



Research and development laboratory
Science for business

GENERICA LAB

The Future of Science And Technology



Having experience in laboratory services

We specialize in preclinical assessment of the biopharmaceutical properties of various drug forms based on advanced pharmaceutical availability tests in simulated physiological conditions.





Discover the highest quality laboratory services

Our infrastructure allows us to provide research and development services for the pharmaceutical, cosmetics and veterinary industries, as well as to conduct joint research projects with scientific units and industry.

[Learn More](#)

✓ Analytical laboratory

✓ Technological laboratory

✓ Cleanroom rental

✓ Contract manufacturing



GENERICA Lab is Dedicated to Bringing You the Latest Breakthrough Science

15+
Years of
Experience

5
EU grants

50
Global
Partners

Get the Best Lab Services with Us

We provide services to the R&D sector of the pharmaceutical, veterinary and cosmetics industries. The analytical laboratory is complemented by a unique infrastructure of a technological laboratory in a cleanroom facility with a total area of 120 m².

**Analytical Laboratory
Services**



**Materials and
Technology Expertise**



**Cleanroom contract
production and rental**



The analytical laboratory

The analytical laboratory excels in conducting drug dissolution and release studies, crucial across the pharmaceuticals, food, cosmetics, and more. With cutting-edge equipment and seasoned scientists, we are able to test pharmaceutical products before they hit the market. Specializing in diverse analytical analyses, as well as release, permeation, and stability studies, we ensure product longevity and regulatory compliance. Our comprehensive services uphold quality, safety, and efficacy, supporting the development and compliance needs of diverse industries.



Analytical and pharmaceutical analysis



Stability studies



Dissolution and release studies



Permeation studies



Statistical data analysis



We are the best in API release tests from various drug forms

Our laboratory has several semi-automatic devices for testing the dissolution or release of medicinal substances from virtually any drug form.



Depending on the needs, tests of the release or penetration of active substances can be performed in basket, paddle apparatuses (including paddle over the disk, mini-paddle and mini-vessel, immersion cell), with a reciprocating cylinder, flow-through cell devices, and Franz vertical diffusion cells.

Performing release tests in various pharmacopeial devices allows us to obtain a complete characterization of the pharmaceutical availability of API from a given drug form.

Laboratory equipment

Our equipment undergoes annual technical/maintenance inspections and is periodically qualified (OQ and/or PQ).

90%

**Successful
Research**



Scope of drug dosage forms for release studies



API, POWDERS, GRANULES,
PELLETS



Immediate Release (IR) and
Modified Release (MR)
TABLETS



CAPSULES (hard and soft)



SUPPOSITORIES and
GLOBULES (on hydrophobic
and lipophilic bases)



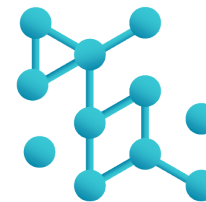
CREAMS, OINTMENTS, GELS



TRANSDERMAL
THERAPEUTIC SYSTEMS



SUSPENSIONS, EMULSIONS



MICRO- , NANOPARTICLES
AND OTHER DRUG CARRIERS



IMPLANTS, STENTS,
MEDICAL DEVICES

GENERICA analytical lab infrastructure



Semi-automatic flow-through cell release SOTAX testers for testing the release of pharmaceutical substances from various drug dosage forms using the flow method in a closed/open loop in an on-line configuration, consisting of: CE7 Smart device, CP 7-35 pump, MS 47 media selector, C 615 fraction collector with splitter and syringe module and UV-Vis spectrophotometer

