pengeringan Terhadap Kalitas Mutu Ikan Kering

HIMSAR AMBARITA , NAUAS DOMU MARIHOT ROMAULI

2021
Penelitian Disertasi Doktor

Pengembangan Sistem Mikro Combine Heat and Power (micro-CHP) berbasis Energi Panas dari Kompor Masak LPG

HIMSAR AMBARITA , JUFRIZAL , FAREL HASIHOLAN NAPITUPU , ILMI

2020

Peningkatan Kualitas Cabe Merah Kering Dengan Pengeringan Metode Dehumidifier

HIMSAR AMBARITA , KARINA NOLA SINAMO , NAUAS DOMU MARIHOT ROMAULI

2019

Karakteristik Mutu Bubuk Cabe Merah Dengan Metode Pengeringan Tenaga Surya

HIMSAR AMBARITA , NAUAS DOMU MARIHOT ROMAULI

2015
Penelitian Fundamental

Karakteristik adsorben campuran alumina aktif dan karbon aktif sebagai gener

HIMSAR AMBARITA , FAREL HASIHOLAN NAPITUPU

2014
Penelitian Hibah Bersaing

Perbaikan Mutu Kakao Indonesia Melalui Metode Pengeringan

HIMSAR AMBARITA , FAREL HASIHOLAN NAPITUPU

Community Services

2026

Focus Group Discussion (FGD) Pengembangan Pusat Riset Teknologi Strategis USU dan Sumatera Utara

HIMSAR AMBARITA

2023
Ipteks

Regional Collaborating Centre Universitas Sumatera Utara - SingHealth DukeNUS Global Health Institute

HIMSAR AMBARITA , INKE NADIA DINIYANTI LUBIS , M. Ichwan , ALDY SAFRUDDIN RAMBE

2022

Meningkatkan Peran Perempuan Dalam Rantai Pasok Sawit

HIMSAR AMBARITA , DIANA CHALIL , MOZART DARUS MBA , RIANTRI BR BARUS

2021

Pelaksanaan Verifikasi SDG's PT Pertamina Patra Niaga Regional Sumbagut

HIMSAR AMBARITA , ARIF RAHMAN , WAHYU ARIO PRATOMO

2021

Penerapan Teknologi Mesin Pencacah dan Pemanfaatan Tumpi Jagung Dalam Pembuatan Pakan Ternak Di Desa Sihusapi Kabupaten Samosir

HIMSAR AMBARITA , USWATUN HASANAH , NAUAS DOMU MARIHOT ROMAULI

2020

Penggunaan Alat Pencuci Tangan Keran Otomatis untuk Pencegahan Penyebaran Covid-19 di Puskesmas Simalingkar

HIMSAR AMBARITA , KARINA NOLA SINAMO , NAUAS DOMU MARIHOT ROMAULI

2019

Penerapan Hygiene Sanitasi dan Penggunaan Mesin Deep Fryer Pada Usaha Pembuatan Donat

HIMSAR AMBARITA , KARINA NOLA SINAMO , NAUAS DOMU MARIHOT ROMAULI

2013
Penelitian Fundamental

Karakteristik adsorben campuran alumina aktif dan karbon aktif sebagai gener