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*Dr. Muhammad Taufik, S.Si., M.Si was born in Tanjungbalai on February 09, 1977. He is a Chemistry lecturer at the Universitas Sumatera Utara. He completed his doctoral degree in Chemistry at the Universitas Sumatera Utara in 2016.*

## Publications

2026

Jurnal internasional bereputasi

### **Silicon-mediated polyacrylic acid and ethylene vinyl acetate (PAA/EVA) dual-crosslinked network binder for highly stable lithium-ion battery anode**

ANDRIAYANI , TAMRIN , MUHAMMAD TAUFIK , RAHMADINA , SUSILO SUDARMAN , EGA HIDAYANI , ANIZA SALVIANA PRAYUGO , ARDIANSYAH SEMBIRING , Muhammad Iqbal Hidayat , Nur Ahmad , Bahrin Bahrin , Yusuf Mathiinul Hakim , Ridho Prasetyo , Febio Dalanta

2026

Monograf

### **METODE ANALISIS TEMBAGA, TIMBAL, DAN SENG PADA ROAD DUST RESUSPENSION-SUSPENSION (RDR-S)**

BOBY CAHYADY , MUHAMMAD TAUFIK

2026

Jurnal nasional terakreditasi

### **Phytochemical Screening And Antibacterial Activity Of N-Hexane, Ethyl Acetate, And Ethanol Extracts Of Malacca Fruit (Phyllanthus EmblicaL.) Against Escherichia ColiAnd Staphylococcus Aureus**

MARIANY RAZALI , NURMALA SARI , SUPRAN HIDAYAT SIHOTANG , YESSI FEBRIANI , EVA SARTIKA DASOPANG , MUHAMMAD TAUFIK , RIKA SILVANY

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### **Phytochemical Screening And Antibacterial Activity Of N-Hexane, Ethyl Acetate, And Ethanol Extracts Of Malacca Fruit (Phyllanthus EmblicaL.) Against Escherichia ColiAnd Staphylococcus Aureus**

YESSI FEBRIANI , MARIANY RAZALI , EVA SARTIKA DASOPANG , MUHAMMAD TAUFIK

2025

Buku referensi

### **Implementasi Lean Manufacturing pada Industri 4.0**

NASARUDDIN , VINSSENSIUS FAOT , MUHAMMAD TAUFIK , FRANS MANGNGI , ADE SUHARA

2025

Buku lainnya

### **Implementasi Lean Manufacturing pada Industri 4.0**

MUHAMMAD TAUFIK , ADE SUHARA , FRANS MANGNGI , VINSSENSIUS FAOT , NASARUDDIN

2025

Jurnal nasional terakreditasi

### **COMMUNITY-BASED PRODUCTION OF LIQUID SMOKE AS A NON-CARCINOGENIC FISH PRESERVATIVE:-**

2025

Jurnal internasional bereputasi

**Impact of atmospheric pressure DBD plasma treatment on the biodegradability, hydrophilicity, and mechanical properties of PVA/PEG/Chitosan/HA nanofibers for bone tissue engineering**

MUHAMMAD TAUFIK

2025

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**Impact of atmospheric pressure DBD plasma treatment on the biodegradability, hydrophilicity, and mechanical properties of PVA/PEG/Chitosan/HA nanofibers for bone tissue engineering**

JAKA FAJAR FATRIANSYAH , HARTATIEK , YUDYANTO , AHMAD TAUFIQ , MARKUS DIANTORO , YUSRIL YUSUF , MUHAMMAD TAUFIK

2025

Prosiding seminar internasional

**Development of antibacterial biofoam from Eucalyptus grandis, cassava, and synthetic plastic as an effort to increase storage time of Citrus sinensis**

MARIANY RAZALI , MUHAMMAD TAUFIK

2025

Prosiding seminar internasional

**Hydrothermal synthesis of nano silicon from rice husk and its use in lithium-ion batteries**

ANDRIAYANI , TAMRIN , MUHAMMAD TAUFIK , SUSILO SUDARMAN

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**Analysis of blood group on plastic using infrared spectroscopy through chemometrics approach**

BOBY CAHYADY , MUHAMMAD TAUFIK

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**Analysis of methamphetamine in Necrophagous diptera larvae cultured on beef**

MUHAMMAD TAUFIK , HELMINA BR SEMBIRING , SOVIA LENNY

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**Analysis of methamphetamine in Necrophagous diptera larvae cultured on beef**