GENERICA analytical lab infrastructure

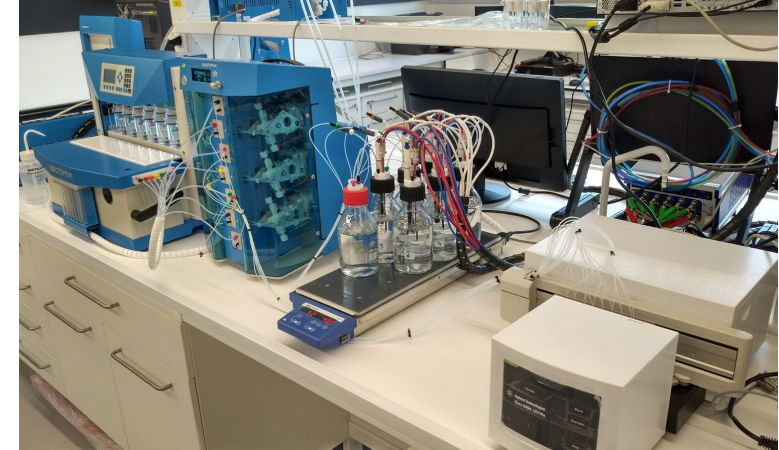
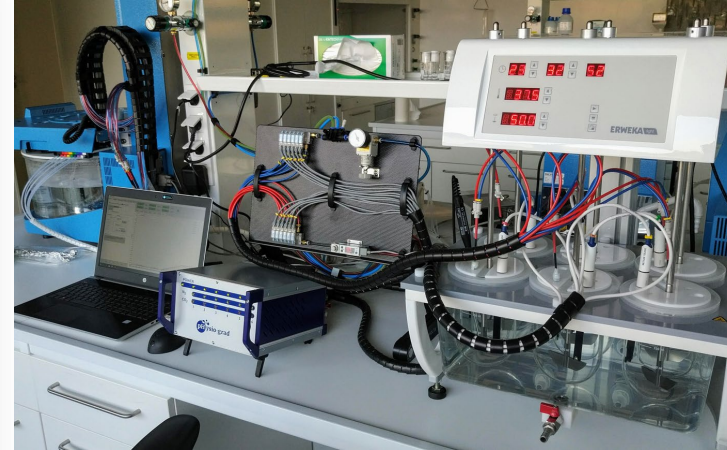
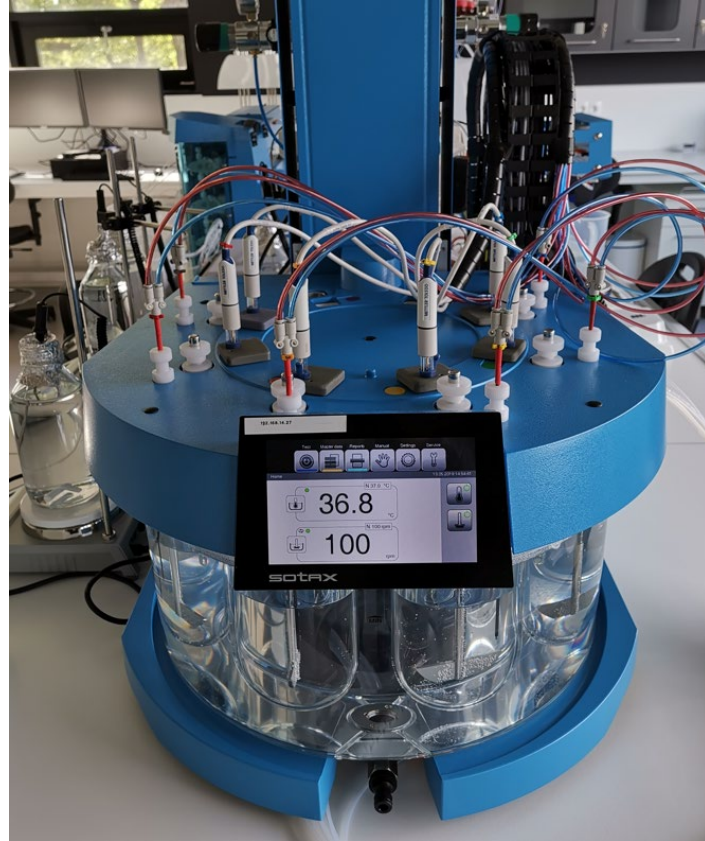


Teledyne Hanson Research
automated Vision Microette System
with a set of vertical Franz diffusion
cells for testing the release and
permeation of API from liquid and
semi-solid dosage forms.



