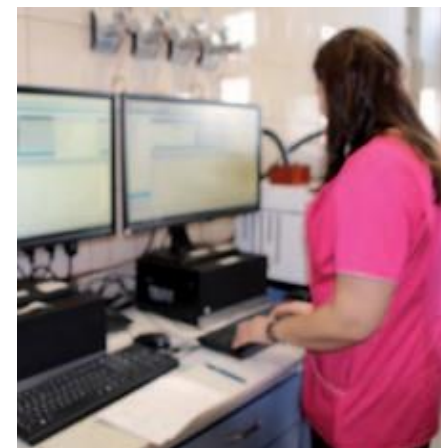




Central Mine Rescue Station S.A.
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Central Mine Rescue Station S.A.'s Chemical Laboratory offer



Chemical Laboratory performs measurements of gas reference materials and conducts research activities in accordance with the implemented management system according to PN-EN ISO/IEC 17025:2018-02 supervised by the Polish Accreditation Center.

IN THE ACCREDITATION OF PCA No. AP 028

The laboratory performs measurements of gaseous standard mixtures containing: tlen w mieszaninie gazowej

$(10 \div 19) \times 10^{-2}$ mol/mol,

- Carbon dioxide in a gaseous mixture $(2 \div 6) \times 10^{-2}$ mol/mol,
- Carbon monoxide in a gaseous mixture $(10 \div 1000) \times 10^{-6}$ mol/mol;
- $(1 \div 2) \times 10^{-2}$ mol/mol,
- Methane in gaseous mixture $(0.5 \div 6.0) \times 10^{-2}$ mol/mol;
- $(20 \div 40) \times 10^{-2}$ mol/mol,
- Hydrogen in the gas mixture $(1 \div 3) \times 10^{-2}$ mol/mol,
- Ethene in a gaseous mixture $(0.2 \div 0.6) \times 10^{-2}$ mol/mol,
- Ethane in a gaseous mixture $(0.2 \div 0.6) \times 10^{-2}$ mol/mol.

IN THE ACCREDITATION OF PCA No. AB 1584

The laboratory performs tests of air samples, mine air samples, mine gas samples, mixtures of industrial gases for determination of compactness:

- methane (50–95,00) %
- carbon dioxide (50,00–90,00) %
- nitrogen (0,10–100,00) %
- carbon monoxide (25000–50000)ppm
- oxygen (10,00–21,00) %

* Accreditation scopes are updated on an ongoing basis on the CSRG S.A. website.

OUTSIDE THE SCOPE OF ACREDITATION

The laboratory produces and performs measurements of mixtures of gaseous mixtures, which may include:

- oxygen
- nitrogen
- carbon dioxide
- carbon monoxide
- argon
- ethylene
- ethane
- air
- methane

The laboratory performs tests on samples of air, mine air, mine gas, mixtures of industrial gases from the determination of content:

- oxygen
- nitrogen
- carbon dioxide
- hydrogen
- ethylene
- ethane
- carbon monoxide
- methane
- acetylene
- propylene
- propane

The laboratory conducts research on hard coal, including:

- Determination of transient and analytical moisture according to PN-80.G-04511 / PN -ISO 11722,
- determination of heat of combustion and calorific value according to PN-ISO 1928,
- determination of total sulfur according to PN-ISO 351,
- determination of sinterability index according to PN-ISO 15585,
- determination of volatile components according to PN-G-04560,
- determination of chlorine content according to PN-ISO 587,
- determination of ash sulfur according to PN-G-04581,
- determination of actual density according to PN-G-04537.

Additional services:

- analysis of mine dust and gases for the assessment of fire hazard, explosion hazard,
- study of airflows in underground mine workings using a tracer gas, i.e. sulfur hexafluoride (SF₆),
- consulting mine laboratories in preparation for performing air and mine gas analysis.

Contact person:

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