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KOALA Tech Inc.

Organic Laser Device R&D / Semiconductor Lead Engineer

Kyushu Univ. Deep Tech Startup

Job Information

Hiring Company
KOALA Tech Inc.

Job ID
1524763

Industry
Electronics, Semiconductor

Job Type
Permanent Full-time

Location
Fukuoka Prefecture, Fukuoka-shi Nishi-ku

Train Description
Chikuhi Line 1, Kyudai-gakken-toshi Station

Salary
7.5 million yen ~ 11 million yen

Refreshed
April 18th, 2025 13:00

General Requirements

Minimum Experience Level
Over 6 years

Career Level
Mid Career

Minimum English Level
None

Minimum Japanese Level
Native

Business-level communication in either Japanese or English is OK

Minimum Education Level
Bachelor's Degree

Visa Status
Permission to work in Japan required

Job Description

Background of Recruitment

As **XR devices and wearable healthcare devices** continue to become **smaller and lighter**, our technology is expected to be a **key platform** that brings **new value to society**. We have already conducted **joint research and development** with **Mitsui Chemicals, Inc. and Sony Group Corporation** , and in the near future, we aim to **collaborate with global companies**.

As **technology development and business expansion accelerate**, we are entering a **critical phase** where we will **fully launch business development efforts** targeting **display manufacturers and XR device makers**. To lead these efforts, we

are looking for a **highly skilled engineer**.

Although we are still a **small team with limited resources**, your work will have a **direct and meaningful impact**. This is an **exciting opportunity** where you can take **ownership of projects** and **see the results firsthand**. If you are passionate about bringing **a revolutionary Japanese technology to the world**, we invite you to **join us and shape the future!**

Job Description

We are finalizing the **fundamental design** of **RGB (Green, Red, Red) devices** and plan to accelerate development by establishing **strategic alliances with display and semiconductor-related manufacturers**.

This position plays a **key leadership role** in **planning and executing development strategies**, **leading Proof of Concept (PoC) projects for display solutions**, and **negotiating and structuring alliances** with partner companies.

Key Responsibilities

- **Supporting the transition from research to development:**
    - Ensure a smooth transition from **research to development phases** and establish the foundation for **commercialization**.
- **Strategic roadmap planning and execution:**
    - Work with the **management team** to **define and execute** the roadmap from **development to commercialization** while leading the team.
- **Backplane circuit development and strategy for PoC projects:**
    - Plan and execute **development strategies** for the **backplane (drive circuit)** needed to advance display solution PoC projects.
- **Alliance partner relationship management:**
    - Build and manage relationships with **alliance partners** to establish a **strong collaboration framework**.

This role provides an exciting opportunity to **merge cutting-edge display technology with semiconductor engineering** to create **new value** in the industry. If you are an engineer looking to **lead technology commercialization** and **accelerate development through strategic alliances**, this is the perfect position for you.

Immediate Challenges & Focus Areas

Current Initiatives

Our technology originates from **Professor Chihaya Adachi of Kyushu University**, a world-renowned expert in **organic EL (OLED) and TADF (Thermally Activated Delayed Fluorescence)**.

Based on **academic demonstrations published in 2019**, we established the **fundamental blue device technology in 2023**, achieving **both directionality and monochromaticity**. Currently, we are **rapidly advancing the development of green and red devices**.

By applying this technology to **next-generation microdisplays**, we aim to **significantly enhance optical systems**, making a major impact on the **AR/VR industry**. While we have focused primarily on **emission device design**, we now need a **visionary development leader** to transform this technology into **a viable display solution**.

Target Industries

- **OLED Manufacturers**: Companies seeking to **enhance OLED display performance** and address emerging market demands.
- **Material Suppliers**: Companies providing **organic materials** for OLED manufacturers.
- **Semiconductor Companies**: Firms involved in **circuit design and manufacturing** for **micro-OLED silicon substrates**.

Our Approach

- **Strategic IP Portfolio Development**: Systematically securing patents related to **OSLD (Organic Semiconductor Laser Display) technology**.
- **Joint Research with Alliance Partners**: Supporting **performance evaluation, prototyping, validation, and technology transfer**.
- **Technology Licensing**: Offering **licensing agreements** to facilitate the commercialization of OSLD technology.