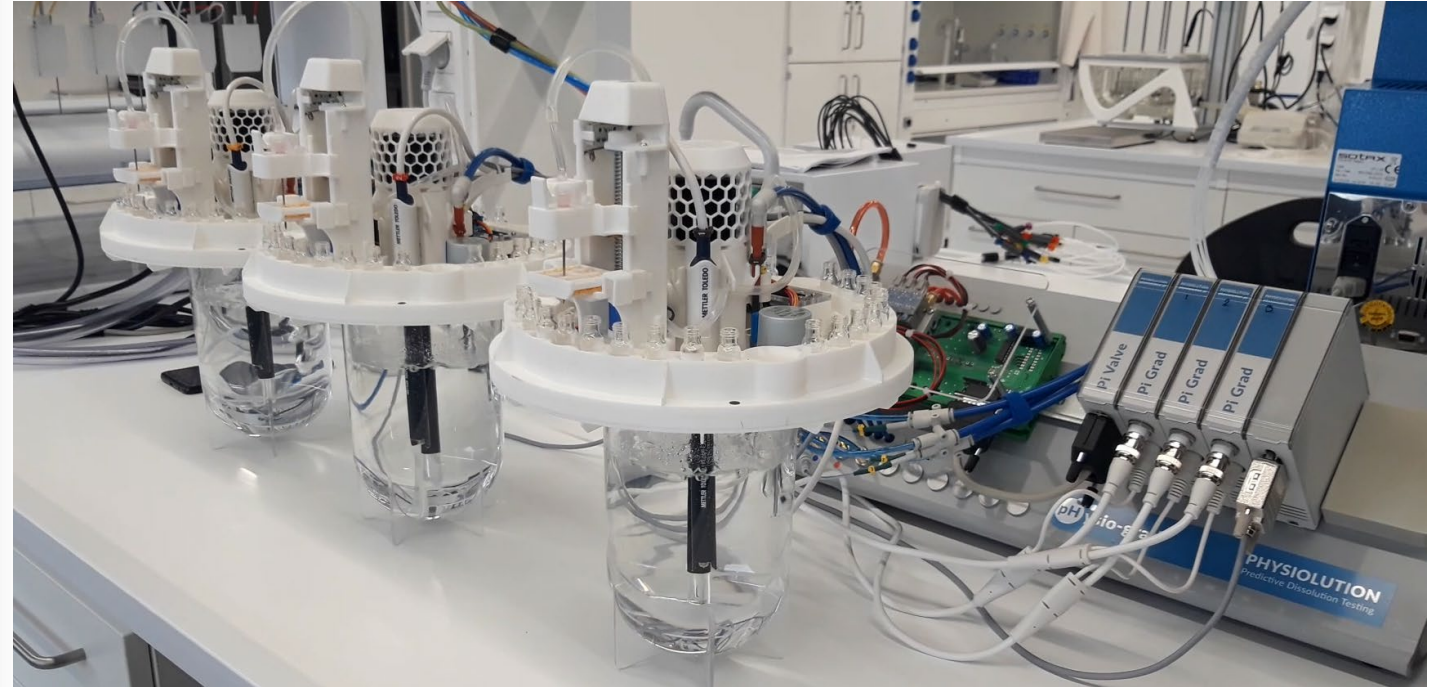
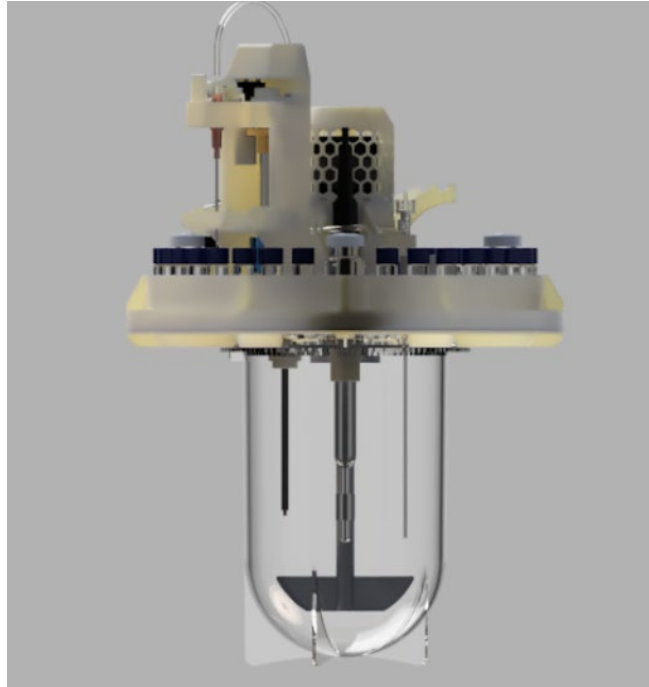
Semi-automatic SOTAX Xtend system for release testing
using basket/paddle/paddle over disc/mini-vessels & mini-
paddles/immersion cells in on/off-line configuration,
consisting of: ATS Xtend apparatus equipped with Hollow-
Shaft, Return Line and Media Replacement systems, CP
pump, FS filtration station, SAM S fraction collector and UV-
Vis spectrophotometer.

GENERICA analytical lab infrastructure



Controller for monitoring and changing the pH of hydrocarbonate buffers - pHysio-grad® compatible with equipment for dissolution and release testing such as SOTAX Xtend, SOTAX CE7 smart or Erweka DT 126 light.

GENERICA analytical lab infrastructure



According to the project - "Innovative methodology for medicinal products in the development phase" (POIR.04.01.04-00-0142/17) we actively participate in the development of a prototype Revolver dissolution apparatus controlled by the pPhysio-grad[®] v2.0 controller - the 3D printed device for drug dissolution and release testing.

