

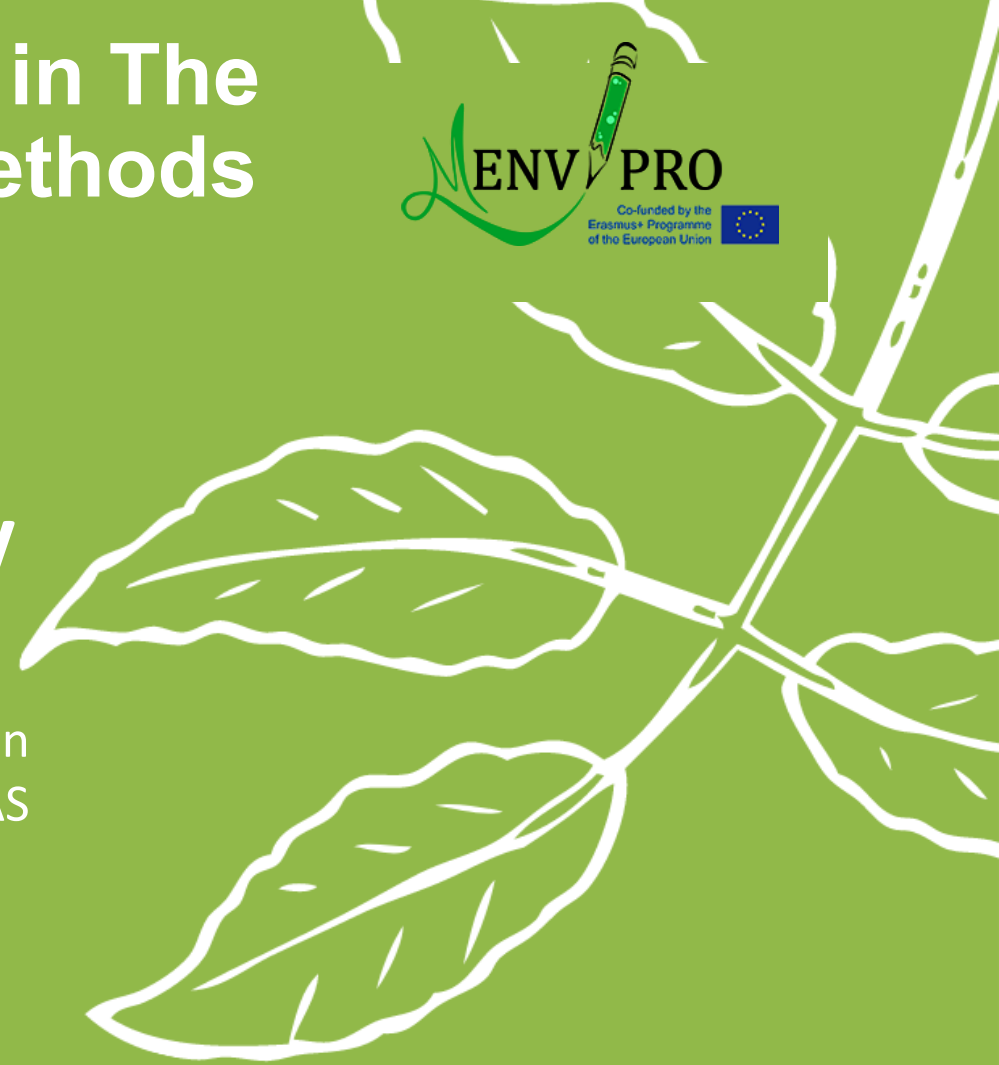
# Innovative Postgraduate Education in The Field of Environment Protection: Methods and Tools



## ERLEP laboratory: a multidisciplinary research space

Dr. Gevorg Tepanosyan  
Center for Ecological-Noosphere Studies NAS

05-07 October 2022



# BIO Presenter



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# Educational and Research Laboratory for Environmental Protection *ERLEP*

The major task

is the establishment of the shared ERLEP which is the key to ensure the high quality education standards in the field of Environmental protection.



