

Jehna Yang

Material Researcher + Designer

is a researcher and designer, specializing in **material innovation**. With a background in BA Material Engineering and an MA in Material Futures from Central Saint Martins, she has over four years of experience working as a **material developer in both the automotive and fashion industries**.

She is also the founder and **visual director** of eleele, a contemporary jewelry brand, where she has gained extensive experience in brand **editorial projects and magazine styling**.

By combining her **material and visual research** experiences, Jehna's work focuses on the practical and future-oriented application of materials in design. She helps bridge the gap between technical materials and their innovative and aesthetic utilization across **all consumer goods industries**.

CONTACT

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Hoxton, London, United Kingdom

EDUCATION

CENTRAL SAINT MARTINS London, UK, Sept. 2022 - Jul. 2024

M.A. in Material Futures

Final project : Sustainable wearables inspired by resilience of alpine plants, engineered to incorporate UV-protective and waterproof flavonoids.

- Nominated for Maison/O Green Trail Award (LVMH creative platform for regenerative luxury)

INHA UNIVERSITY Incheon, South Korea, Jan. 2013 - Aug. 2017

B.A. in Material Science and Engineering

- Dissertation title: High Temperature Deformation Characteristics of Hot-Extruded 7021 Aluminum Alloy
 - Core subjects : Creative Design, Energy&Environmental Materials, Thermodynamics of Materials, Electroproperties of Materials, Technical Behavior of Materials, Phase Transformation
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EXPERIENCE

CAMBRIDGE UNIVERSITY - SAINSBURY LAB (SLCU) London, UK, Sept. 2023 - Present

Material Researcher for UK patent project

- **Engineered self-assembling fibers** utilizing biomimicry of alpine plants for innovative textile solutions.
- Employed **advanced analytical tools**, including Keyence microscopy and Raman spectroscopy, for precise sample observation and characterization.
- Led project management efforts and conducted extensive research for funding opportunities.

DYERECYCLE London, UK, Jul. 2023 - Dec.2023

R&D Chemist & Project Manager

- **Communicated with main clients (Kering and Ikea)** to arrange the project timeline and prepare presentations of test results.

- Advanced the stabilization of **new technology for industrialization** : executed experiments for the extraction of dye from polyester textile waste, exploring redyeing techniques on new textiles under diverse conditions
- **Conducted textile material property analysis** using an Instron Universal Testing Machine (UTM) to assess strength, elasticity, and durability.
- Applied key techniques for **dye and color analysis**, including color spectrophotometry, Ultraviolet-Visible Spectroscopy (UV-Vis), and Colorimetry, to ensure precision in color matching and quality.

LG CHEM - Petrochemical Division - High Performance Material (HPM) Department

Osan, South Korea, Nov. 2019 - Apr. 2022

Synthetic Rubber Technical Service Team

Technical service manager of American and domestic customers

- Spearheaded the development of multifunctional solution styrene butadiene rubber (SSBR) optimized for **electric vehicle tires, emphasizing sustainability and performance.**
- Led the groundbreaking **sustainability project** aimed at replacing key synthetic rubber components with recycled tires, significantly advancing LG Chem's commitment to eco-friendly material innovation.
- Facilitated strategic partnerships with startups to integrate recycling solutions, closely collaborating with LG Chem's petrochemical analysis and SSBR research teams to evaluate the viability of incorporating recycled components, with a focus on environmental impact, production yield, and regulatory compliance.
- Managed the full lifecycle of product development from **lab-scale experimentation to plant-scale production, focusing on sustainable practices** and optimizing product usage in tire manufacturing.
- Conducted detailed analyses of polymer structures and compound properties using advanced techniques (GPC, RPA, Mooney viscosity), focusing on enhancing fuel efficiency, abrasion resistance, and traction in a sustainable manner.
- Ensured products met stringent European and American chemical regulations, overseeing EU REACH certification processes and promoting sustainable industry standards. assess strength, elasticity, and durability.

LG CHEM - Petrochemical Division - High Performance Material (HPM) Department

Seoul, South Korea, Jan. 2019 - Nov. 2019

Associate in Product Development Planning Team

- **Led market analysis for sustainable synthetic rubber in the tire and shoe sectors**, guiding strategic development.
- Compiled market insights for sales and research, facilitating informed product innovation.
- Organized strategy meetings and "gate reviews" for R&D, evaluating new product feasibility and guiding development plans.
- **Managed pilot to mass production trials**, ensuring compliance and sustainability in product launch

EXHIBITION

- **CENTRAL SAINT MARTINS GRADUATE SHOW** London, UK, June. 2024
Performance mountain gear made of biodegradable and self-assembled textile using biomimicry from alpine plants
- **BASE MILAN** Milan, Italy, Apr.2024
Material Futures group exhibition during Milan design week
- **LETHABY GALLERY** London, UK, Mar.2023
Collaboration project with *DeepMind from Google*
Future Organ Transplant ; speculative design project to imagine about future organ transplant system using AI technology in the future

HONORS, AWARDS & CERTIFICATION

- **Nominated - Maison/0 Green Trail Award** London, UK, June. 2024
Maison/0 is the Central Saint Martins-LVMH creative platform to help regenerate our climate and biodiversity and to empower emerging talents to design a better future
 - **LGChem's Best practice festival** Seoul, South Korea, Oct. 2021
A part of project to increase the profit of the operation division
Made a presentation about result, analysis, and explanation of real cases
 - **Best performance as technical service manager in LGChem in the HPM department**
Seoul, South Korea, Apr. 2021
 - **Verification of Accreditation for Engineering** Incheon, South Korea, Aug. 2017
Certified by ABEEK(Accreditation Board for Engineering Education of Korea)
Certification guarantees that students are fully ready to perform in international fields as global professional engineers
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ADDITIONAL SKILLS

- Brand Director of Jewellery Brand ELEELE** London, UK, 2023
- Founded the independent jewelry brand based in Seoul and London
 - Developed and implemented the brand's **artistic vision and design strategy**, focusing on slow fashion and timeless jewelry designs crafted from high-quality sterling silver.
 - Managed vendor relationships and controlled product stocks at select shops, ensuring optimal inventory levels and product availability.
 - Collaborated with local craftsmen in Seoul, enhancing the growth and sustainability of the small artisan community through active engagement and support.
 - **Partnered with London-based stylists and magazines** to secure features for the products, increasing brand visibility and market reach.
 - **Directed visuals and styled lookbooks**, overseeing the creative process from concept to execution to ensure brand consistency and appeal.
 - **Handled fashion and snap photography, including Photoshop editing for social media content**

Fluent in English

Native Proficiency in Korean

Regular donor for UNHCR programs since 2020

Regular donor for the Korean Animal Welfare Association since 2021