GENERICA Lab 3D printing services

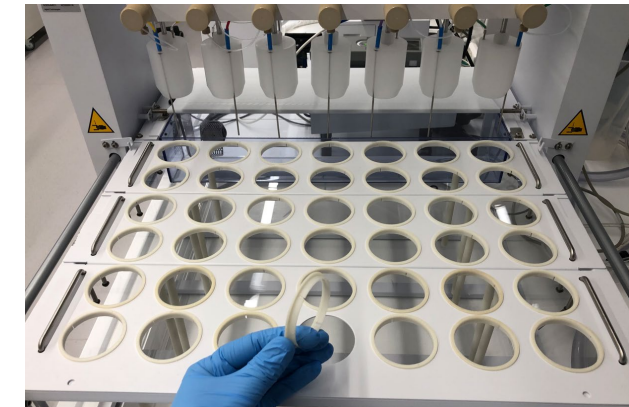
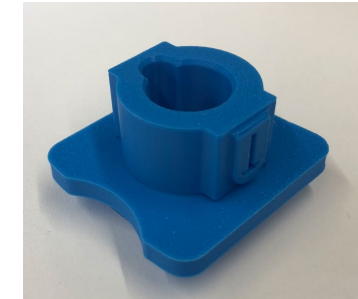
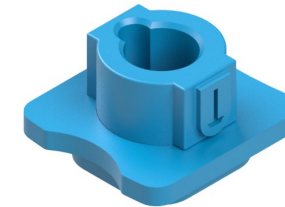
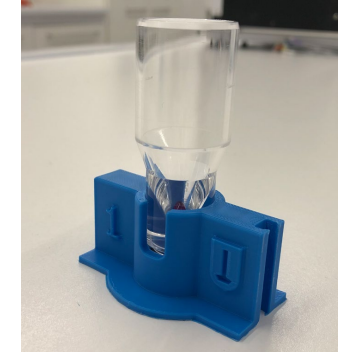
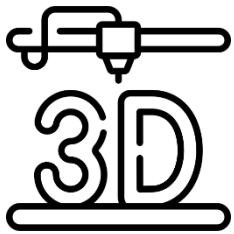


Innovative Solutions

R&D projects often require unusual applications for standard laboratory equipment. In our Lab we design and solve problems related to such limitations.

3D printing

Printing is done using FDM/FFF technology from commercially available materials (PLA, PETG, TPU, PVA) in the desired colors. The maximum printing working surface is 180*180*180 mm³. The quality is selected individually for the model (thickness of a single layer from 0.08 mm (High Quality) to 0.28 mm (Extra draft)). Available nozzles with a diameter of 0.2 mm; 0.4mm and 0.6mm.



The capabilities of our technological laboratory



Short-term cleanroom
rental



Contract production
in a cleanroom facility



Freeze-drying services



The technological laboratory

The unique infrastructure of the technological laboratory in a cleanroom facility with a total area of 120 m² with a dedicated HVAC system allows us to conduct technological processes and produce non-sterile and sterile semi-solid drug forms in a scale of up to 50 liters per single batch.

Short-term rental of cleanroom area

We offer cleanroom rentals for short-term research, development or production purposes. The offered spaces are:

- ISO 7 class (area: 14.5 m²),
- ISO 6 class (area: 50 m²),
- ISO 4 class (area: 4 m²).

Contract production at cleanroom

Contract production of medical devices, cosmetics or dietary supplements in a qualified (ISO) cleanroom area.

We offer technological freeze-drying tests of food products, medical devices or pharmaceutical formulations.



The technological laboratory

The cleanroom area offers a **Zirbus EKS 10 shelf freeze dryer**, with a freeze drying area of 1.2 m², with the ability to record and monitor process parameters (product temperature, chamber pressure, product conductivity, temperature of the freeze dryer shelves, condenser temperature).

Ice condenser capacity: up to 15 kg.

Possibility of loading and unloading the freeze dryer in an ISO 4 environment.



Utilities available in the cleanroom area:

- ✓ compressed air class 1.2.1
- ✓ pure nitrogen 5.0
- ✓ purified water in accordance with pharmacopeial requirements

DISSOLUTION DAY 2022

In May 2022 **GENERICA Pharmaceutical Lab** as a main organiser revived the Dissolution Day event which attracted over 40 participants from various pharmaceutical companies and laboratories.

The event featured lectures and workshops led by experts, focusing on pharmaceutical dissolution testing, automation methods, and the latest SOTAX ATS dissolution apparatus.

Attendees also engaged in hands-on sessions with cutting-edge equipment. The event received positive feedback, offering valuable insights and practical applications for participants.