# ERLEP equipments

*Analytical scale*



*HPLC*



*JEOL JCM-7000*



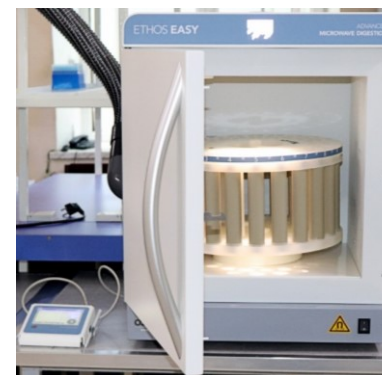
*Drying oven*



*Horiba U53G*

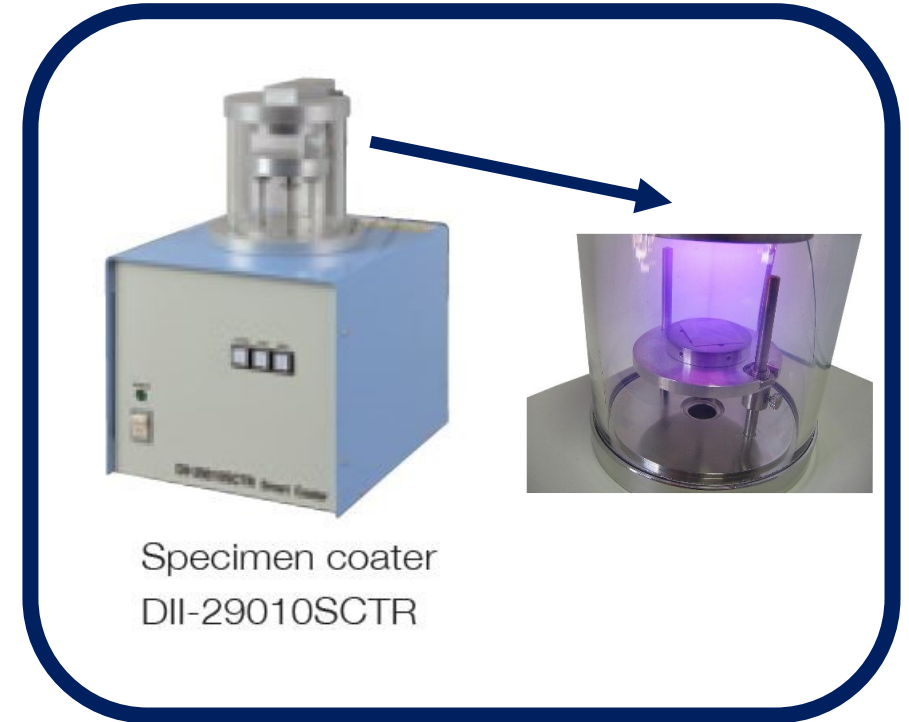
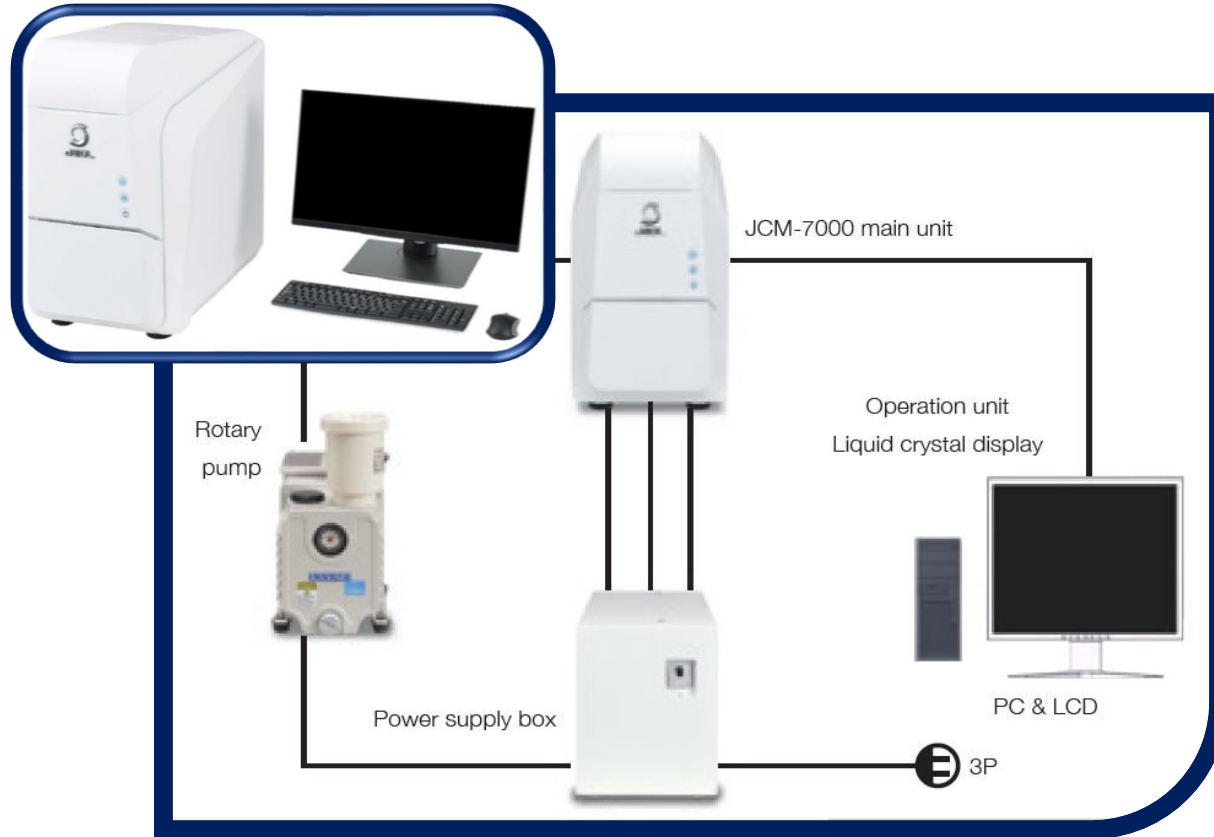