MARIANY RAZALI , MUHAMMAD TAUFIK

2025

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**The prediction of hydroxyapatite crystallinity under various ion doping using machine learning**

JAKA FAJAR FATRIANSYAH , YUSRIL YUSUF , DONANTA DHANESWARA , MUHAMMAD TAUFIK , HARTATIEK

2025

## **Forensic Chemistry Study: Analysis of Phenylpropanolamine Hydrochloride in Urine by UV-Vis Spectroscopy**

MARIANY RAZALI , SUPRAN HIDAYAT SIHOTANG , NURMALA SARI , PRAVIL MISTRYANTO TAMBUNAN , DESI ARDILLA , FENA DEWI SARA MARBUN , BOBY CAHYADY , MUHAMMAD TAUFIK

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## **Validation Method of 3,4-Methylenedioxymethamphetamine (MDMA) Analysis Using Gas Chromatography Mass Spectroscopy**

R. FANI MIRANDA , ANDRIAYANI , MUHAMMAD TAUFIK

2025

Jurnal nasional terakreditasi

## **Green Synthesis of Barium Doped Titanium Dioxide Using Palm Leaf Extract (*Elaeis guineensis* Jacq.)**

HENNY DUMARTA HUTAPEA , MUHAMMAD TAUFIK , ANDRIAYANI

2025

Jurnal nasional terakreditasi

## **Analysis of River Water Quality in Medan Belawan Regency based on the Diversity Index of Aquatic Insects as an Effort to Improve the Health of River Ecosystems from Heavy Metal Contamination (Ni)**

HELEN GANDARIA SITUMORANG , MUHAMMAD TAUFIK

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Jurnal internasional bereputasi

## **Electrospun polyvinyl alcohol nanofiber scaffolds incorporated strontium-substituted hydroxyapatite from sand lobster shells: synthesis, characterization, and in vitro biological properties**

MUHAMMAD TAUFIK

2024

Tulisan ilmiah

## **PENGEMBANGAN USAHA HOME INDUSTRI BRIKET ARANG MENGGUNAKAN BAHAN BAKU PERPADUAN BATOK KELAPA DAN BONGKOL JAGUNG**

USWATUN HASANAH , MUHAMMAD TAUFIK , MARIANY RAZALI , NURMALA SARI , SUPRAN HIDAYAT SIHOTANG

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## **Synthesis and application of nano-silicon prepared from rice husk with the hydrothermal method and its use for anode lithium-ion batteries**

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## **Bioactive Compounds in Barangan Banana Peel (*Musa acuminata* Colla.) as an Alternative for Antibacterial Drug Development**

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## **ANALISIS NIKOTIN DALAM DAUN TEMBAKAU DELI (*Nicotiana tabacum* L)**

RIDWANTO , MUHAMMAD TAUFIK , ATHAILLAH

2023

Jurnal internasional bereputasi

## **Analysis of Methamphetamine Using Necrophagous Insects For Forensic Entomotoxicology Applications**

MUHAMMAD TAUFIK , HELMINA BR SEMBIRING

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## **Completely Randomized Design (CRD) Method on Lard Analysis Which was Adulterated to Palm Oil**

MUHAMMAD TAUFIK

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2023

Prosiding seminar internasional

## **Preface: 2nd International Conference on Chemical Science and Technology Innovation (ICOCSTI)**

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2023

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## **Analysis of Antimicrobial Activity from 1,8-cineole and Chitosan as Mouthwash**

HARRY AGUSNAR , MUHAMMAD TAUFIK

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## **Laboratory investigation applications in identification and analysis of worn out blood samples of murder victims using infrared spectroscopy**

BOBY CAHYADY , MUHAMMAD TAUFIK , ZUL ALFIAN

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## **Application of solid phase extraction in lard separation in pork jerky and analysis using FTIR spectroscopy**

MUHAMMAD TAUFIK , ZUL ALFIAN , BOBY CAHYADY , MARIANY RAZALI , DESI ARDILLA , ZULFA ISMANIAR FAUZI

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## **Sonication technique for nicotine extraction from saliva and urine**

ZUL ALFIAN , BOBY CAHYADY , MUHAMMAD TAUFIK

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## **Analysis of Antimicrobial Activity from 1,8-cineole and Chitosan as Mouthwash**

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## **Relationship of Tobacco Weight in Commercial Cigarettes to Nicotine Levels**