The Best Facilities with the Latest Technology

 GENERICA

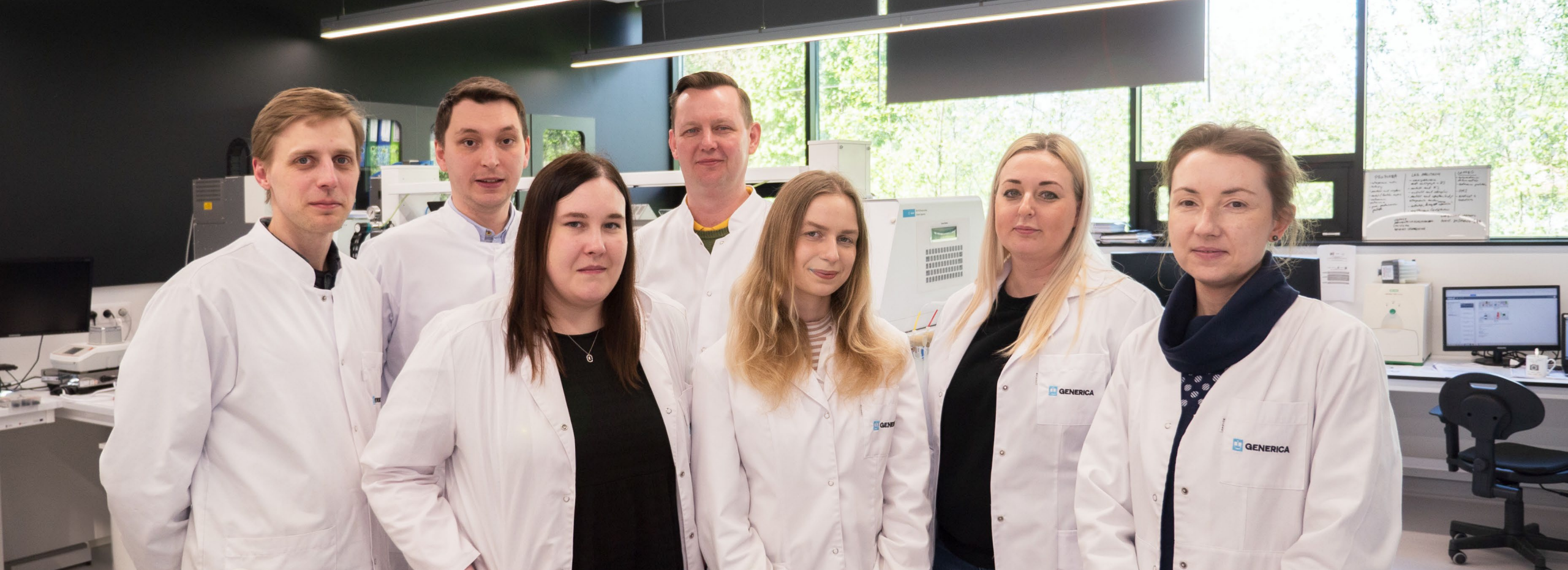
DISSOLUTION
DAYS 2024

5-6/06
GENERICA
PHARMACEUTICAL LAB
ZBĄSZYŃ



DISSOLUTION
DAYS 2024

Building on the success of the previous edition, we are delighted to announce that we will be hosting another two-day event in 2024. We cordially invite you to join us for this exciting occasion.



Our Laboratory Team



Bartłomiej Milanowski

Head of the Lab, Principal Investigator

The originator of the laboratory. Exploits and transfers his experience gained at the laboratories of Poznan University of Medical Sciences and Pharma Companies



Hanna Wosicka-Frąckowiak

Investigator



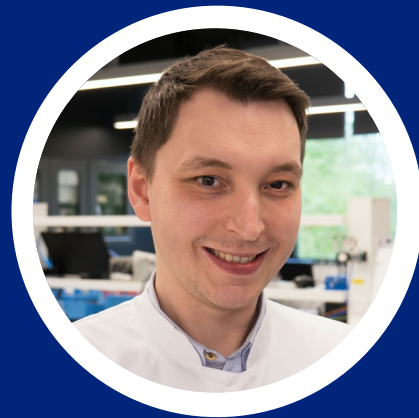
Kornelia Poniedziałek

Analysis Specialist



Martyna Nyga

Junior Analysis Specialist



Mateusz Kuprianowicz

Analysis Specialist



Stanisław Woźny

Technologist



Anna Burghardt

Cleanroom Specialist

Laboratory Team

20 years of experience in academia and pharmaceutical industry



Dr Bartłomiej Milanowski

Head of GENERICA Pharmaceutical Laboratory,
Assistant Professor at PUMS, Industrial Pharmacy
Specialist, MPharm

Dedicated professional with a strong background in pharmaceutical sciences and extensive international research experience. He graduated with an M.Sc. in Pharmacy in 2003 and earned my Ph.D. in Pharmaceutical Sciences in 2012 from the Poznan University of Medical Sciences (PUMS).

He has gained valuable international research exposure, serving as a research assistant at the Department of Occupational and Environmental Health, College of Public Health, University of Iowa, IA, US (2007-2008). Additionally, he has contributed to the R&D departments of renowned organizations including GlaxoSmithKline (2010), PozLab (2012), Physiolution, Biofarm (2017-2018), and Zentiva (2023).

From 2016 to 2022, he served as a board member of the University Centre for Medical Technology Transfer in Poznan, Poland. He also held significant roles as Director of the Training Committee and WP4 Lead in the ORBIS Project from 2018 to 2019.

He is co-author of > [30 publications](#) (IF > 100, h-index = 14) from the area of predictive drug release and dissolution testing, biopharmaceutical evaluation of drug dosage forms, preformulation, formulation computer-aided design, and new process technologies.

Currently, he holds the position of Assistant Professor in the Chair and Department of Pharmaceutical Technology at PUMS. Since June 2018, he has been leading the R&D initiatives as the Head GENERICA Pharmaceutical Laboratory, Regionalne Centrum Zdrowia Sp. z o.o..

