

At the National Institute of Chemistry, young people acquire knowledge by participating in research projects under the mentorship of internationally renowned researchers. **CURRENTLY, WE ARE TRAINING 62 EARLY STAGE RESEARCHERS OUT OF A TOTAL OF 302 EMPLOYEES.**

Due to high quality of their knowledge, our researchers are the most suitable human resource for demanding and advanced professional challenges in the industry, which is indicative of the **DIRECT TRANSFER OF KNOWLEDGE INTO THE INDUSTRY.**

In five years, we have acquired €430,000 for international grants for young scientists via the Marie Skłodowska Curie Actions program.

SUPPORTING YOUNG PEOPLE



TRANSFERS TO THE ENTERPRISE SECTOR SINCE 2010 TO 2015



Doctors of Science
in total
27

Other total
32

At the renowned international competition in **synthetic biology, iGEM**, at MIT in Boston, USA, Slovenian high school and university students have achieved exceptional results in past years under the mentorship of mentors from the National Institute of Chemistry.



✉ projektna.pisarna@ki.si

For several years now, the policy of the National Institute of Chemistry in the field of innovations and the transfer of knowledge and technologies into the enterprise sector has been developed in cooperation with the 4 member **Innovation Committee (KZI)**. The key tasks of the KZI are managing procedures for taking over service inventions, providing opinions in procedures before local and foreign patent offices and cooperation in commercialization. The transfer of technologies is performed interactively by establishing business networks and organizing professional meetings

✉ kzi@ki.si



	2013	2014	2015 (1.1.-31.10.)
Income (public service)	10.739.873,04	11.384.651,53	9.137.290,90
Industry, local market	2.132.948,36	2.240.410,72	1.798.591,60
Industry, foreign market	157.660,49	281.455,33	323.669,00
Income EU	647.837,21	745.691,14	1.056.228,18

CERTIFICATES

Our dedication to social responsibility is attested to by the acquired certificates.