ANNY SARTIKA DAULAY , MUHAMMAD TAUFIK , MARIANY RAZALI

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## **Analysis of Arsenic in Purple Cabbage (*Brassica Oleracea* var. *capitata* L) after the Eruption of Mount Sinabung using Atomic Absorption Spectrophotometer**

BOBY CAHYADY , SUHARMAN , MUHAMMAD TAUFIK , ZUL ALFIAN

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## **A Simple Extraction Method for the Determination of Nicotine from Saliva**

MUHAMMAD TAUFIK , BOBY CAHYADY , ZUL ALFIAN

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## **Analysis of Lard Adulterated in Beef Sausages: Influence of n-hexane Concentration and Maceration Time**

DAFNI MAWAR TARIGAN , DESI ARDILLA , MUHAMMAD THAMRIN , MUHAMMAD TAUFIK , REVI TRISNA SIREGAR

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## **INVESTIGASI LABORATORIUM : DETEKSI NIKOTIN DARI AIR LUDAH PEROKOK AKTIF**

MUHAMMAD TAUFIK , BOBY CAHYADY , ZUL ALFIAN

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## **INVESTIGASI LABORATORIUM: DETEKSI NIKOTIN DARI AIR LUDAH PEROKOK AKTIF**

ZUL ALFIAN , MUHAMMAD TAUFIK , BOBY CAHYADY

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## **Production of natural hand sanitizers from Aloe vera, Rambutan (*Nephelium lappaceum* L.) and Lime (*Citrus aurantiifolia*) barks, Betel (*Piper betle*) and *Eucalyptus grandis* leaves in Kotamatumbe IV sub district, Medan City**

MUHAMMAD TAUFIK , BOBY CAHYADY

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Jurnal nasional terakreditasi

## **Analisis Kadar Arsen (As) pada Sayur Kubis Hijau (*Brassica oleracea* L.) Pasca Erupsi Gunung Sinabung**

BOBY CAHYADY , SUHARMAN , MUHAMMAD TAUFIK

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## **Exploration of maceration methods for extracting of lard from industrial food products**

ZUL ALFIAN , BOBY CAHYADY , MUHAMMAD TAUFIK

2021  
Prosiding seminar internasional

## **Separation of lard in adulterated multivitamins using chromatography and maceration methods**

RIDWANTO , ANNY SARTIKA DAULAY , MUHAMMAD TAUFIK , MARIANY RAZALI , BOBY CAHYADY , HUSNUL ISA HARAHAP , DESI ARDILLA

2021  
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RIDWANTO , ANNY SARTIKA DAULAY , ZUL ALFIAN , MUHAMMAD TAUFIK , BOBY CAHYADY

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## **maceration methods**

ZUL ALFIAN , BOBY CAHYADY , MUHAMMAD TAUFIK

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### **Analysis of lard in soybean oil adulterated in order to increase halal food**

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### **Nicotine separation from the urine of active smokers using Moringa oleifera on column chromatography**

BOBY CAHYADY , MUHAMMAD TAUFIK , ZUL ALFIAN

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### **Nicotine separation from the urine of active smokers using Moringa oleifera on column chromatography**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

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### **Decreased stress levels and nicotine concentrations in the urine of active smokers after consuming antioxidants**

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### **Nicotine separation from the urine of active smokers using Moringa oleifera on column chromatography**

RIDWANTO , ANNY SARTIKA DAULAY , BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

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### **The relationship between vitamin C consumption and the stress level of active smokers in Medan city**

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### **Nicotine separation from the urine of active smokers using Moringa oleifera on column chromatography**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

2020

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### **Making Hand sanitizer from Eucalyptus citriodora plants as an economic opportunity in the new normal era**

HAMDI , M.SYAFII , MUHAMMAD TAUFIK , SUKMA HAYATI HAKIM , ARIF RAHMAN

2020

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### **The AAS Method for Arsen Analysis in Cabbage in the Area of Sinabung Post Eruption**

BOBY CAHYADY , MUHAMMAD TAUFIK , SUHARMAN

2020

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### **Brackish Water Treatment into raw water using Moringa oleifera leaves as an adsorber at Habibie Mustafa College, Keramat Kubah Village, Tanjungbalai Town**

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2020

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### **Biopesticide for overcoming caterpillar pests on cabbage plant (Brassica**

## oleracea L)

BOBY CAHYADY , MUHAMMAD TAUFIK , ENITA DEWI BR TARIGAN

2020

Prosiding seminar internasional

### **The AAS Method for Arsen Analysis in Cabbage in the Area of Sinabung Post Eruption**

MUHAMMAD TAUFIK , SUHARMAN , BOBY CAHYADY

2020

Prosiding seminar internasional

### **Identification and Analysis of Potential Antioxidants from Leaves of Eucalyptus robusta PT. Toba Pulp Lestari, Tbk.**