*Microwave Digestion System*



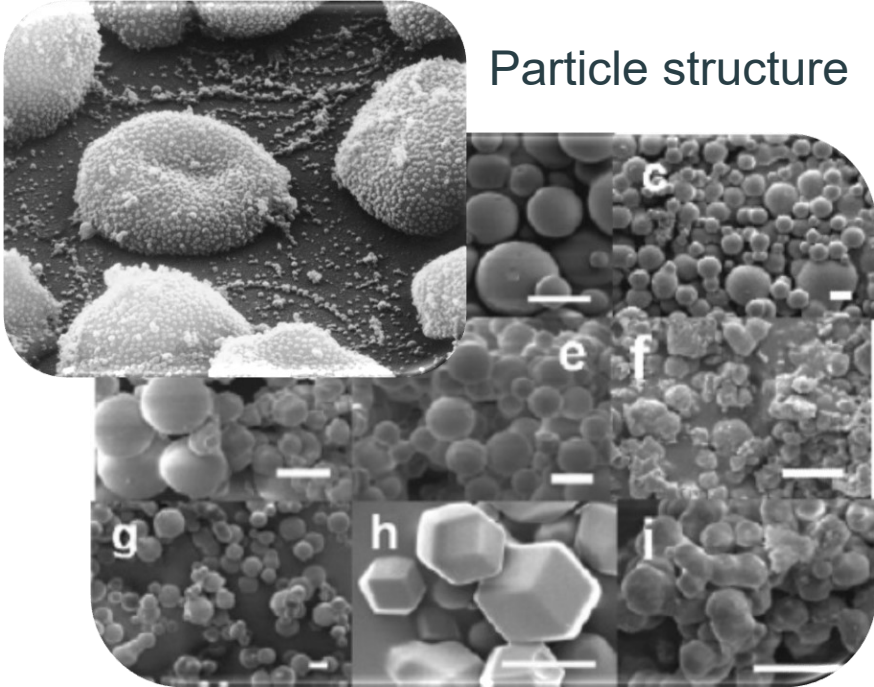


# JCM-7000 SEM and Smart coater

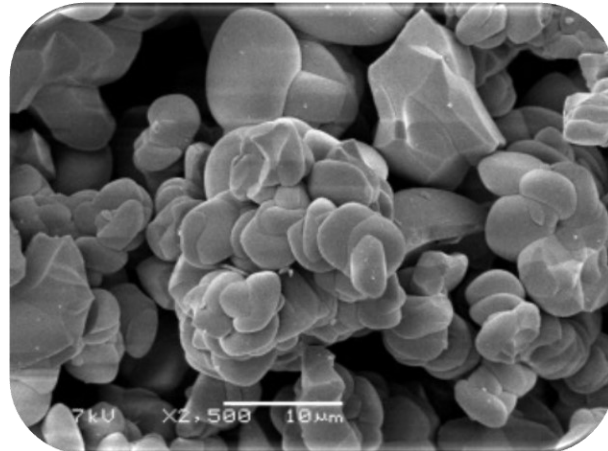


# JCM-7000 SEM application

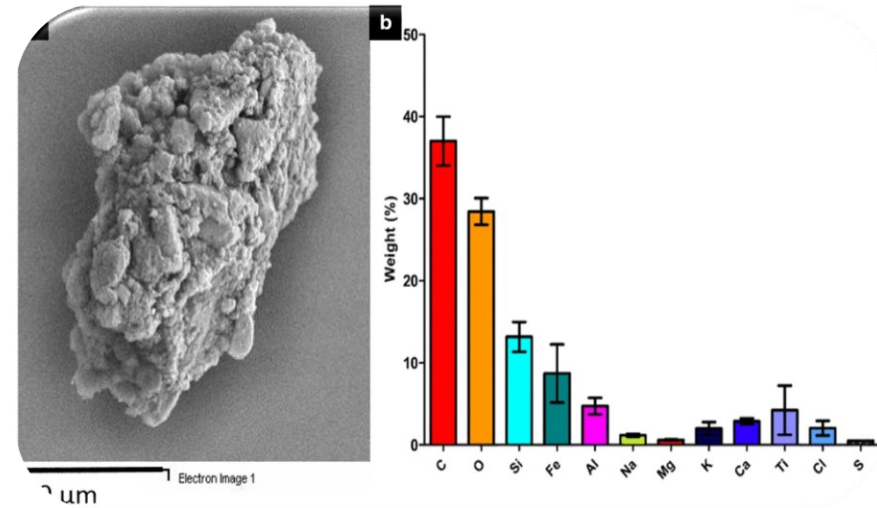
Particle structure



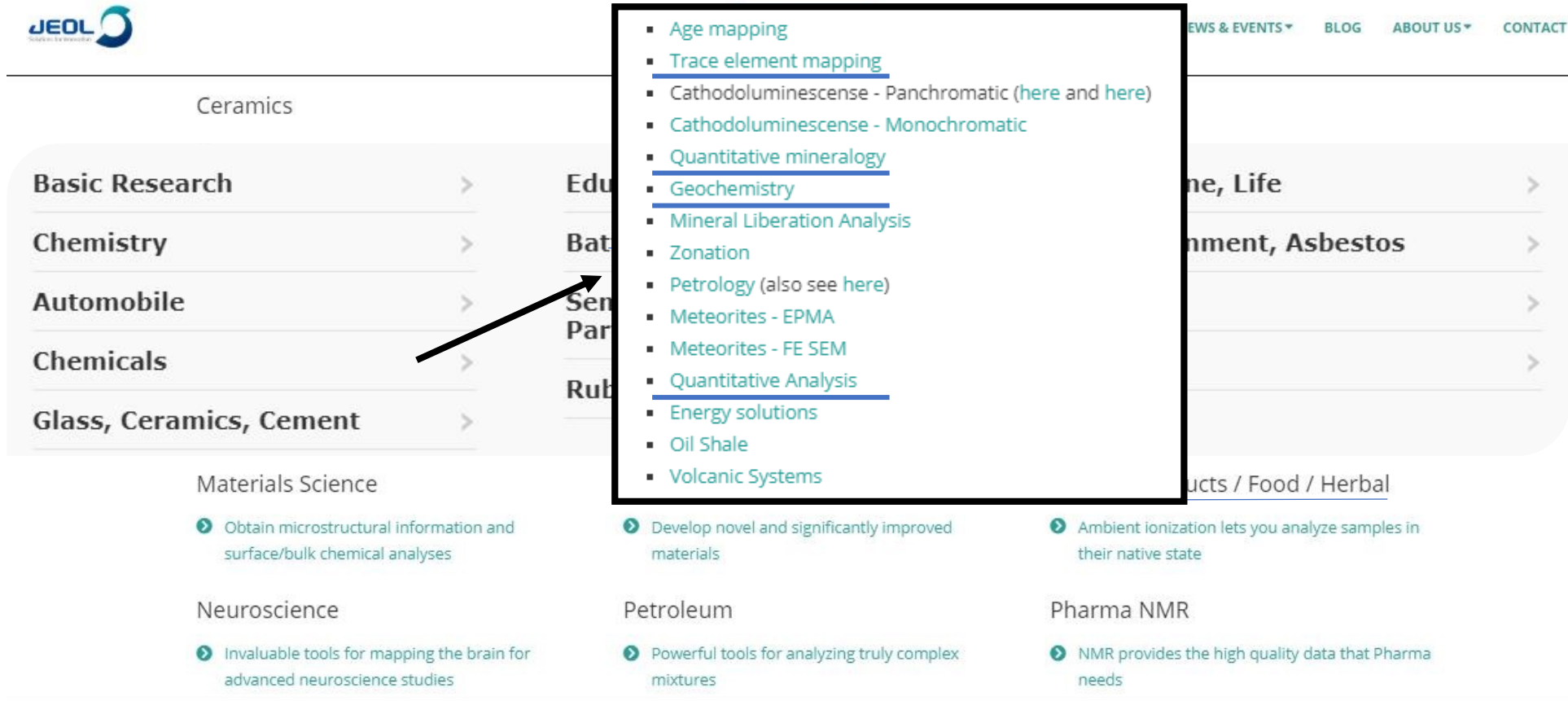
Particle size



Particle chemical composition



