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*Prof. Ir. Indra Surya, M.Sc., Ph.D. was born in Palembang on June 9, 1963, and is a lecturer in Chemical Engineering at Universitas Sumatera Utara. He completed his doctoral degree in the field of Rubber and Latex at USM in 2016.*

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## Publications

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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**

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2022

Jurnal internasional bereputasi

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

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2020

Prosiding seminar internasional

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

INDRA SURYA

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2023

Jurnal internasional bereputasi

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

INDRA SURYA

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2023

Prosiding seminar internasional

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

INDRA SURYA

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2024

Jurnal internasional bereputasi

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

INDRA SURYA

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2022

Prosiding seminar internasional

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

INDRA SURYA

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2022

Jurnal internasional bereputasi

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

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2023

Jurnal internasional bereputasi

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

INDRA SURYA

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2023

Prosiding seminar internasional

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

INDRA SURYA

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2024

Jurnal internasional bereputasi

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

INDRA SURYA

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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**

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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