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2020

Prosiding seminar internasional

### **Development of Maceration Methods in the Investigation and Analysis of Lard in Industrial Food Products to Improve Halal Product in Indonesia**

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2019

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### **Effect of particle size on fresh turmeric (Curcuma Longa L.) and simplicia toward content of curcumin compound**

RIDWANTO , MUHAMMAD TAUFIK , ANNY SARTIKA DAULAY , ASTRILIANA DAULAI

2019

Jurnal internasional

### **Relationship of Tobacco Weight in Commercial Cigarettes to Nicotine Levels**

RIDWANTO , MARIANY RAZALI , MUHAMMAD TAUFIK , ANNY SARTIKA DAULAY , DESI ARDILLA , ENDANG SUSILAWATI , AFNIWATI , EVI DAYATUL ATIQA

2019

Jurnal internasional bereputasi

### **Extraction and Analysis of Nicotine in the Urine of Active Smokers after given by Vitamin C**

RIDWANTO , ENDANG SUSILAWATI , MUHAMMAD TAUFIK , AFNIWATI , MARIANY RAZALI , DESI ARDILLA , VIRDA LOLA BR TARIGAN

2019

Jurnal internasional bereputasi

### **GC-MS Analysis of Chemical Contents and Physical Properties of Essential Oil of Eucalyptus grandis from PT. Toba Pulp Lestari**

MUHAMMAD TAUFIK , SOVIA LENNY , HARLEM MARPAUNG , ANDRIAYANI , ZUL ALFIAN

2019

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### **GC-MS Analysis of Chemical Contents and Physical Properties of Essential Oil of Eucalyptus grandis from PT. Toba Pulp Lestari**

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2018

Jurnal internasional bereputasi

### **The effect concentration of tetraethylorthosilicate and variation HCl 0.1M for synthesis mesoporous**

MUHAMMAD TAUFIK

2018

Jurnal internasional bereputasi

### **The effect concentration of tetraethylorthosilicate and variation HCl 0.1M for synthesis mesoporous silica using oleic acid as template and 3-aminopropyltrimethoxysilane as co-structure directing Agent**

ANDRIAYANI , MUHAMMAD TAUFIK

2018

Jurnal nasional

# Studi Awal: Analisis Sifat Fisika Lemak Babi Hasil Ekstraksi Pada Produk Pangan Olahan

MUHAMMAD TAUFIK

2017

Jurnal nasional

## STUDI PENDAHULUAN MASERASI COUPLING ELEKTROSINTESIS DALAM MENGEKSTRAKSI NIKOTIN YANG TERKANDUNG DALAM PUNTUNG ROKOK DAN ANALISA MENGGUNAKAN SPEKTROSKOPI UV-VIS

RIDWANTO , MUHAMMAD TAUFIK , DESI ARDILLA , MARIANY RAZALI , DAFNI MAWAR TARIGAN , SITI RAHMAH CIBRO

2017

Jurnal nasional

## ANALISIS NIKOTIN DALAM DAUN TEMBAKAU DELI (*Nicotiana tabacum* L)

ANNY SARTIKA DAULAY , MUHAMMAD TAUFIK , RIDWANTO , MAYA HANDAYANI SINAGA , DESI ARDILLA , MARIANY RAZALI

2017

Jurnal nasional

## Pemeriksaan Narkotika Menggunakan Sampel Urine

MUHAMMAD TAUFIK

2017

Jurnal nasional terakreditasi

## Analisis Cepat Methamphetamin pada Rambut Pengguna Sabu Sabu Menggunakan Gas Kromatografi Spektroskopi Massa

MUHAMMAD TAUFIK

2017

Jurnal internasional

## Qualitative and Quantitative Analysis of Heavy Metal and Mineral of Volcanic Ashmount Sinabung by Using Inductively Coupled Plasma (Icp-Oes)

MUHAMMAD TAUFIK , ZUL ALFIAN , EMMA ZAIDAR

2016

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## Analysis of user's hair cannabinoid of narcotic type of marijuana (*Cannabis Sativa* L.) using GCMS Technic

