Novrida Harpah Hasibuan, S.Si., M.T.

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

novridahasibuan@usu.ac.id

USU Faculty of Engineering

ft.usu.ac.id/en/lecturer/novrida-harpah-hasibuan

Novrida Harpah Hasibuan S.Si., M.T., joined the Environmental Engineering Study Program in July 2018. Novrida graduated from the Undergraduate Program in Chemistry at USU in 2009 and the Master's Program in Environmental Engineering at ITB in 2013. Novrida has worked in a multinational company in the field of palm oil processing as a Safety Health Environment Quality staff from 2013 to 2018. Novrida is passionate about environmental management, especially surface water quality management, B3 waste management, and environmental risk analysis. Some of the research themes she has conducted include modeling the movement of heavy metals, life cycle assessment, plastic waste management, especially microplastics in rivers, and community behavior. Novrida has been involved as Inalum's Green Proper verification team for B3 waste, as an expert team of Medan city BLH for water quality monitoring study activities around Terjun landfill, and as a social mapping preparation team as a supporting document for PT PLTU Belawan's Green Proper.

Publications

2026
Prosiding seminar internasional

Domestic Laundry as a Potential Source of Microfiber Pollution for the Deli River Medan

NOVRIDA HARPAH HASIBUAN , JOVIE SIHAR SIMANGUNSONG

2024
Prosiding seminar internasional

Microplastic Distribution Model in Ambient Air PM2.5 Around the Medan Industrial Area, North Sumatra

ISRA SURYATI , NOVRIDA HARPAH HASIBUAN , RINA ANGELLA SILALAHI , ROMIAN MALAU , YOLANDA TAMBUN

2023
Prosiding seminar internasional

Analysis of the Carbon Footprint of the Domestic Wastewater Sector in Several Areas in Medan City During the Covid-19 Pandemic

NOVRIDA HARPAH HASIBUAN , LUSI SARI ANGGRIANI NADAPDAP , JOSE ALEXANDER SATRIO SIGALINGGING , MUSTIKA ANGGRAENI , MIFTA HANISAH , ISRA SURYATI , MILENIA RUADELIA

2023
Prosiding seminar internasional

Analysis of the carbon footprint of the domestic wastewater sector in several areas in Medan city during the Covid-19 pandemic

NOVRIDA HARPAH HASIBUAN , ISRA SURYATI

2022
Jurnal nasional terakreditasi

Improving the Quality of Sanitation and Environmental Cleanliness at SD Swasta Pembangunan, Petumbak District, Deli Serdang Regency

NOVRIDA HARPAH HASIBUAN , IVAN INDRAWAN , ISRA SURYATI

2022
Jurnal internasional bereputasi

Life Cycle Assessment on the Onsite Wastewater Treatment Systems by LIME3 in the Republic of Indonesia

NOVRIDA HARPAH HASIBUAN , IRVAN , MAYA SARAH

2022
Prosiding seminar internasional

Spatial Analysis of Potential Greenhouse Gas (GHG) Emissions from Household-Scale LPG Consumption in Urban and Sub-Urban Areas of Medan City during the COVID-19 Pandemic

NOVRIDA HARPAH HASIBUAN , ISRA SURYATI

2022
Jurnal nasional terakreditasi

Optimization of Sanitation Facilities to Support Open Defecation Free (ODF) Programs in Dusun 13 Desa Percut Kecamatan Percut Sei Tuan

NURUL IKA PUTRI DALIMUNTHE , NOVRIDA HARPAH HASIBUAN , FITRI KHAIRANI , ISRA SURYATI

2021
Jurnal nasional terakreditasi

Oil Spinner Machine to Improve the Quality of UMKM Chips Products in the Community of Food and Beverage Processed Association (IMO) of Sumatera Utara

DIAN MORFI NASUTION , FERRY RAHMAT ASTIANTA BUKIT , IVO ANDIKA HASUGIAN , NOVRIDA HARPAH HASIBUAN

2020
Jurnal nasional

Design of Portable Sinks With Foot Pedal Valves For Prevention of Virus Spread in Medan Selayang District

ERWIN , FERRY RAHMAT ASTIANTA BUKIT , IVO ANDIKA HASUGIAN , NOVRIDA HARPAH HASIBUAN

2020
Jurnal nasional terakreditasi

Improvement of sanitation facilities to achieve Sustainable Development Goals in Dusun 6 Desa Percut, Kecamatan Percut Sei Tuan

NOVRIDA HARPAH HASIBUAN

2020
Jurnal internasional bereputasi

Alternative study of reducing Carbon Dioxide (CO<inf>2</inf>) from the transportation sector in Medan city

