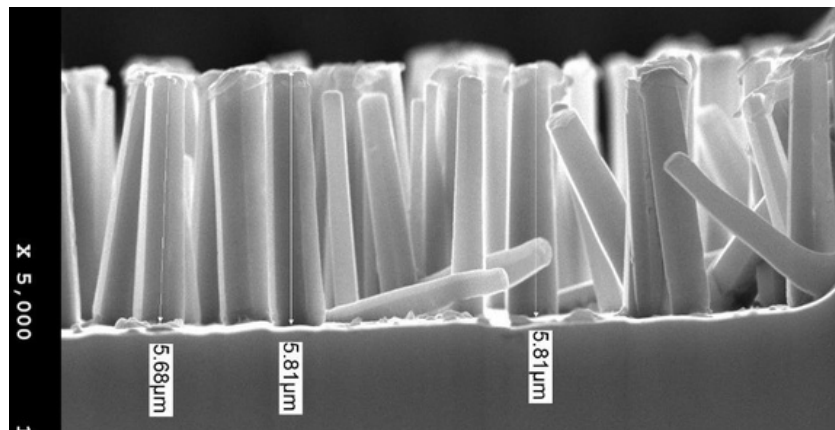
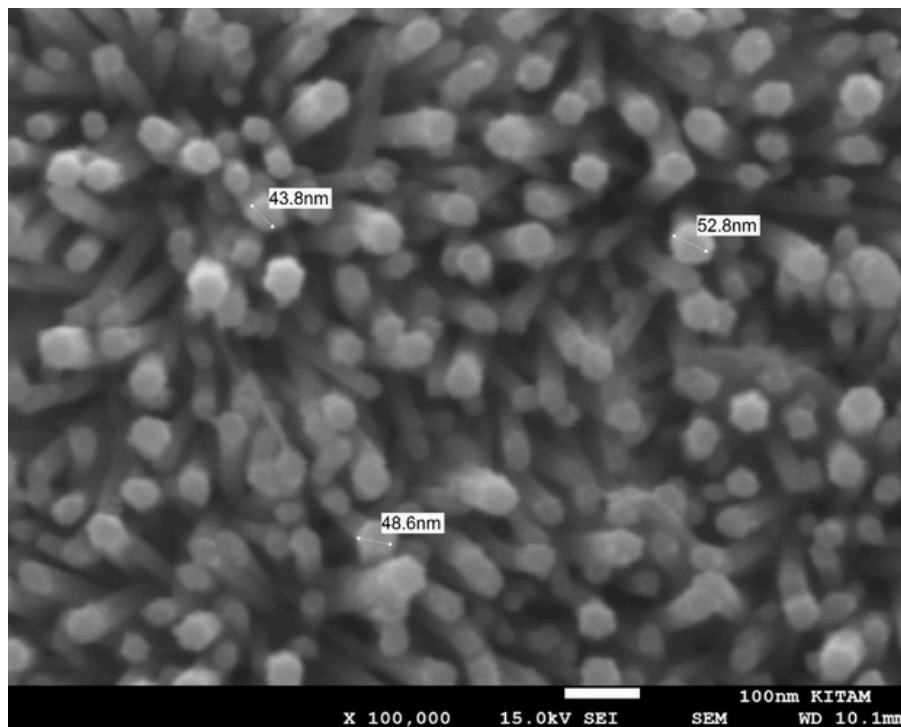


# MARKSTRONICS HYDROTHERMAL SYSTEM

## 9500 SYSTEM



ZnO Nanorod synthesized by MARKSTRONICS SYSTEM



MARKSTRONICS HYDROTHERMAL SYSTEM includes

The hydrothermal system produce all materials from the solutions such organic materials and metal oxides and all-in solutions for various applications.

FYHD-9500 produce materials from the solution as **POWDER AND THIN FILMS** on any substrate.

SYSTEM INCLUDES A HIGH PRESSURE REACTOR AND TEMPERATURE CONTROLLER

The FYHD-9500 is a complete functional and nanomaterial production system.

### Specifications

High pressure reactor

Reaction temperature: RT to 280 oC

100 ml PTFE or black carbon:TFE sample holder

PID Temperature controller

System automatically adjusts internal-pressure from low to high pressure by temperature or solution volume or external gas.

System automatically switch on-off and hold System automatically cools by air cooling system when reaction is completed System is controlled by heating rate Homogenous heating in XYZ directions Reaction time: 1 h to 24 h or more



Hydrothermal PTFE sample holder

M FYHT-8000 nanomaterial and functional production system performs the followings

Synthesize powder, nanopowder materials

Synthesize thin films in microstructure or nanostructure

Controlling of nanosize of materials with reaction time

Controlling of nanosize and nanostructure with reaction temperature

Controlling of nanosize and nanostructure with internal pressure

Controlling of structure of materials with external pressure

Controlling of structure of materials with pH of solution

Controlling of structure of materials with heating rate

Controlling of structure of materials with atomic ratios

Systems produces the following materials or more

- All ceramic materials
- Bioceramics
- Polymer nanocomposites
- Polymers
- Metal complexes
- Organometallic complex
- Metal complex nanocomposites
- Bioglass ceramic materials
- Carbon based materials
- Graphene , Graphene Oxide
- Boron based materials
- Coating metal oxide films on substrate
- Coating bioceramic films on substrate
- Graphene-nanocomposite materials
- Nanocomposite metal oxide materials
- Metal oxide semiconductors
- Boron nitride, boron carbide
- Film growth on any substrate
- Battery materials
- Solar cell materials
- Ferroelectric materials
- Piezzo materials
- PL materials
- Chalcogenide materials
- Biomaterials
- Hybrid materials
- and more,