



Organic Laser Device R&D / Semiconductor Lead Engineer

Kyushu Univ. Deep Tech Startup

募集職種

採用企業名

株式会社KOALA Tech

求人ID

1524763

業種

電気・電子・半導体

雇用形態

正社員

勤務地

福岡県,福岡市西区

最寄駅

筑肥線 1、 九大学研都市駅

給与

750万円~1100万円

更新日

2025年04月18日 13:00

応募必要条件

職務経験

6年以上

キャリアレベル

中途経験者レベル

英語レベル

無し

日本語レベル

ネイティブ

Business-level communication in either Japanese or English is OK

最終学歴

大学卒: 学士号

現在のビザ

日本での就労許可が必要です

募集要項

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.

スキル・資格

Required Qualifications

- Candidates must have the following experience:
 - 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.

会社説明