MUHAMMAD TAUFIK

2016

Makalah ilmiah

## Analisis Cannabinoid dari Rambut Pengguna Narkotika Jenis Ganja (*Cannabis sativa* L.) Menggunakan Teknik GCMS

MUHAMMAD TAUFIK

2016

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## Analysis of User's Hair Cannabinoid of Narcotic Type of Marijuana (*Cannabis Sativa* L.) Using GCMS Technic

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2026

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## The effect concentration of tetraethylorthosilicate and variation HCl 0.1 M for synthesis mesoporous silica using oleic acid as template and 3-aminopropyltrimethoxysilane as co-catalyst

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2026

Jurnal internasional

## SJ, 2019. GC-MS Analysis of Chemical Contents and Physical Properties of Essential Oil of *Eucalyptus grandis* from PT. Toba Pulp Lestari

MUHAMMAD TAUFIK

2024

Penelitian Dana Lokal Perguruan Tinggi

## **Analisis Mechanical Properties pada Scaffold Karbonat Hidroksiapatit (CHA) Berbahan Dasar Biowaste Cangkang Kerang Darah (Anadara granosa) dan Variasi Polimer untuk Aplikasi Rekayasa Jaringan Tulang**

MUHAMMAD TAUFIK

2024

Penelitian Tim Pasca Sarjana

## **Aplikasi Entomologi Forensik menggunakan Serangga Air untuk Menganalisis Kualitas Air Sungai di Kecamatan Medan Belawan sebagai upaya peningkatan Kesehatan Ekosistem Sungai dari cemaran Logam berat**

ZUL ALFIAN , MUHAMMAD TAUFIK , HELEN GANDARIA SITUMORANG

2024

Penelitian Fundamental

## **Aplikasi Teknik Kromatograf sebagai Alternatif Pengembangan Alat Elektromedik dalam menganalisis Metamfetamin pada Maggot Lalat Necrophagous secara Entomoksikologi Forensik**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

2023

Ipteks Bagi Masyarakat

## **PENGGUNAAN NANO KOMPOSIT KITOSAN DARI CANGKANG KERANG HIJAU (PERNA VIRIDIS) UNTUK PENGOLAHAN AIR SUNGAI YANG TERCEMAR LOGAM BERAT DAN MINYAK SOLAR**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

2023

Penelitian Fundamental

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ZUL ALFIAN , MUHAMMAD TAUFIK

2021

## **Deteksi nikotin dari Air Ludah Perokok Aktif secara laboratory investigation**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

2021

## **Aplikasi metode Laboratory Investigation pada Identifikasi dan Analisis golongan darah tidak segar sampel model korban pembunuhan menggunakan spektroskopi Infra Merah**

BOBY CAHYADY , MUHAMMAD TAUFIK

2020

## **Eksplorasi metode elektrosintesis dalam ekstraksi lemak babi pada Produk Pangan Industri dalam rangka pengembangan analisis produk pangan halal di Indonesia**

BOBY CAHYADY , ZUL ALFIAN , MUHAMMAD TAUFIK

2020

## **Pemanfaatan kulit kerang sebagai bahan pengisi kolom kromatografi pada pemisahan lemak babi yang terdapat pada multivitamin teradulterasi**

BOBY CAHYADY , MUHAMMAD TAUFIK

2020

Penelitian Dosen Pemula

## **Pemisahan nikotin pada urin perokok aktif menggunakan daun kelor sebagai bahan pengisi kolom kromatografi**

BOBY CAHYADY , MUHAMMAD TAUFIK

2019

Penelitian Kerjasama Antar Perguruan Tinggi

## **Analisis Pemberian Vitamin C Terhadap Tingkat Stress dan Kadar Nikotin pada Urin Perokok Aktif di Kelurahan Tanjung Sari Kecamatan Medan Selayang Kota Medan Tahun 2019**

MUHAMMAD TAUFIK

2019

Penelitian Fundamental

## **METODE SEDERHANA INVESTIGASI DAN ANALISIS LEMAK BABI PADA PRODUK PANGAN INDUSTRI DALAM PENINGKATAN PRODUK HALAL DI INDONESIA**

