

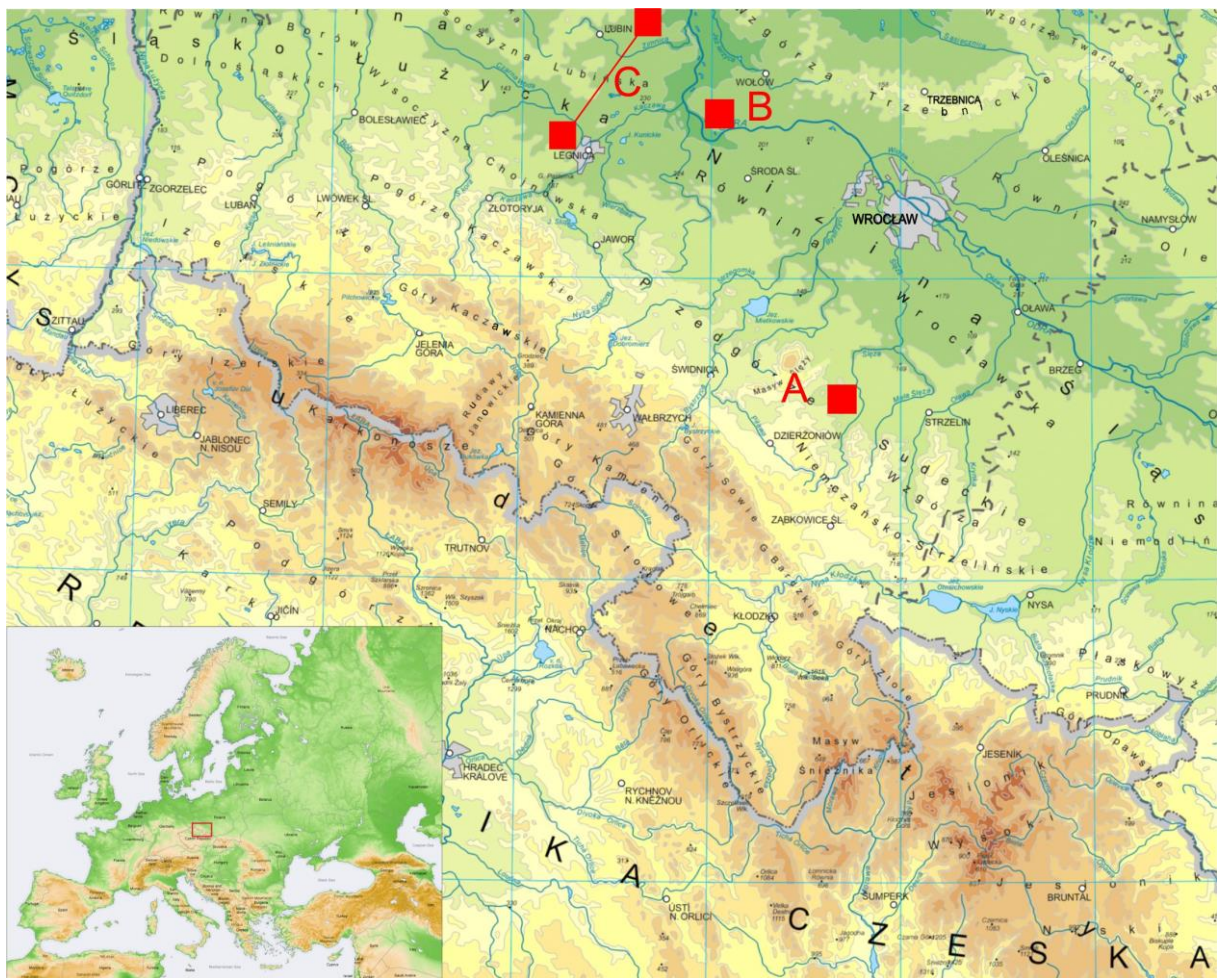
29. CONGRESS OF THE POLISH SOIL SCIENCE SOCIETY (PTG), WROCLAW 2015

ONE-DAY MID-CONFERENCE FIELD SESSIONS, 02/09/2015

Excursion „A”: Black earths of the Silesian Lowland

Excursion „B”: Transformation of alluvial soils and forest habitats in the Odra valley

Excursion C”: Degradation and protection of soils influenced by copper mining and smelting in the Legnica-Głogów industrial area



EXCURSION C'': DEGRADATION AND PROTECTION OF SOILS INFLUENCED BY COPPER MINING AND SMELTING IN THE LEGNICA-GŁOGÓW INDUSTRIAL AREA

The field session will focus on the control of an impact of copper industry on the soil environment, the conditions of agricultural production, forest ecosystems, and health of the local population.

Two objects belonging to the KGHM Polska Miedź SA will be presented during the session.

(1) Tailings pond Żelazny Most located near Rudna is the largest wet landfill of this kind in Europe with over 350 million m³ of tailings from copper ore flotation enrichment (target of 1.5 billion m³) are stored on an area of about 1.5 thousand ha.

(2) Legnica Copper Smelter began operation in 1953 and currently produces about 150 thousand tonnes of pure copper per year.

Both objects, due to the nature and scale of operations are potentially very dangerous for the environment. The degree of soil contamination, prevention and protection, as well as monitoring of the impact of the industrial objects on the environment will be presented and discussed during the session. Two profiles of typical soils – Luvisols developed from loess (HM Legnica) and Brunic Arenosols developed from glacio-fluvial sands (Żelazny Most) will be presented in the afforested former sanitary zones surrounding the plants.