He is a passionate about advancing pharmaceutical sciences, fostering innovation, and contributing to the development of safe and effective medical devices and drug formulations

Laboratory Team



**Dr Hanna Wosicka –
Fręckowiak**

Investigator, MPharm

Ph.D. MPharm.

Pharmacist with over 10 years' experience in pharmaceutical technology (Department of Pharmaceutical Technology, Poznan University of Medical Sciences (PUMS)).

She graduated from Pharmacy at PUMS in 2005.

She obtained her Ph.D. in Pharmaceutical Technology in 2014 from Medical University of Gdansk. Her PhD thesis *Lipid micro- and nanoparticles as roxithromycin carriers for the hair follicles* laid the foundation for two patent applications.

The co-author of several publications from the area of lipid nano- and microparticles, follicular delivery and skin penetration.

Since 2020 a member of Generica Team.



Scientific opinions/research



Semi-solid dosage forms technology



In vitro release/permeation testing from topical dosage forms

Laboratory Team



Dr Mateusz Kuprianowicz

Analysis Specialist

Education background:

- 06/2018 – Adam Mickiewicz University, Poznań – PhD in field of Organic Chemistry (Organic Synthesis and structural analysis of newly synthesized compounds).
- 06/2012 – Adam Mickiewicz University, Poznań – Masters degree in field of Material Chemistry.
- 06/2010 - Adam Mickiewicz University, Poznań – Bachelor degree in field of Chemistry.

Professional background:

- Since 2020 a member of Generica Team – Responsible for conducting and developing various dissolution testing methods using USP I-IV apparatus. Experienced in various quantitative analytical methods including HPLC and spectrophotometric methods. Passionate about implementing FDM 3D printing technology in modern R&D pharmaceutical laboratory.
- In years 2012 – 2024 a part of Firestone Airide Team as Proces Development Engineer. Responsible for creating prototype tooling for new production lines and leading the pilot production runs of new products.



Analytical methods development; chemistry; design and production engineering



3D printing and CAD design



Drug dissolution testing

Laboratory Team



Kornelia Poniedziałek, MSc

Analysis Specialist

MSc, Eng. in Chemical Technology, specialized in Analytical Chemistry.

I have over five years of professional experience in the medical company, focusing on the production of medical devices such as balloon catheters and stents. My work has primarily revolved around the application of chemical technology and analytical chemistry in the production, validation and testing of pharmaceuticals and medical devices.

I am a co-author of several publications in the fields of sorption materials and analytical chemistry. My research has focused on the development of novel sorption materials and their application in various fields, including pharmaceutical testing.

Since 2023, I have been a member of the Generica Team, where my experience and knowledge are utilized in developing the analytical methods for pharmaceuticals and medical devices testing. Moreover, my knowledge extends to drug dissolution testing, where I evaluate the release of active ingredients from various formulations.



Analytical methods development and validation



Product quality testing



Drug dissolution testing



Martyna Nyga, Eng

Analytical Laboratory

Laboratory Team

Currently pursuing master's degree in Pharmaceutical Engineering, engaging in research about incorporating antifungal drugs into tropocollagen hydrogels in cooperation with Generica Lab and Poznan University of Medical Sciences Since 2022 a member of Generica Team



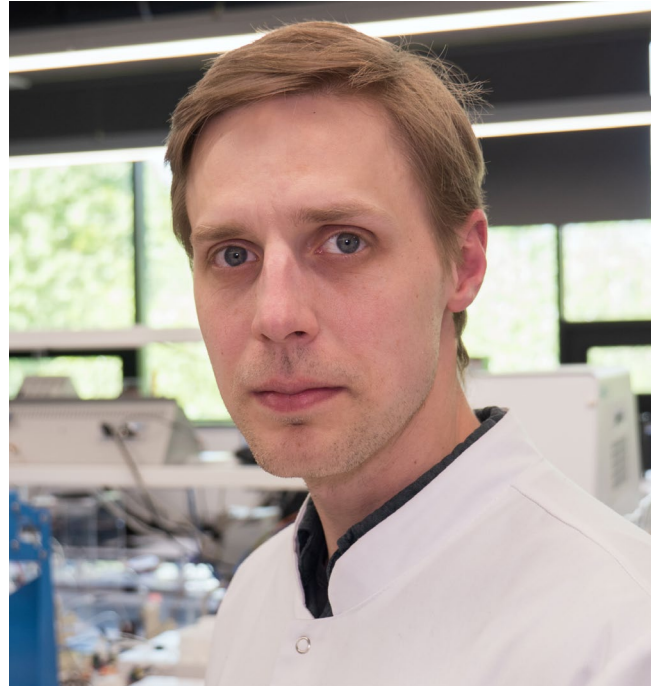
Analytical methods development and validation



Product quality testing



Drug dissolution testing



Stanisław Woźny, MSc

Technological Laboratory

Laboratory Team

I am a solid-state physicist, member of Generica Team for the past four years. My expertise lies in maintaining the cleanliness of cleanroom facilities, ensuring optimal conditions for production. With years of experience in collagen production for both the cosmetic and medical industries. I specialize in crafting and optimizing prototype medical devices, especially in dry form. I actively contribute to research and development projects in the medical field.



