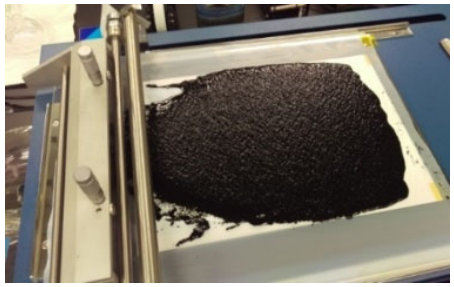
Development of Mechano-Activated Materials

Mechano-Activated Materials Research Group　Hirosato MONOBE

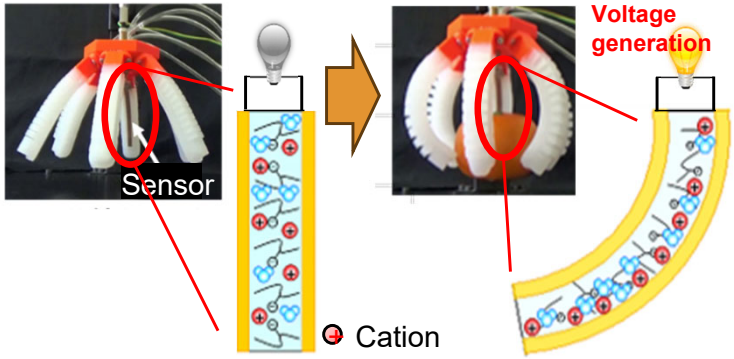
AIST
Create the Future, Collaborate Together

1. **Nanocarbon Ink Process Development**
   Exploring dispersion processes for printable electrodes
2. **Uniform CNT Actuators**
   Performance equalization with 100 mm CNT films
3. **Demo Devices for Soft Actuators**
   Prototyping for sensor–actuator applications
4. **Sensor-Embedded Soft Robotic Hand**
   Grasping and tactile evaluation via bending sensors
5. **Infrared-Responsive Actuators**
   Light-controlled bending using Liquid Crystal Polymer with photothermal layers

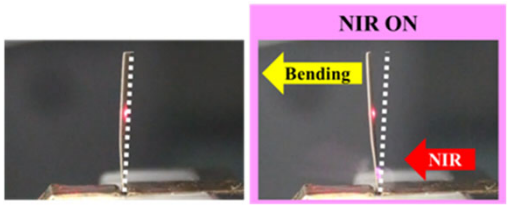


A4 size CNT electrodes

Demo devices for soft sensor–actuator prototypes



Flexible sensor–embedded soft robot hands



Infrared–responsive LCP actuators

Sensors and Actuators: A. Physical, **377** (2024) 115770.