



November 22, 2022

To whom it may concern,

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Notice of Presentation at The 39th “Sensor Micromachine and Application System” Symposium - Contribution to the Research of Quantum Sensor for Exploring the Dark Matters in the Space -

We are pleased to inform that we have succeeded in the verification of the alkali atomic microcells for quantum sensors (our produce) at The University of Tokyo, and the results were announced in the presentation at the domestic academic conference (The 39th “Sensor Micromachine and Application System” Symposium) as released on "Notice on the Successful Verification of Microcells for Quantum Sensors at The University of Tokyo -Contribution to the Research of the Dark Matters in the Space-" dated November 7, 2022.

1. Overview

Recently, quantum sensors are being developed for practical use in many fields including artificial satellite, next generation vehicle, etc. This time, a presentation of quantum sensor for exploring the dark matters in the space mainly by Assistant Professor Takatoshi Aoki from The University of Tokyo (See Fig. 1, a scene of the conference where the presentation was carried out). There were many discussions also on alkali atomic microcells (our produce), and we will build stronger relationships with cutting-edge researchers in the world also after this.



(a)

(b)

Fig. 1

- (a) Asty Tokushima where the academic conference was held
- (b) A scene of presentation in the site. Active discussions were carried out among many cutting-edge researchers of the world in the various fields including telecommunications, energy, space, medical care, etc.

2. Information on the presentation

Conference title:

The 39th "Sensor Micromachine and Application System" Symposium

Date: November 14, 2022 (Mon) – November 17, 2022 (Thu)

Venue: Asty Tokushima (Tokushima Pref.)

Date and time: November 16, 2022 (Wed) 12:50-14:20

Title: Cs Atomic Microcell Spectroscopy for Quantum Sensors

Presentation No.: 16P2-P-19

Conference URL : <https://sensorsymposium.org/>

3. Description of terms

◆Quantum sensor

Atom, photon, electron, neutron, etc. are included in quantum, and this quantum sensor uses the characteristic phenomenon. Atomic interference inertial sensor is the representative sensor with 100-1000 times the performance of ordinary inertial sensors. It is expected to realize an automatic driving system without using GPS.

As needs of the time and society drastically change, we are aiming for business expansion by expanding the existing domains to new domains by finding new challenges and needs. We will continue to contribute to achievement of "decarbonated society" by providing solutions in "communication," "energy" and "space" fields.