

Complex characterization of the gas-sensitive materials in real conditions

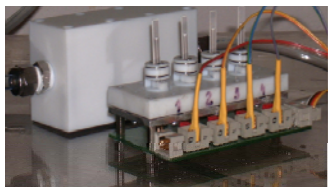
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PROSPECT**

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NIMP, Gas Sensors Group

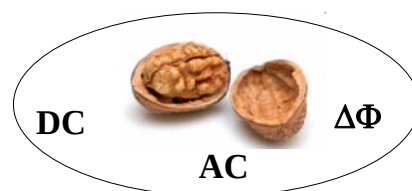
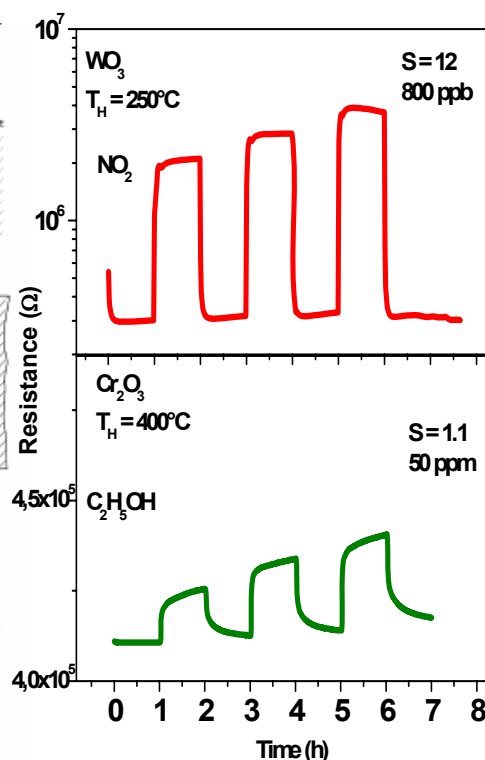
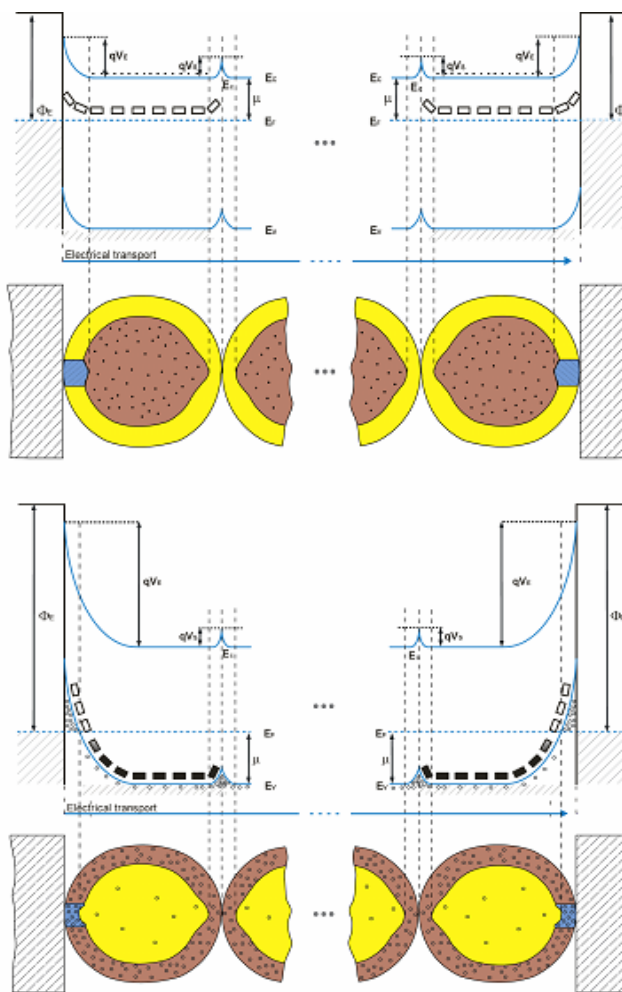
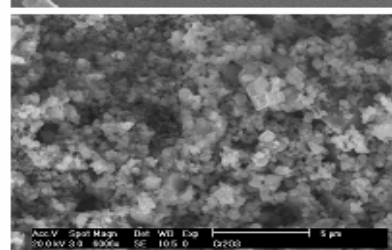
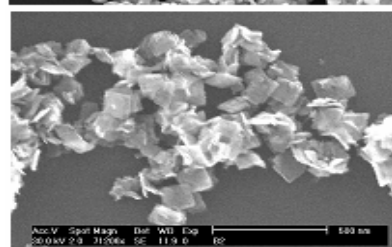
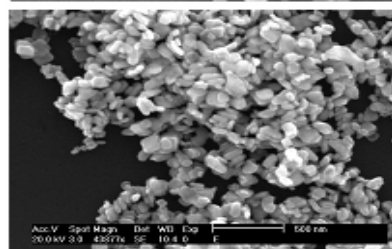
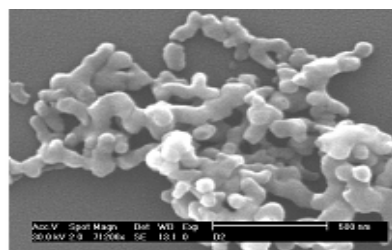
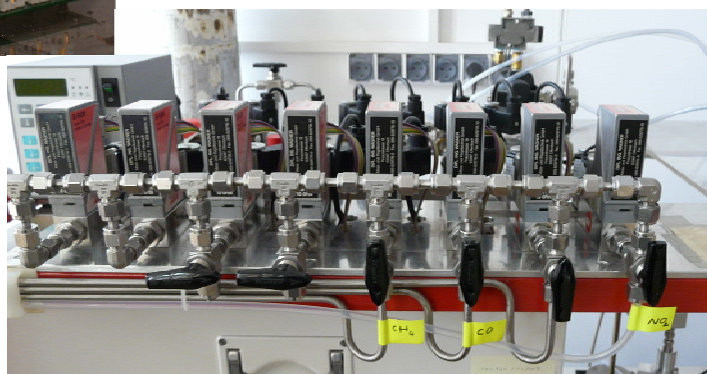
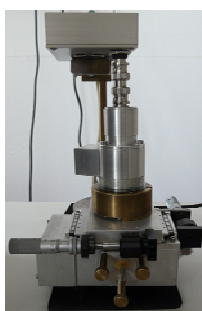
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Set up for the experimental investigation

- Gas Mixing Station
- digital debitmeter Alltech
- humidity sensor Testo 625
- Julabo thermostat
- Poseidon software
- Origin 7.5 software
- Keithley 2000 multimeter
- Keithley 6517A electrometer
- Photoacoustic analyser INNOVA 1314
- Kelvin Probe KP6500 McAllister



The experimental availabilities are:

- **Conductivity measurements:** $G = G_0 (1 + kcp)$, where k and p are constants, c the concentration (vol.%, ppm, ppb)
- **Work function measurements:** $\Phi\Delta = kBT \ln(R_F / R_I) + \chi\Delta$, where Φ is work function and χ is electronic affinity
- **Spectroscopic measurements:** catalytical activity of substrate, electrodes, and sensitive layers

Scientific Cooperation Agreement: NIMP (Romania) - IPTC (Eberhard Karls Universitaet, Tuebingen)

