

Prof. Ir. Indra Surya, M.Sc., Ph.D

Dosen Program Studi S1 Teknik Kimia
Fakultas Teknik
Universitas Sumatera Utara

✉ isurya@usu.ac.id

🌐 ft.usu.ac.id/id/dosen/indra-surya

Prof. Ir. Indra Surya, M.Sc., Ph.D. dilahirkan di Palembang pada tanggal 09 Juni 1963 dan merupakan seorang dosen dengan bidang Teknik Kimia di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya pada jenjang Doktor (S3), bidang ilmu Getah dan Lateks, di USM pada tahun 2016.

Publications

2022

Jurnal internasional bereputasi

Sustainable Recycling of Waste from Nitrile Gloves: Prolonging the Life Span by Designing Proper Curing Systems

INDRA SURYA

2025

Prosiding seminar internasional

The Potency of Fatty Alcohol Compounds to Improve the Silica Dispersion in the Compound of Natural Rubber with Silica

INDRA SURYA

2024

Prosiding seminar internasional

Processing and Tensile Properties of Natural Rubber Filled with Calcium Carbonate or Silica in the Presences of Lauryl Alcohol

INDRA SURYA

2025

Jurnal internasional bereputasi

Structural and chemical properties of kappa-carrageenan extracted from macroalgae by deep eutectic solvents and sustainable biopolymer films produced thereof

INDRA SURYA

2023

Prosiding seminar internasional

Effect of sodium metabisulphite (SMBS) and hydroxylamine sulphite (HNS) on the mooney viscosity, PRI, ASHT and color of dry crumb rubber

INDRA SURYA

2024

Jurnal internasional bereputasi

Hydrophobicity and mechanical properties of purified lignin nanoparticles reinforced marine-derived biopolymer composites

INDRA SURYA

2025

Jurnal internasional bereputasi

Functionalized magnetite-biochar with live and dead bacteria for adsorption-biosorption of highly toxic metals: Cd, Hg, and Pb

INDRA SURYA

2025

Prosiding seminar internasional

Increased Rubber-Filler Interaction of the Compound of Natural Rubber-Silica by Aminopropyltriethoxy Silane

INDRA SURYA

2022

Jurnal internasional bereputasi

Viable Properties of Natural Rubber/Halloysite Nanotubes Composites Affected by Various Silanes

INDRA SURYA

2020

Prosiding seminar internasional

Silica-loaded styrene-butadiene rubber in the incorporation of stearamide: The torque properties

INDRA SURYA

2023

Jurnal internasional bereputasi

Enhancing the properties of industrial waste nanocellulose bioaerogels using turmeric nano particles

INDRA SURYA

2023

Prosiding seminar internasional

The NR/Silica/Silane Composites: Study on The Crosslinks Behaviour and Tensile Strength

INDRA SURYA

2024

Jurnal internasional bereputasi

Physico-chemical and thermal degradation characteristics of marine red macroalgae for sustainable packaging applications

INDRA SURYA

2022

Prosiding seminar internasional

Effect of oleamide on the torques behaviors of natural rubber/precipitated silica compounds

INDRA SURYA

2022

Jurnal internasional bereputasi

Microstructure-Properties of Dynamically Vulcanized Mengkuang Leaf Fibre/Ethylene Vinyl Acetate/Natural Rubber Thermoplastic Elastomer Composites

INDRA SURYA

2023

Jurnal internasional bereputasi

Recent Advances in Nanocellulose Aerogels for Efficient Heavy Metal and Dye Removal

INDRA SURYA

2023

Prosiding seminar internasional

Extraction and characterization of silicon dioxide based on a bottom ash waste of a palm oil mill boiler

INDRA SURYA

2024

Jurnal internasional bereputasi

Eco-friendly approach for carboxymethyl cellulose isolation from durian peel waste and aerogel scaffold preparation

INDRA SURYA

2024
Prosiding seminar internasional

Renewable Compatibilizing Agent for Silica Reinforced Natural Rubber

INDRA SURYA

2024
Jurnal internasional bereputasi

Microwave-assisted sodium alginate extraction from Dictyota menstrualis and the fabrication of green thermal insulators

INDRA SURYA

2020
Prosiding seminar internasional

Effects of Modified Palm Stearin on Torque Properties of Carbon Black-loaded Epoxidized Natural Rubber

INDRA SURYA

2025
Prosiding seminar internasional

The Curing and Reinforcement Behaviours of Compound of Natural Rubber-Silica in the Presences of Epoxidized Natural Rubbers

INDRA SURYA

2024
Prosiding seminar internasional

Fatty alcohols as sustainable compatibilizer agents for the compound of natural rubber/silica: The curing, rubberiness and tensile strength behaviours

INDRA SURYA

2022
Jurnal internasional bereputasi

Hydrophobicity and Biodegradability of Silane-Treated Nanocellulose in Biopolymer for High-Grade Packaging Applications

