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IMN



**Norway**  
grants



**Łukasiewicz**  
Institute of Non-Ferrous Metals

**DEVELOPMENT OF  
REFERENCE MATERIALS  
FOR  
SILICON INDUSTRY  
– IMPROVEMENT OF  
QUALITY ASSURANCE**

**FUNDING:**

The SILREF project benefits from a 444 930,14 € grant from Norway and 78 517,08 € from state budget. The aim of the project is to develop new certified reference materials for silicon industry.

The Applied Research Programme is operated by The National Centre for Research and Development [NCBR] in Poland.



## PROJECT DETAILS

acronym: SILREF, programme: Applied Research  
starting date: 1.09.2020 – ending date: 1.09.2023  
coordinator: ŁUKASIEWICZ RESEARCH NETWORK  
– INSTITUTE OF NON-FERROUS METALS, POLAND  
partner: ELKEM ASA, NORWAY

## OBJECTIVE

Silicon is the element of significant importance – including the production of electronic devices, solar panels and metallurgical alloys. Silicon materials producers have to keep strict quality control of their raw materials and products. Modern and innovative silicon production technological line requires high quality analytical information about chemical composition – for this purpose modern instrumental methods are commonly used. Correctness of the results obtained with these methods has to be verified using materials of well-known composition, traceable to SI units, confirmed and described by the certificate. These materials are called certified reference materials (CRM). In response to the market needs, SILREF project consists of production of 8 CRMs for silicon materials: silicon metal, ferrosilicon magnesium and microsilica. The ISO 17034 standard requirements will be maintained during the project to meet the recent requirements of the market.



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