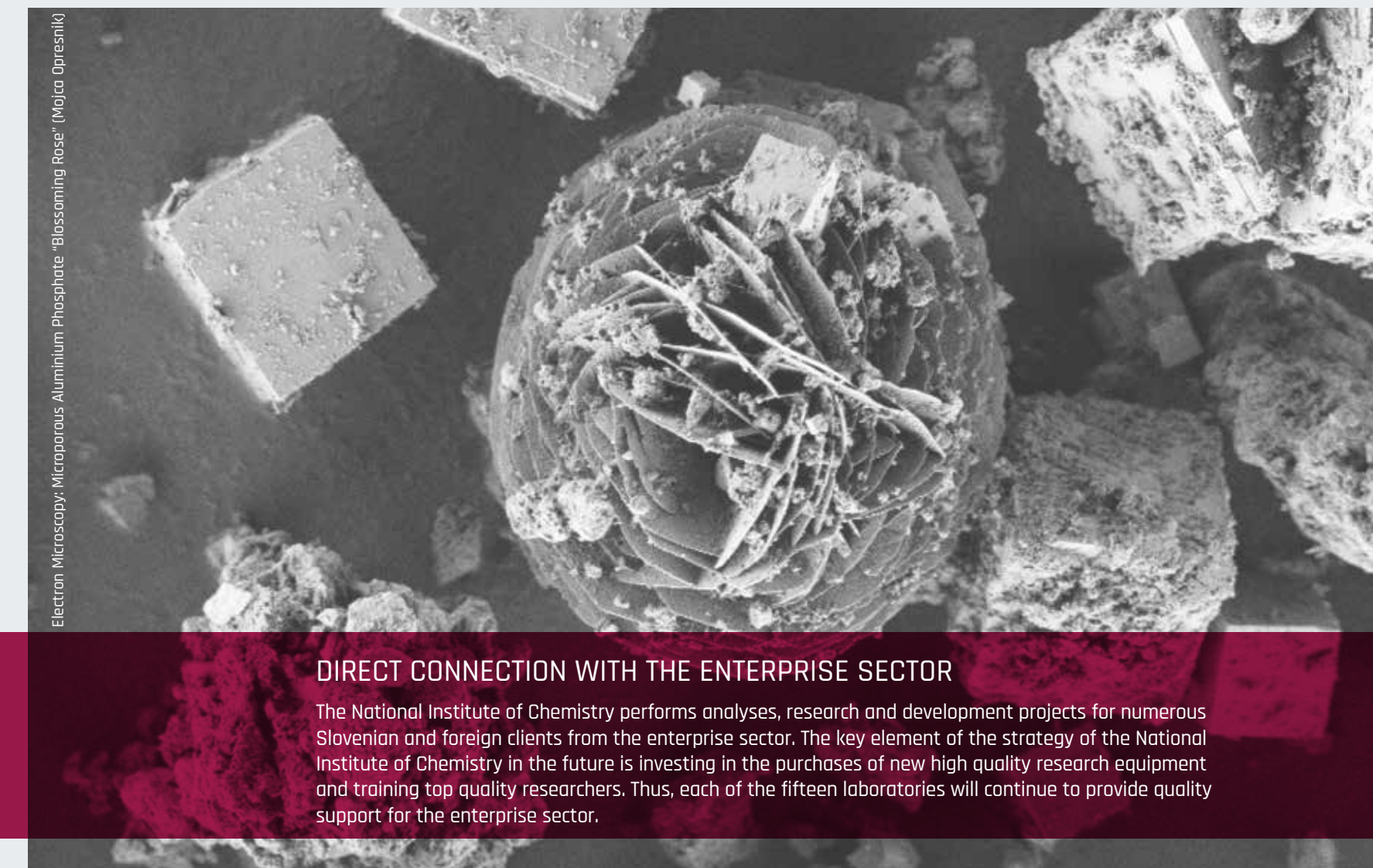
Kemijski inštitut
Ljubljana
Slovenija

OUR KNOWLEDGE

your opportunity

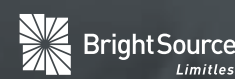
»ZNANJE BOGATI DRUŽBO.« dr. Mojca Benčina

Electron Microscopy: Microporous Aluminium Phosphate "Blossoming Rose" (Mojca Dpiresnik)

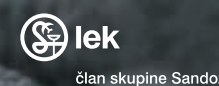


DIRECT CONNECTION WITH THE ENTERPRISE SECTOR

The National Institute of Chemistry performs analyses, research and development projects for numerous Slovenian and foreign clients from the enterprise sector. The key element of the strategy of the National Institute of Chemistry in the future is investing in the purchases of new high quality research equipment and training top quality researchers. Thus, each of the fifteen laboratories will continue to provide quality support for the enterprise sector.



COOPERATION WITH THE ENTERPRISE SECTOR



In the last three years, we have established cooperation with approximately 400 partners from the enterprise sector



A WORD FROM THE DIRECTOR

There is no doubt that excellent, enthusiastic scientists devoted to science are of key importance for the successful operation of the National Institute of Chemistry. I am very proud of the numerous awards and recognitions our researchers have received for their scientific achievements in Slovenia and abroad. There would not have been so many without constantly connecting with other research institutions and the enterprise sector.

With this publication, we want to present ourselves in the field of cooperation with Slovenian and foreign industry. An important goal of ours is the effective transfer of knowledge we create in laboratories into the social environment, to young people and into the enterprise sector. We have exceptional experts and an excellent research infrastructure, which is a basic condition for scientific excellence, achieving top scientific achievements and cooperation with development laboratories of Slovenian companies. Top quality basic science is the basis for the successful transfer of knowledge and the developmental breakthroughs that are needed by our society.


prof. dr. Gregor Anderluh



SUCCESSFULLY ACQUIRED PROJECTS OF THE NATIONAL INSTITUTE OF CHEMISTRY



PROJECTS

MefCO2
Tollerant
NextBioPharmDSP
HELIS
NANO RESTART
ADREM
PLOTINA

IN COOPERATION WITH THE BEST RESEARCH ORGANISATIONS AND COMPANIES IN EUROPE, WE HAVE ACQUIRED €4,509,984.12 OF FUNDS FOR OUR RESEARCH AS PART OF THE HORIZON 2020 COMPETITIONS.



