

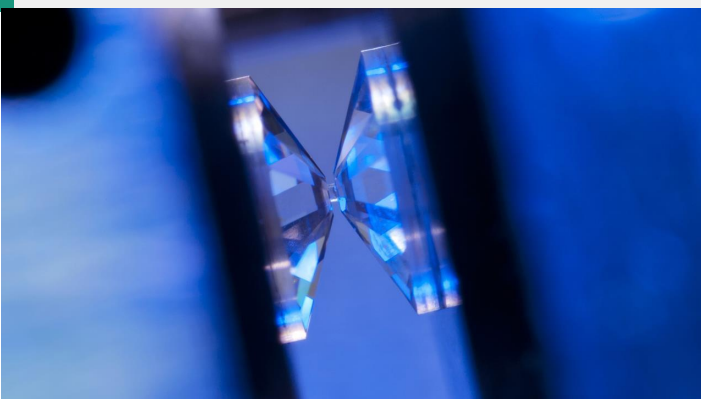
# Looking for a new way to examine materials for Hydrogen storage?

## LOOKING FOR A SAFE SOLUTION?

Our solution has additional sensor for Hydrogen which along with Argon introduction to the system provides the safest solution for analyzing Hydrogen sorption properties of materials on the market.

## LOOKING TO ANALYZE SMALL SAMPLES?

With HSA-ULNS You can analyze powder samples and thin films.



## VINCA INSTITUTE OF NUCLEAR SCIENCES

CENTER OF EXCELLENCE FOR HYDROGEN AND RENEWABLE ENERGY

D.Sc. Jasmina Grbovic Novakovic

Principal Research Fellow

E-mail: [jasnagn@gmail.com](mailto:jasnagn@gmail.com)

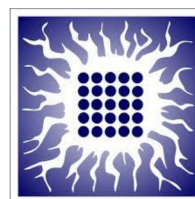
[jasnagn@vin.bg.ac.rs](mailto:jasnagn@vin.bg.ac.rs)

Address: POB 522

11000 Beograd, Serbia

Phone: +381 64 16 96 253

Website: [www.vin.bg.ac.rs](http://www.vin.bg.ac.rs)



Institute of Nuclear  
Sciences Vinča

## UNO-LUX NS D.O.O.

M.S. Ana Milovanovic

Director

E-mail: [office@unoluxns.com](mailto:office@unoluxns.com)

Address: Ace Joksimovica 64

11030 Beograd, Serbia

Phone: +381 11 2361 768

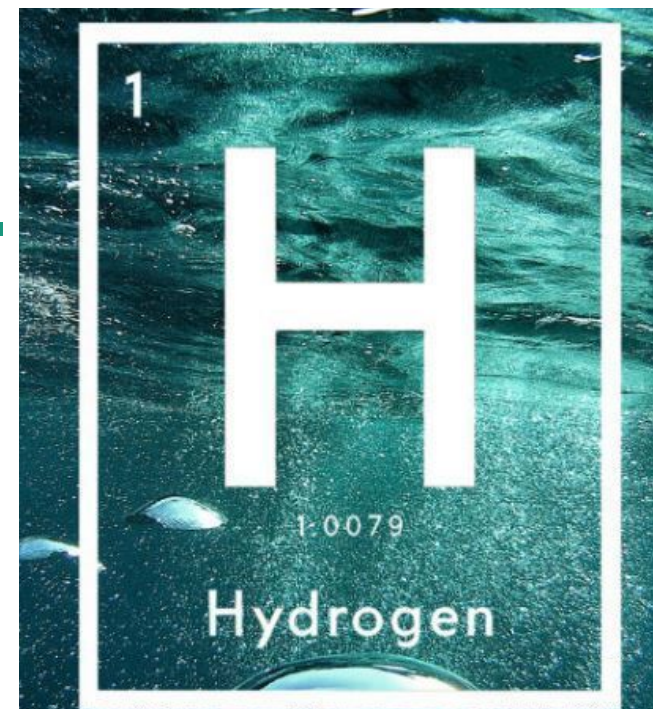
Website: [www.unoluxns.com](http://www.unoluxns.com)



UNO-LUX NS

## SUPERIOR WAY TO MEASURE HYDROGEN SORPTION

HYDROGEN SORPTION  
ANALYZER - HSA-ULNS



## HYDROGEN SORPTION ANALYZER HSA-ULNS

New improved device presents innovative technical and operational solution in comparison to existing technologies and devices.



Intelligent design improves security, safety, accuracy and "user friendly" operability for measurements of Hydrogen sorption.

In addition, HSA-ULNS has very competitive price and powerful software that enables monitoring from a distant location.

### SECURITY

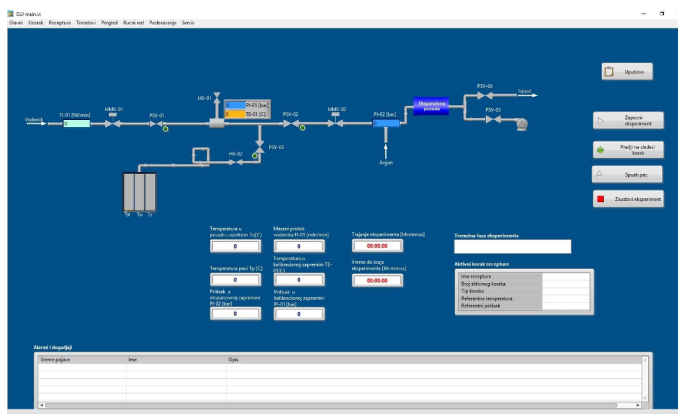
Innovative way of pneumatic furnace design and sample chamber opening/closing increase the security of a sample and quality of a measurement, while at the same time reduce physical work.

### SENSITIVITY

Reduction of a sample holder size provides a tool for examining of a thin films.

### TWO TYPES OF MEASUREMENTS IN ONE INSTRUMENT

Kinetics and thermodynamics of Hydrogen sorption yield complete set of properties available by using only one instrument.



### SOFTWARE

Monitoring and control from a distant location with enhanced user interface.



### APPLICATIONS

It can be used for examining Hydrogen sorption properties of: metal hydrides, complex hydrides, chemical hydrides, MOF, carbon based materials, amidoboranes, **catalysts for fuel cell industry and batteries, minerals and natural material composite materials** for electronics, magnetic tape and magnets.

It is possible to follow the properties of broad spectrum of solid state materials that can desorb in the range

**Temperature range:** 293.15K to 773.15K (20°C to 500°C)

**High accuracy:** approx. 0.05% of the reading (vacuum to 100 bar)

**Sample volumes:** from 1 to 3 cc

**Sample weight:** 1 mg - 10g

**Sample types:** powder samples, thin films

# FINDING THE IDEAL SOLUTION FOR YOUR LAB

## CONTACT US

jasnagn@gmail.co  
jasnag@vin.bg.ac.rs  
office@unoluxns.com