INDRA SURYA

2023
Prosiding seminar internasional

Synthesis and Characterization of Precipitated Silica from Coal Fly Ash

INDRA SURYA

2022
Prosiding seminar internasional

The using of oleamide for improving the strength of natural rubber/silica vulcanizates

INDRA SURYA

2025
Prosiding seminar internasional

Synergistic effect of amine-modified palm stearin and carbon black in natural rubber reinforcement applying different cure systems

INDRA SURYA

2025
Prosiding seminar internasional

he Curing and Reinforcement Behaviours of Compound of Natural Rubber-Silica in the Presences of Epoxidized Natural Rubbers

MUKHLISHIEN , INDRA SURYA

2025
Artikel ilmiah

The potency of fatty alcohol compounds to improve the silica dispersion in the compound of natural rubber with silica

MUKHLISHIEN , INDRA SURYA

2023
Prosiding seminar internasional

The stearamide adding for improving the strength of styrene butadiene/carbon black compounds

INDRA SURYA

2025

Prosiding seminar internasional

The Effect of Aptes-Silane on Tensile and Ageing Properties of the Compound of Natural Rubber-Silica

INDRA SURYA

2026

Prosiding seminar internasional

Modified palm stearin for enhanced crosslinks, mechanical and ageing resistance of carbon black - Styrene butadiene rubber compound

INDRA SURYA

2025

Jurnal internasional

High surface area activated carbon derived from sustainable Kappaphycus alvarezii via one-step NaOH activation for efficient methylene blue adsorption

INDRA SURYA

2024

Jurnal internasional bereputasi

Green Thermal Insulators; Insights into the Role of Biopolymer-based aerogels in Thermal Insulation Applications

LILIS SUKEKSI , INDRA SURYA

2022

Jurnal internasional bereputasi

Reducing the Payne Effect of the Natural Rubber/Sepiolite Composite by Introducing Modified Palm Stearin

INDRA SURYA

2023

Jurnal internasional bereputasi

The Use of Kenaf Fibre as a Natural Anti-Degradant in Recycled High-Density Polyethylene and Natural Rubber-Based Thermoplastic Elastomers

INDRA SURYA

2024

Prosiding seminar internasional

The Effect of Silica Concentration on The Absorption Properties of Silica-Based Ceramic Membrane

INDRA SURYA

2025

Jurnal internasional bereputasi

The Tear and Tensile Strengths of Silica Fly Ash Reinforced Natural Rubber Vulcanizate

INDRA SURYA

2025

Jurnal internasional bereputasi

Biochar-layered double hydroxide vs biochar-layered double oxide: a critical review on their applications in water pollution control

INDRA SURYA

2025

Prosiding seminar internasional

Processing characteristics and mechanical properties of styrene butadiene rubber filled with varying amounts of silica

INDRA SURYA

2020

Jurnal internasional bereputasi

PREPARATION, CHARACTERISATION AND APPLICATION OF GLUT PALMITATE AS A COUPLING AGENT IN NATURAL RUBBER COMPOSITES

INDRA SURYA

2024

Prosiding seminar internasional

The porosity and morphology properties of ceramic membrane

INDRA SURYA

2023

Prosiding seminar internasional

Studying on the carbon black-reinforced styrene butadiene rubber: Effect of stearamide adding on the rheological behavior

INDRA SURYA

2021

Jurnal internasional bereputasi

Selectively etched halloysite nanotubes as performance booster of epoxidized natural rubber composites

INDRA SURYA

2024

Jurnal internasional bereputasi

The Role of Natural Fibre Reinforcement in Thermoplastic Elastomers Biocomposites

INDRA SURYA

2025

Jurnal internasional bereputasi

Functionalized magnetite-biochar with live and dead bacteria for adsorption-biosorption of highly toxic metals: Cd, Hg, and Pb

AHMAD TAWFIEQURRAHMAN YULIANSYAH , INDRA SURYA , YUDHA GUSTI WIBOWO , HIMAWAN TRI BAYU MURTI PETRUS , DEDY ANWAR , Hana Safitri , Sudibyo Sudibyo

Researches

2022

Penelitian Dana Lokal Perguruan Tinggi

Pembuatan Sediaan Sabun Mandi Cair dengan Bahan Baku Minyak Kelapa dan Ekstrak Daun Sirih (Piper Betle L.)

LILIS SUKEKSI , HAMIDAH HARAHAP , INDRA SURYA

2023

Pengaruh Saponifikasi Dingin terhadap Karakteristik dan Kemampuan Daya Hambat Jamur dan Bakteri pada Sabun Herbal Alami dari Daun Ketepeng (Cassia alata L)

DR IRIANY, IR, MSC , LILIS SUKEKSI , INDRA SURYA

Community Services

2016

Ipteks Bagi Masyarakat

Peningkatan Kualitas Pembuatan dan Pemasaran Susu Soya Dengan Merek Soyaku

LILIS SUKEKSI , INDRA SURYA