Dr. Robert Dominko,
Head of Projects
EUROLIS and HELIS

Coordination of European and larger industrial projects

is a challenge when managing researchers from the private and public sectors, the basic goal of which is to fulfil the obligations provided in the project application and to raise the technological level in the field of research. This simultaneously enables the inclusion of a larger number of younger colleagues who obtain precious experience and knowledge and thus become a competitive development human resource in the wider European region. Personnel trained for work on large projects are key for inclusion in global industrial flows in the future.



Dr. Blaž Likozor, Head
of Projects MefCO2
and Adrem

By managing and participating in projects

where the largest European companies and the industry are participating, we have proven and that our research and development are comparable or even superior to those from other European countries. By cooperating with Slovenian and European industry via projects and directly, we are strengthening the development part of local industry and ensure development for future generations in the field of science and technology.



Dr. Simon Caserman,
Project NextBioPharm

The Ambition of the Next Generation European project

The Biopharmaceutical Downstream Process is the introduction of innovative solutions for certain biotechnical processes based on a deep understanding of processes and the use of the latest technical possibilities. We want to integrate the production of monoclonal recombinant antibodies into a uniform and continued process. Such an approach promises the long-term competitiveness of a Slovenian industrial partner, high added Dr. Simon Caserman, Project NextBioPharm value of production and new employment possibilities for highly educated personnel. From a global viewpoint, the new solutions promise a greater accessibility of recombinant medicinal products due to the reduced production price and lower starting investments into production.

AWARDS & RECOGNITIONS

BETWEEN 2011-2015, WE RECEIVED NUMEROUS RECOGNITIONS AND AWARDS FOR OUR WORK IN THE FIELD OF INNOVATION AND COOPERATION WITH THE ENTERPRISE SECTOR, INCLUDING ...



Members of the Laboratory for Environmental Sciences and Engineering received the **Chamber of Commerce and Industry of Slovenia's silver award** for the invention "Catalyst and the Process for Converting Gas Mixtures of Methane and Carbon Dioxide into Syngas". The authors of the invention are Dr. Gasan Osojnik, Dr. Petar Djinović, Prof. Dr. Albin Pintar and Dr. Boštjan Erjavec.

At the **2nd Second World Competition of Chemical Inventions in Warsaw**, the colleagues of the Laboratory for Environmental Sciences and Engineering won the silver medal for the invention titled "A Novel and Compact Reactor System for Processing and Reutilizing Sanitary Waste Water".

The Puh Decoration* went to the research group of the National Institute of Chemistry for the invention of the water-soluble coenzyme **Q10**. For the development and production of the similar biological medicinal products filgrastim and pegfilgrastim and their transfer into production, the above mentioned decoration also went to the mixed group of

researchers from the Laboratory for Molecular Biology and Nanobiotechnology and from the pharmaceutical company Lek.

Krka Awards: Numerous early stage researchers have received Krka awards and recognitions for undergraduate and

The project of the dairy producer Ljubljanske mlekarne and the National Institute of Chemistry entitled "Computer Simulations of Potential Functional Food Supplements - Chemical Carcinogen Scavengers" won second place in the category of large companies in **the competition of socially responsible practices**. The holder of the project is Doc. Dr. Urban Bren, researcher at the Laboratory for Molecular Modelling.

*The water-soluble form of CO-ENZYME Q10 is the most successful potent of the National Institute of Chemistry.