Collagen production, quality control



Medical device prototype manufacturing, development and optimization



Cleanroom management



Anna Burghardt, BSc

Technological Laboratory

Laboratory Team

Specialist of laboratory cleanroom, with 4 years experience of collagen production in the cleanroom area.

As a specialist in the field of cleanroom laboratories, my main task is to ensure absolute cleanliness and adherence to rigorous guidelines in the production process of collagen. My work involves not only strict control of microbiological processes but also consistent adherence to procedures at every stage of the production cycle, from sourcing raw materials to finalizing the product.



Microbiology monitoring



Cleanroom service



Collagen production and finished product confection



Zdzisław Podrez

Zdzisław Podrez

From 2023, President of the Management Board of Regional Health Center.

In the years 2013-2022 he held the position of the company's Proxy.

In the years 2010-2022, President of the Management Board of the University Transfer Center Medical Technologies in Poznan, manager for Research Commercialization and Protection Intellectual Property of the Medical University of Karol Marcinkowski in Poznan.

He has extensive experience in financial modeling and valuations of innovative technologies, as well as market analyses. He participated in the establishment of technology companies from various industries.

A particularly important area of competence is EU subsidies. A long-time lecturer at the WSB University in Poznań and a substantive supervisor in fields related to obtaining, settling and auditing structural funds. He has specific experience related to technology transfer, commercialization of research results and consulting dedicated to innovative business ventures.

He has extensive training experience (over 15 years) in conducting training, proven by obtaining funding for various recipients. Author of numerous publications and articles in this field, as well as development strategies for local governments and entrepreneurs.



Wiktor Napierała

Wiktor Napierała

**From 2018-2023, the Regional Health Center's advertising and public relations manager.
From 2023, Independent proxy and marketing and advertising manager.**

Currently, at the Generica and Regional Health Center and Laboratory, he is responsible for marketing, product image design, printing coordination, and maintaining the availability of resources needed for product packaging.

From 2012 to 2014, he was a junior designer at the Avantgarde Studio advertising agency. From 2014 to 2016, he served as a Promotion and Advertising Office clerk. In 2016-2018, he took over the position of Head of the Promotion and Advertising Office. While working at Teatr Nowy, he was responsible for promotional and advertising activities, including coordinating film and photo production and content distribution. He was responsible for acquiring media and business partners. Since 2013, he has been permanently cooperating with the Institute of Culture Foundation in graphic design and advertising.