# SEM application fields



**JEOL**  
Solutions for the Environment

NEWS & EVENTS ▾ BLOG ABOUT US ▾ CONTACT

**Ceramics**

- Basic Research >
- Chemistry >
- Automobile >
- Chemicals >
- Glass, Ceramics, Cement >

**Materials Science**

- Obtain microstructural information and surface/bulk chemical analyses

**Neuroscience**

- Invaluable tools for mapping the brain for advanced neuroscience studies

**Petroleum**

- Powerful tools for analyzing truly complex mixtures

**Pharma NMR**

- NMR provides the high quality data that Pharma needs

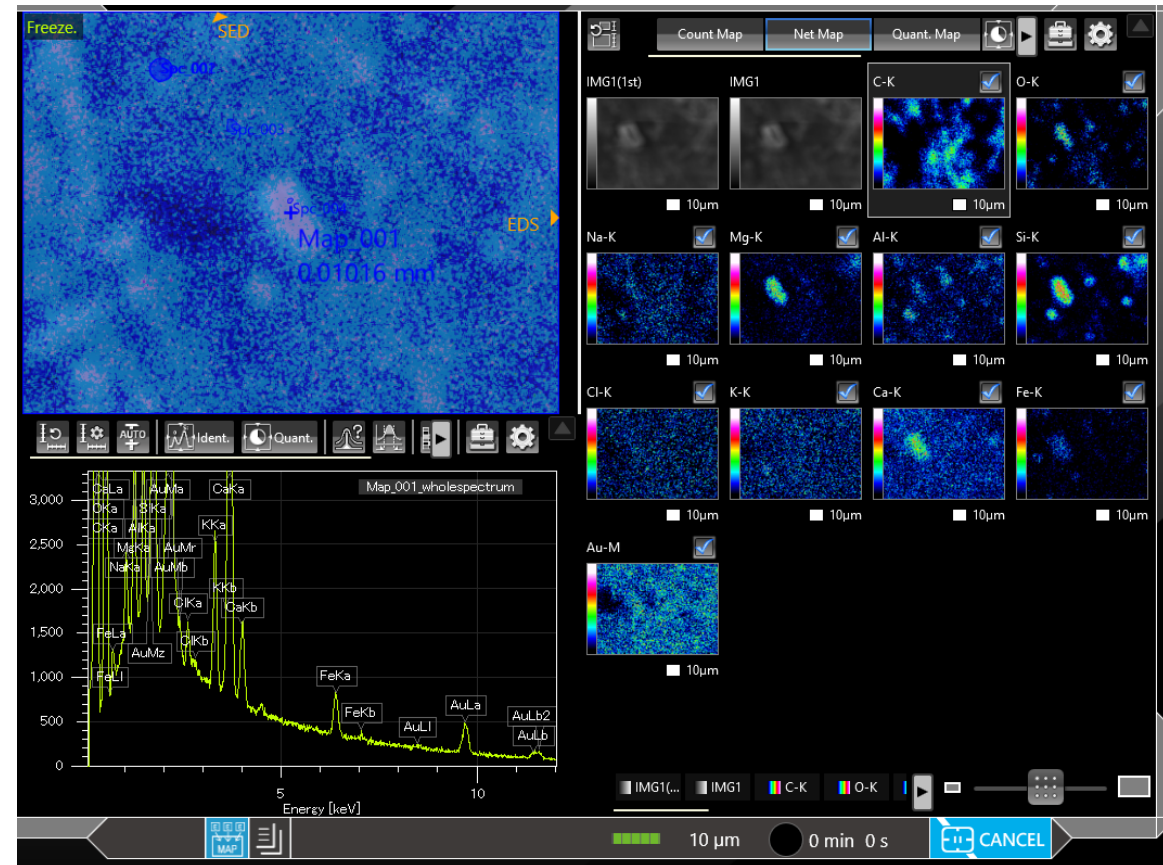
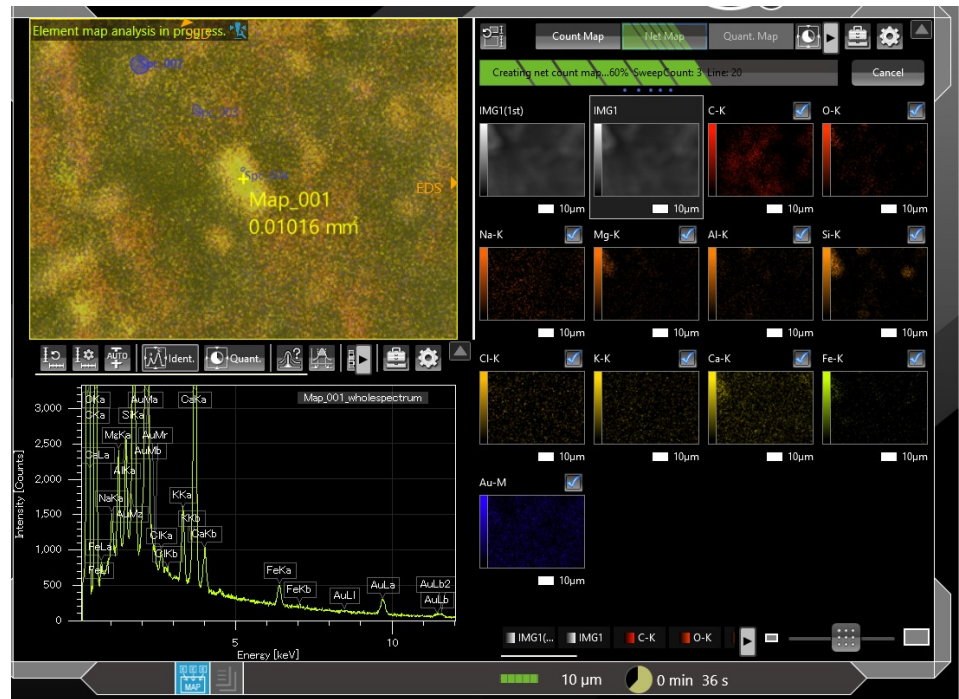
**Education, Life**

