KGHM CUPRUM

RESEARCH & DEVELOPMENT CENTRE

Technology Research Workroom

+ **Chemical synthesis reactor** with **visual analysis**
+ **Real-time control of reaction parameters**
+ **Advanced optimisation** of technological processes.

Technology research for modern industry

The workroom is equipped with a comprehensive research workstation centred on the **OptiMax 1001** platform, incorporating **a calorimetric module** and the **EasyViewer 100 visual analysis system** (METTLER TOLEDO). The OptiMax chemical synthesis reactor enables **highly precise, real-time control of reaction parameters,** which is essential for **optimising production processes** and **improving process efficiency** across a wide range of industrial applications.

Mining and metallurgical industry

- **Studies of performance** and **energy efficiency** in the **chemical processing of raw materials.**
- Development of technologies aimed at **minimising losses of valuable elements in metallurgical processes.**

Chemical and fertiliser industry

- **Development of new methods for processing mineral raw materials.**
- Design of **customer-specific crystallisation methods for mineral salts.**
- **Optimisation of drying** and **calcination processes in fertiliser production.**
- Investigation of **stability, solubility** and **leachability of fertiliser products** under varying environmental conditions.

Water management and desalination technologies

- **Analysis of the effectiveness of unwanted ion removal methods** in water treatment processes.
- **Optimisation of energy performance** in **membrane-based** and **thermal desalination technologies.**

Thanks to its broad technical capabilities, the Technology Research Workroom is well equipped to undertake a wide range of studies supporting both research and development projects and analyses intended for industrial implementation.

Contact us

Energy Technologies Department

Phone: +48 **71 78 12 243**
Mobile: +48 **785 909 517**

KGHM CUPRUM Sp. z o.o. – CBR

Gen. W. Sikorskiego 2-8,
53-659 Wrocław, Poland

+48 **71 781 22 01**
kghm@kghmcuprum.com
kghmcuprum.com