Mid- to Long-Term Challenges

The **ultimate challenge** of this position is the **commercialization of organic laser technology**—an ambitious and groundbreaking endeavor.

We are working toward **real-world implementation and optimization** of organic lasers, ensuring they can be **widely adopted across industries**.

Your **expertise and leadership** will be **critical** in shaping the future of organic lasers, **creating new value**, and **delivering the world's first organic semiconductor laser devices** to the market.

Join us in **this historic challenge** and be part of a team that will **change the industry!**

Why Join Us?

At **KOALA Tech**, you will have the opportunity to engage in **cutting-edge research in lasers and organic electronics** , working alongside an **internationally diverse team** to develop **game-changing technology**.

You will also have access to **world-class research infrastructure**, including the **Kyushu University OPERA Center**, led by **Professor Chihaya Adachi**, a global leader in the OLED field.

We invite you to **join us in pioneering new markets**, **developing next-generation laser devices**, and **driving the commercialization of organic semiconductor laser technology**.

We have already **collaborated with Mitsui Chemicals and Sony Group** and plan to **expand partnerships with global corporations**.

As XR devices and **wearable healthcare technology** continue to evolve, our technology is expected to become a **key platform** enabling **lighter and more compact devices**.

This is an opportunity to **develop groundbreaking products** that have the potential to **revolutionize daily life** and **change the world**.

Team & Diversity

- **Engineering Team**: 4 members (Japanese, French, Iranian, and Indian engineers).
- **Company Diversity**:
  - **28% non-Japanese employees**.
  - **42% female employees** (as of October 2024, including executives).
  - A **highly skilled team** with **PhD holders and professionals from major corporations**.

Work Location

Fukuoka, Japan
Kyushu University Academic Research Collaboration Center, Room 215
4-1 Kyudaishinmachi, Nishi-ku, Fukuoka City

Employment Type

Full-time Employee

Trial Period

6 months

Salary & Benefits

Estimated Annual Salary

¥7,500,000 – ¥10,500,000 (Stock options included).

Estimated Monthly Salary

- **¥7,500,000 annual salary → ¥625,000/month** (Base salary: ¥542,000 + Fixed OT: ¥83,000).
- **¥10,500,000 annual salary → ¥875,000/month** (Base salary: ¥758,000 + Fixed OT: ¥116,200).

Overtime Pay

Includes **20 hours of fixed overtime** per month. Additional overtime is **compensated separately**.

Work-Life Balance

Our **engineering team currently works with almost no overtime** . We value **efficiency and work-life balance**, ensuring that employees can **maximize productivity while maintaining a healthy lifestyle**.

Bonuses

None

Salary Increases

Annual review every **May**, based on performance.

Remote Work

Primarily on-site work.

Hiring Process

1. **Document Screening**
2. **Interviews (2 rounds)**
   - **First interview**: Online
   - **Second interview**: In-person
3. **Final Offer Discussion**
4. **Aptitude Test Required**

For candidates outside Fukuoka:

- We offer **flexible interview options**, including **online and in-person interviews**.
- Candidates are **required to visit the Fukuoka office at least once** for the final interview.
- **Travel expenses for interviews** will be covered.
- **Relocation support** is negotiable.

Required Skills

Required Qualifications

◆ Candidates must have the following experience:

1. **At least 5 years of R&D experience** in one of the following fields: **display drive circuit design, CMOS circuit design, or semiconductor circuit design**, with a proven track record as a **key member** in launching **new products or new technologies**.
2. **Key involvement in joint research and development projects** with other companies or universities.

Preferred Qualifications

- Proven experience as a **key member in joint research and development projects** with companies or universities.
- Experience **leading teams or projects** and achieving successful outcomes.
- Comfortable communicating in **English** (using translation tools or dictionaries for communication with engineering team members is acceptable).
- Strong **interpersonal skills**, with the ability to **communicate effectively with people from diverse nationalities and generations**.

Company Description