- Environment, Asbestos >
- Products / Food / Herbal >

**Applications**

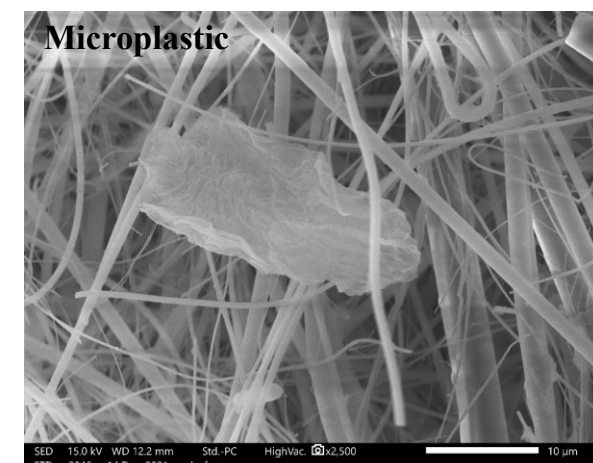
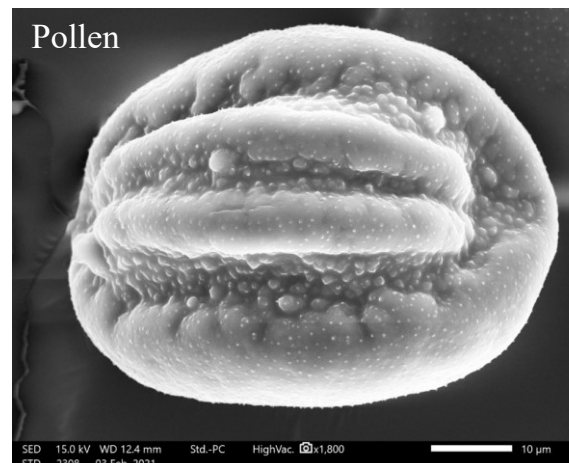
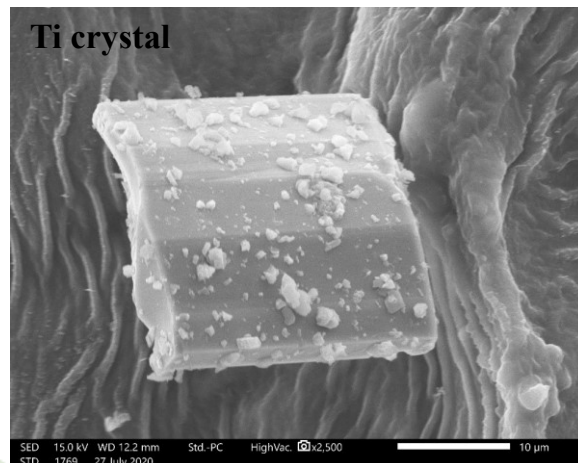
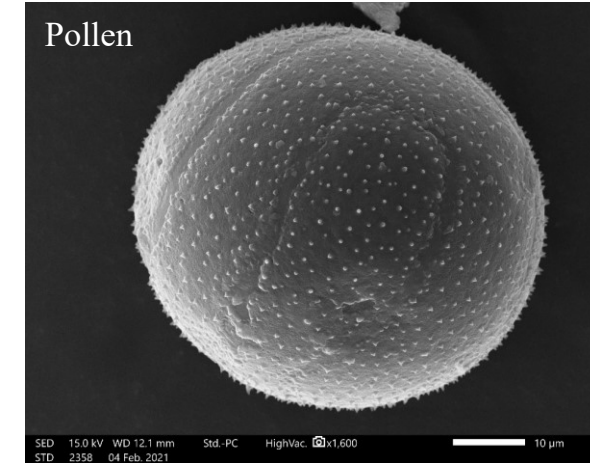
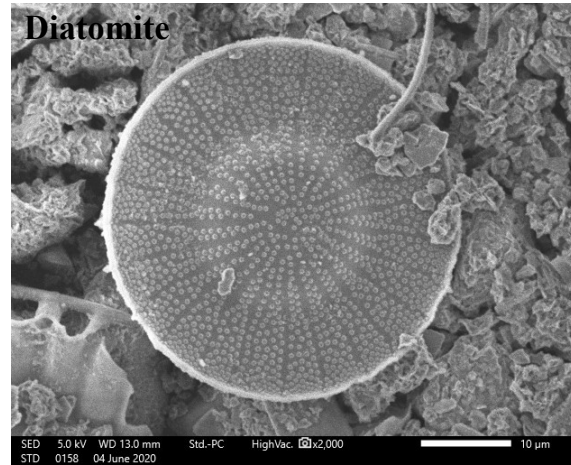
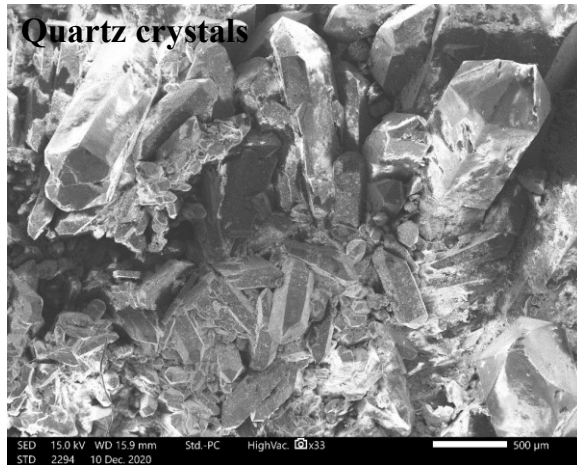
- Age mapping
- Trace element mapping
- Cathodoluminescence - Panchromatic ([here](#) and [here](#))
- Cathodoluminescence - Monochromatic
- Quantitative mineralogy
- Geochemistry
- Mineral Liberation Analysis
- Zonation
- Petrology (also see [here](#))
- Meteorites - EPMA
- Meteorites - FE SEM
- Quantitative Analysis
- Energy solutions
- Oil Shale
- Volcanic Systems

# Surface mapping





# JCM-7000 SEM





# THANK YOU !

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