NETTI HERLINA , NOVRIDA HARPAH HASIBUAN , ISRA SURYATI

Researches

2025
Kerjasama Luar Negeri dan Publikasi Internasional

Water Surveillance of Deli River and Wastewater Treatment Plant in Medan City

RANTI PERMATASARI , T KEMALA INTAN , INKE NADIA DINIYANTI LUBIS , EVITA MAYASARI , MARIA MAGDALENA SIMATUPANG , NOVRIDA HARPAH HASIBUAN , Vincent Pang Junxiong

2025
Kerjasama Luar Negeri dan Publikasi Internasional

Water Surveillance of Deli River and Wastewater Treatment Plant in Medan City

RANTI PERMATASARI , T KEMALA INTAN , INKE NADIA DINIYANTI LUBIS , MARIA MAGDALENA SIMATUPANG , NOVRIDA HARPAH HASIBUAN

2023
Penelitian Fundamental

KAJIAN KEBERADAAN MIKROPLASTIK DALAM PM 2,5 UDARA AMBIEN (STUDI KASUS : TPA TERJUN DAN KIM (KAWASAN INDUSTRI MEDAN) DI KOTA MEDAN)

ISRA SURYATI , NOVRIDA HARPAH HASIBUAN , YOLANDA TAMBUN , RINA ANGELLA SILALAHI , ROMIAN MALAU

2023
Ipteks Bagi Wilayah Antara PT-CSR / PT-PEMDA-CSR

PEMBUATAN PROTOTIPE BRIKET ARANG BAHAN DASAR CANGKANG KELAPA SAWIT

ISRA SURYATI , RAHMI KAROLINA , NOVRIDA HARPAH HASIBUAN , YERICA MAGDALENA , ORISA SATIVANA MEGAWATI , TRIE NOVA MARITO SITANGGANG , Sally Irvina Ritonga

2022
Penelitian Fundamental

Penilaian Resiko Keberadaan Tempat Pemprosesan Akhir Sampah (TPA) Terjun di Kecamatan Medan Marelan

ISRA SURYATI , NOVRIDA HARPAH HASIBUAN , LESTARI HUTABARAT , ANDRE YANIKO , VICENTIUS EGIDIA , UCHTI AFRIDA

2021
Penelitian Dosen Pemula

MODEL DISTRIBUSI SPASIAL POTENSI EMISI GAS RUMAH KACA DARI AKITIVITAS SEKTOR PEMUKIMAN DI KOTA MEDAN

ISRA SURYATI , NOVRIDA HARPAH HASIBUAN , MIFTA HANISAH , JOSE ALEXANDER SATRIO SIGALINGGING , LUSI SARI ANGGRIANI NADAPDAP , MILENIA RUADELIA

Community Services

2026
Ipteks Bagi Masyarakat

Pembangunan Fasilitas Sanitasi Komunal Sebagai Solusi Kebutuhan Air Bersih dan MCK Pasca Bencana Banjir di Kelurahan Lopian Tapanuli Tengah

FATIMAH INSANI HARAHAP , EVITA MAYASARI , NOVRIDA HARPAH HASIBUAN , NETTI HERLINA , IMMANUEL SIREGAR , ELIA REINARDUS SIMBOLON , ALYA AZZAHRA

2023

TIM PELAKSANA PEKERJAAN JASA KONSULTANSI PERENCANAAN DED PEMBANGUNAN UNDER PASS BRIGJEND KATAMSO SIMPANG JALAN JUANDA KECAMATAN MEDAN MAIMUN

DONI ALDO SAMUEL SIAHAAN , JONIS GINTING , ISRA SURYATI , SRI ALEM BR SEMBIRING , EMMA PATRICIA BANGUN , NOVRIDA HARPAH HASIBUAN , EMMANUEL GULO , MHD AZMI AZIZ NASUTION , MUHAMMAD REZKI , VICENTIUS EGIDIA , MUHAMMAD VIRZA FATHULLAH

2021
Ipteks Bagi Masyarakat

Penerapan Teknologi Tepat Guna dan Tenaga Surya pada Aktifitas Usaha Masyarakat di Desa Sayur Matua Kecamatan Aek Nabara Baruhum Kabupaten Padang Lawas

FANINDIA PURNAMASARI , DESTANUL AULIA , NOVRIDA HARPAH HASIBUAN

2021
Ipteks Bagi Masyarakat

Perbaikan Sarana Sanitasi untuk Mendukung Program Stop Buang Air Besar Sembarangan (SBS) di Dusun 13 Desa Percut Kecamatan Percut Sei Tuan

