

## PRESS RELEASE

### Lasertec Corporation

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(Tokyo Stock Exchange Prime Market, Code 6920)

### **Lasertec Releases Electro-Chemical Reaction Visualizing Confocal System, ECCS B520**

**Yokohama, May 9, 2025** - Lasertec Corporation announced today the release of ECCS B520, an electro-chemical reaction visualizing confocal system designed for the operando observation and measurement of all-solid-state batteries.

Lasertec has been providing the ECCS series to customers in the battery industry for many years, contributing to improvements in the quality of lithium-ion batteries used in electric vehicles and smartphones. The series has been particularly well received for use in R&D and defect analysis applications.

Recently, research on all-solid-state batteries has been conducted in earnest, and their sulfide-based variants require high confining pressures. The newly released ECCS B520 can perform the operando observation and measurement of samples while uniformly applying pressure at the megapascal level—a feat that was previously challenging to achieve.

We have also replaced the xenon lamp used in the previous model with an LED lamp, which has a longer lifespan and stable brightness, as the light source for the new model.

Lasertec remains committed to developing unique solutions that meet customer needs, facilitating quality improvement and productivity enhancement, and contributing to the advancement of the battery industry.

### **Features**

- Pressurization mechanism capable of applying the high confining pressure (10MPa) required for sulfide-based all-solid-state batteries
- High-rigidity observation cell with excellent pressure uniformity
- Function for monitoring pressure changes during charging and discharging
- Cutting unit capable of creating cross-sections of electrodes up to 50mm in length
- LED light source with a longer lifespan and higher stability

### **Applications**

- Analysis of reaction distribution through the electrode thickness direction
- Analysis of the expansion and contraction of active materials
- Observation of dendrite formation and lithium metal dissolution and deposition
- Observation of crack formation in the solid electrolyte layer



ECCS B520

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