Beneficiaries

Coordinator

Institute of General and Inorganic Chemistry – BAS

Partners:

- Institute of Electrochemistry and Energy Systems - BAS
- Institute of Catalysis - BAS
- Institute of Metal Science, Equipment, and Technologies with Hydro- and Aerodynamics Center - BAS
- Institute of Mechanics - BAS
- Institute of Mineralogy and Crystallography - BAS
- Institute of Optical Materials and Technologies - BAS
- Institute of Organic Chemistry with Centre of Phytochemistry - BAS
- Institute of Polymers - BAS
- Institute of Solid State Physics - BAS
- Institute of Physical Chemistry - BAS
- Sofia University “St. Kliment Ohridski”
- Technical University of Varna
- Technical University of Gabrovo
- Technical University of Sofia
- University of Chemical Technologies and Metallurgy
- Central Laboratory of Applied Physics - BAS

BG05M2OP001-1.001-0008

National Center of Mechatronics and Clean Technologies

Associate partners

Borima EAD

R&D Association

Institute of Robotics and Intelligent Systems, Federal Technical University, Zurich

The Hebrew University of Jerusalem (HUJI)

Delft University of Technology

1113 Sofia
Acad. Georgi Bonchev str. bl. 11
Floor 3, office 303
http://www.igic.bas.bg

http://www.eufunds.bg

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

OPERATIONAL PROGRAMME SCIENCE AND EDUCATION FOR SMART GROWTH

Project

BG05M2OP001-1.001-0008

National Center of Mechatronics and Clean Technologies

Execution Period

28.02.2018 – 31.12.2023

CREATIG TOGETHER

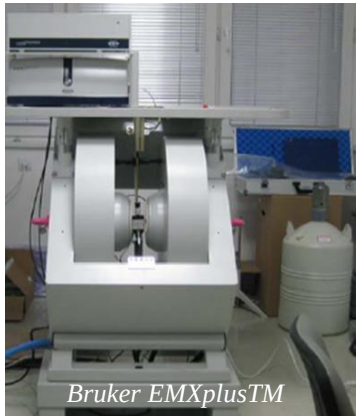
Objective of the Project

Establishment and development of research infrastructure for excellence in the field of mechatronics and clean technologies, which will contribute to the implementation of the program for sustainable and smart economic growth of the Republic of Bulgaria.

Basic Activities

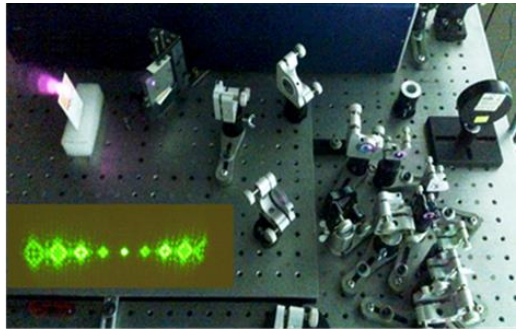
- Creation of three research complexes equipped with unique for the country facilities:

Geo Milev Complex



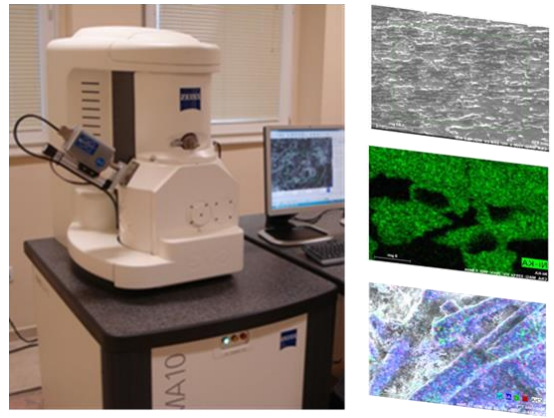
Spectrometers

Lozenets Complex



Femtosecond laboratory

Studentski Grad Complex



Scanning Electron Microscope

- Implementation of a long-term research plan structured into four work packages (WP):

- WP1 Computer modelling and development of technologies; and new materials for engineering and re-engineering;
- WP2 Electronic, optic, sensor and bio-mechatronic systems and technologies;
- WP3 Mechatronic systems and technologies;
- WP4 Clean energy and green technologies.

System for testing and generation of shock loads

- Maintaining highly qualified scientific staff;
- Realization of conditions for effective transfer of technologies .

Selective Laser Melting Machine

Expected results

Increasing the competitiveness of the Bulgarian economy, increasing the share of high-tech industries such as mechanics, electronics, control systems, electro-mobility, fuel cells and hydrogen society and strengthening the international market as a result of:

- Establishment of country and region-leading institution with international visibility and scientific importance;
- Finding innovative technological solutions to support the Bulgarian industry;
- Provision of highly qualified specialists;
- Creating new jobs;
- Encouraging young and leading Bulgarian scientists to work in Bulgaria.