NURUL IKA PUTRI DALIMUNTHE , FITRI KHAIRANI , ISRA SURYATI , NOVRIDA HARPAH HASIBUAN

2021
Ipteks Bagi Masyarakat

PENINGKATAN KUALITAS SANITASI DAN KEBERSIHAN LINGKUNGAN DI SD SWASTA PEMBANGUNAN, KECAMATAN PETUMBAK, KABUPATEN DELI SERDANG

ISRA SURYATI , IVAN INDRAWAN , NOVRIDA HARPAH HASIBUAN , LUCY ELISABETH SITIO , MUHAMMAD ADIL FADHLY PANE , KEVIN DARMA SURYA , BAYU LISTIANY

2020
Ipteks Bagi Masyarakat

Rancang Bangun Wastafel Portabel dengan Katup Pedal Kaki untuk Pencegahan Penyebaran Virus di Kecamatan Medan Selayang Kota Medan

FERRY RAHMAT ASTIANTA BUKIT , IVO ANDIKA HASUGIAN , NOVRIDA HARPAH HASIBUAN

2020

Ipteks Bagi Masyarakat

Pembuatan Kamar Mandi dan Tangki Septik sebagai Upaya Untuk mewujudkan Sustainable Development Goals Bidang Sanitasi dI Dusun 6 Desa Percut Kecamatan Percut Sei Tuan

ISRA SURYATI , GEA GEBY AURORA SYAFRIDON , NOVRIDA HARPAH HASIBUAN

2019
Ipteks Bagi Masyarakat

Peningkatan Ketersedian Air Bersih Bagi Masyarakat Ujung Kerang, Kampung Nelayan, Kecamatan Medan Belawan

ISRA SURYATI , NOVRIDA HARPAH HASIBUAN

2019
Ipteks Bagi Masyarakat

PEMANFAATAN MESIN CUCI BEKAS SEBAGAI MESIN PENIRIS MINYAK UNTUK PRODUK UMKM KERUPUK DI KOMUNITAS MAKANAN MINUMAN OLAHAN (IMO) SUMATERA UTARA

DIAN MORFI NASUTION , FERRY RAHMAT ASTIANTA BUKIT , IVO ANDIKA HASUGIAN , NOVRIDA HARPAH HASIBUAN

Intellectual Property Rights

2026
Hak cipta nasional

Prosedur Preparasi dan Identifikasi Mikroplastik di Air Limbah dan Sungai

NOVRIDA HARPAH HASIBUAN , ALYA AZZAHRA , IMMANUEL SIREGAR , MARIA MAGDALENA SIMATUPANG , EVITA MAYASARI

2025
Paten nasional

ALAT PASSIVE SAMPLER UNTUK SAMPLING KANDUNGAN MIKROPLASTIK DALAM PARTIKULAT UKURAN 10 MIKRON (PM10) DI UDARA AMBIEN

AMANDO MANALU , ROMIAN MALAU , YOLANDA TAMBUN , RINA ANGELLA SILALAHI , ISRA SURYATI , NOVRIDA HARPAH HASIBUAN

2025
Hak cipta nasional

Toksikologi Air Lindi

YANA MARCELLA SIKELTA PURBA , NOVRIDA HARPAH HASIBUAN

2024
Paten nasional

ALAT PASSIVE SAMPLER UNTUK SAMPLING KANDUNGAN MIKROPLASTIK DALAM PARTIKULAT UKURAN 10 MIKRON (PM10) DI UDARA AMBIEN

NOVRIDA HARPAH HASIBUAN , AMANDO MANALU , ROMIAN MALAU , YOLANDA TAMBUN , RINA ANGELLA SILALAHI , ISRA SURYATI

2023
Paten nasional

Formula Hand Sanitizer Mengandung Minyak Tea Tree

NOVRIDA HARPAH HASIBUAN

2023
Hak cipta nasional

Gc-MS : (Teori dan Pengoperasiannya)

NOVRIDA HARPAH HASIBUAN , RAHMI KAROLINA

2023
Hak cipta nasional

UHPLC (Ultra High Perfomance Liquid Chromatography) : Teori dan Aplikasinya

NOVRIDA HARPAH HASIBUAN , HILMA TAMIAMI FACHRUDIN

2022
Hasil penelitian/pemikiran yang tidak dipublikasikan

Penyusunan Dokumen Pembaharuan Green Building Kota Medan

NOVRIDA HARPAH HASIBUAN