

## Research and development of next-generation virus detection system

We aim to build an ultra-sensitive virus detection system with our proprietary ABC light semiconductor and silver tabular particle technology.

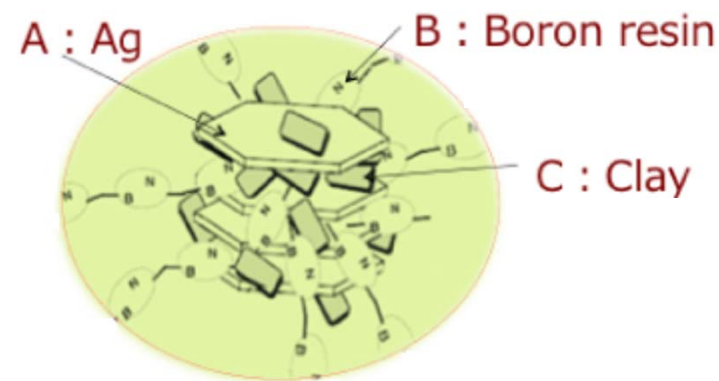
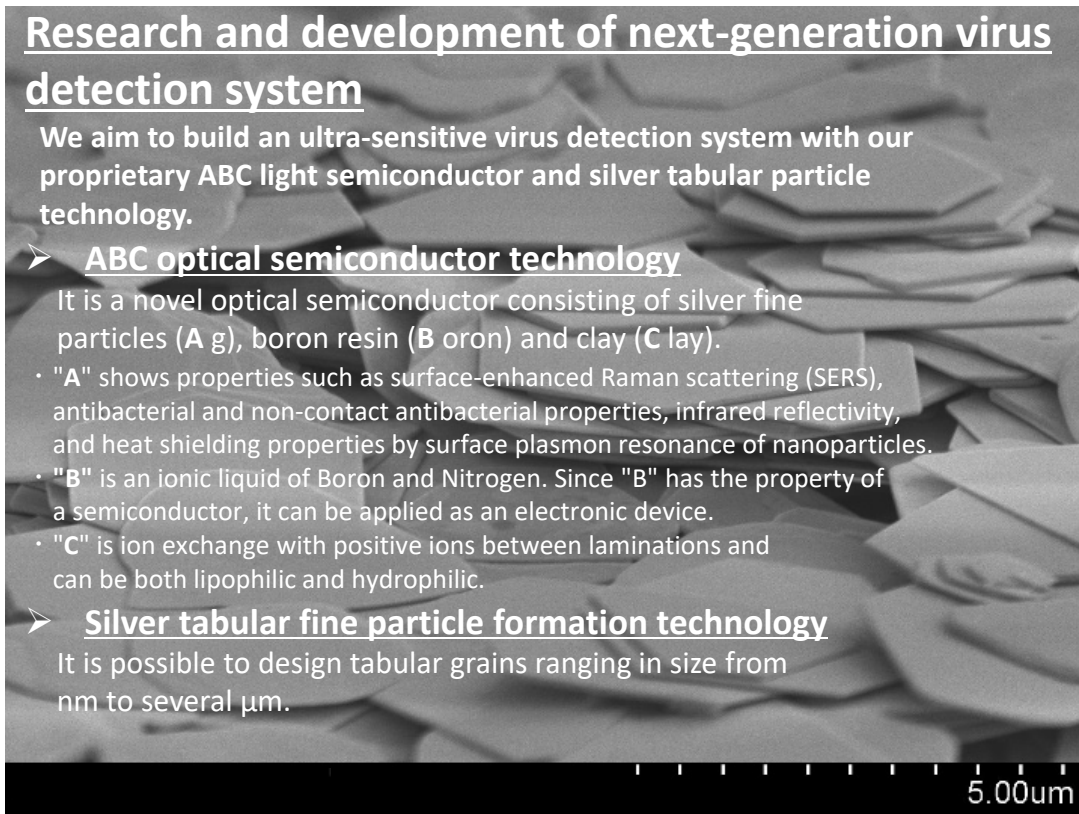
### ➤ ABC optical semiconductor technology

It is a novel optical semiconductor consisting of silver fine particles (A g), boron resin (B oron) and clay (C lay).

- "A" shows properties such as surface-enhanced Raman scattering (SERS), antibacterial and non-contact antibacterial properties, infrared reflectivity, and heat shielding properties by surface plasmon resonance of nanoparticles.
- "B" is an ionic liquid of Boron and Nitrogen. Since "B" has the property of a semiconductor, it can be applied as an electronic device.
- "C" is ion exchange with positive ions between laminations and can be both lipophilic and hydrophilic.

### ➤ Silver tabular fine particle formation technology

It is possible to design tabular grains ranging in size from nm to several  $\mu\text{m}$ .



ABC optical semiconductor



Absorbed color

B G R IR

Multi-size silver nanoplate water dispersion

AIRBIC, Room A03, Food, Medicine and Bio-Products