ZUL ALFIAN , MUHAMMAD TAUFIK

## **Community Services**

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2026

### **BAKSOS- Pengabdian Masyarakat Pascabanjir**

BOBY CAHYADY , MUHAMMAD TAUFIK

2025

### **Bakti Sosial Bersama Kita Bisa**

BOBY CAHYADY , MUHAMMAD TAUFIK

2025

### **BAKTI SOSIAL BERSAMA KITA BISA**

MUHAMMAD TAUFIK , DELISMA MARSAULI SIMORANGKIR

2025

### **Bakti Sosial Bersama Kita Bisa dengan Kegiatan Pelayanan Medis, Pengobatan Massal untuk Masyarakat**

HELMINA BR SEMBIRING , SABARMIN PERANGINANGIN , MUHAMMAD TAUFIK

2025

### **Baksi Sosial Bersama**

MUHAMMAD TAUFIK

2022

Ipteks Bagi Masyarakat

### **Pengembangan Biofoam antibakteri dari Ranting Eucalyptus grandis, Kulit Singkong, dan plastik sintetik sebagai upaya untuk memperpanjang umur simpan buah jeruk manis (Citrus sinensis)**

BOBY CAHYADY , RINI HARDIYANTI , MUHAMMAD TAUFIK , SOVIA LENNY

2021

### **Pemberantasan Lalat buah (Bactrocera sp.) pada Jeruk Manis (Citrus X Sinensis) menggunakan Biopestisida berbahan Eucalyptus grandis pada Kelompok Tani Bukit Rumah Sendi Kabupaten Karo**

RINI HARDIYANTI , MUHAMMAD TAUFIK

2020

### **Pembuatan Hand Sanitizer Alami beraroma Eucalyptus sebagai upaya Pencegahan Penyebaran Covid-19 di Kelurahan Kotamatum IV Kecamatan Medan Area Kota Medan**

MUHAMMAD TAUFIK

2020

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2019

Ipteks Bagi Masyarakat

## **BIOPESTISIDA SEBAGAI ALTERNATIF PEMBERANTASAN HAMA ULAT PADA TANAMAN KUBIS (*Brassica oleracea* L) PADA KELOMPOK TANI BUKIT RUMAH SENDI DI DESA UJUNG SAMPUN KABUPATEN KARO**

BOBY CAHYADY , ENITA DEWI BR TARIGAN , MUHAMMAD TAUFIK

2019

## **BIOPESTISIDA SEBAGAI ALTERNATIF PEMBERANTASAN HAMA ULAT PADA TANAMAN KUBIS (*Brassica oleracea* L) PADA KELOMPOK TANI BUKIT RUMAH SENDI DI DESA UJUNG SAMPUN KABUPATEN KARO**

BOBY CAHYADY , ENITA DEWI BR TARIGAN , MUHAMMAD TAUFIK

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## **Implementasi Lean Manufacturing pada Industri 4.0**

MUHAMMAD TAUFIK

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## **Implementasi Lean Manufacturing pada Industri 4.0**

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## **Implementasi Lean Manufacturing pada Industri 4.0**

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## **Pengembangan Usaha Home Industri Briket Arang Menggunakan Bahan Baku Perpaduan Batok Kelapa Dan Bongkol Jagung**

NURMALA SARI , MARIANY RAZALI , USWATUN HASANAH , SUPRAN HIDAYAT SIHOTANG , MUHAMMAD TAUFIK

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## **Pengembangan Usaha Home Industri Briket Arang Menggunakan Bahan Baku Perpaduan Batok Kelapa Dan Bongkol Jagung**

MUHAMMAD TAUFIK

2020

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## **Metode untuk Mendeteksi Cannabinoid menggunakan Sampel Rambut Pengguna Narkotika Jenis Ganja (*Cannabis sativa* L) i»¿**

MUHAMMAD TAUFIK , ZUL ALFIAN , BOBY CAHYADY

2020

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## **Metode Untuk Mendeteksi Cannabinoid Menggunakan Sampel Rambut Pengguna Narkotika Jenis Ganja**

AFNIWATI , ENDANG SUSILAWATI , MUHAMMAD TAUFIK , ZUL ALFIAN , MARIANY RAZALI , BOBY CAHYADY , MAYA HANDAYANI SINAGA

2020

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## **Metode untuk Mengekstraksi Nikotin dari Urin Perokok Aktif**

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## **Proses untuk Mengekstraksi Lemak Babi (LARD) yang Terdapat dalam Abon Babi**

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### **Metode untuk mengekstraksi Nikotin dari Air Ludah Perokok**

MUHAMMAD TAUFIK , BOBY CAHYADY , ZUL ALFIAN , HARLEM MARPAUNG

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### **Metode untuk mengekstraksi Nikotin dari Air Ludah Perokok**

BOBY CAHYADY , MUHAMMAD TAUFIK , ZUL ALFIAN , HARLEM MARPAUNG

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