Our Clients



Cooperations



WARSZAWSKI
UNIwersytet
MEDYCZNY



JAGIELLOŃSKIE
CENTRUM INNOWACJI



UNIwersytet ŚLĄSKI
W KATOWICACH

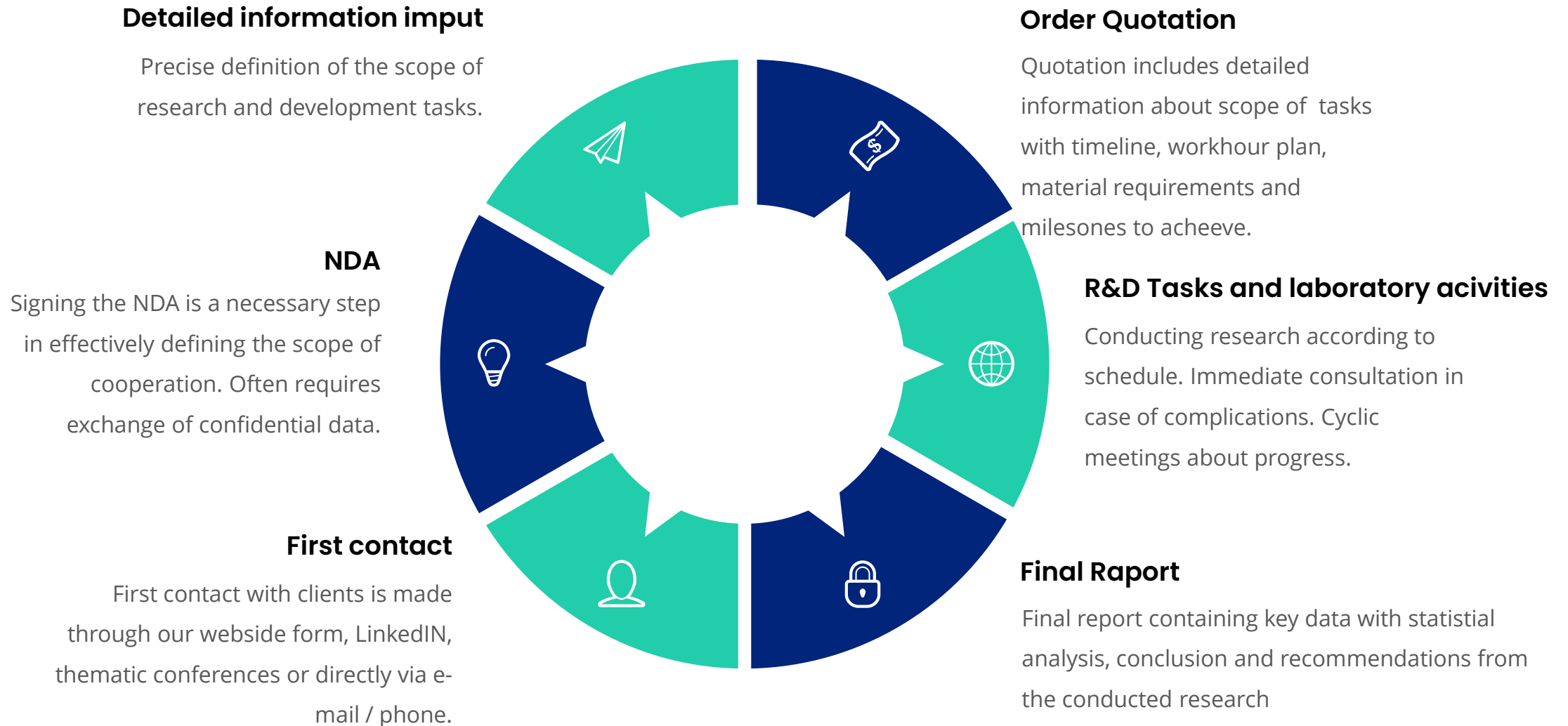


UNIwersytet
ZIELONOGÓRSKI

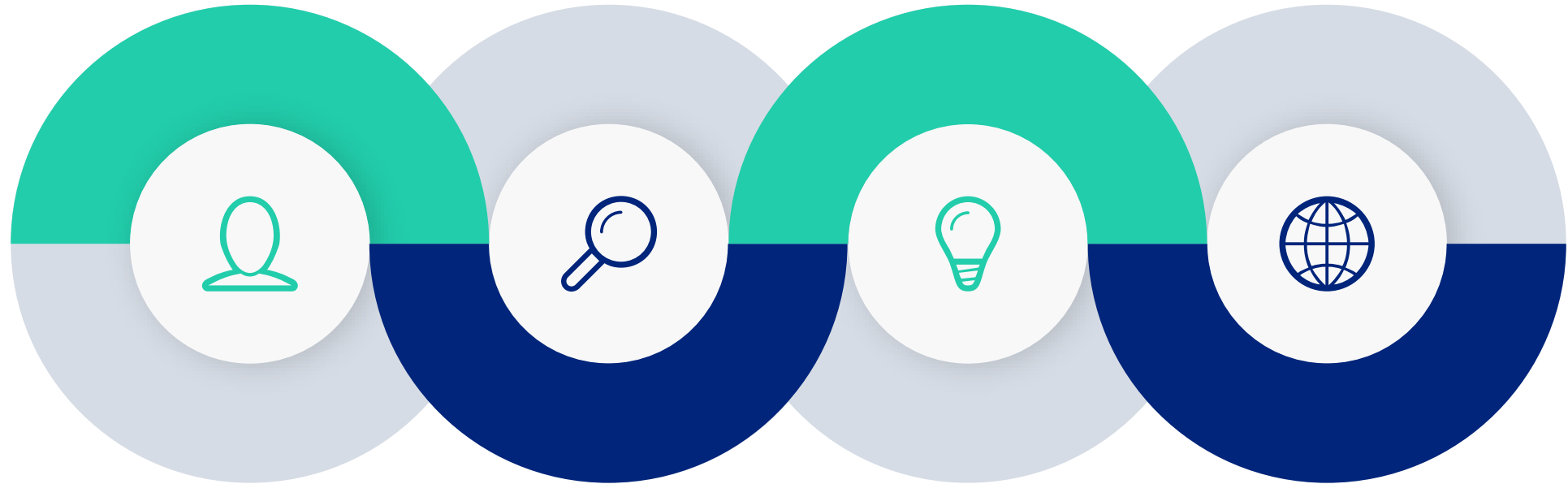


INSTYTUT
MEDYCYNY PRACY
IM. PROF. J. NOFERA

Our Collaboration Cycle



Working Process Flow



Group of experts

Each new project undergoes initial consultation by a panel of experts.

Literature review

Based on the project goals, conducting a literature review is an essential next step to enhance our understanding of the project objectives.

Innovative Ideas

Through extensive experience and a comprehensive literature review, we have derived the most effective strategies for conducting R&D work within the project

Project execution

Uncompromising standards and an analytical approach to challenges form the foundation of our project success.



Committed to Quality of Laboratory Products

We highlight our unwavering dedication to delivering high-quality products and services. From the careful selection of reagents and analytical standards to the implementation of rigorous quality control protocols, we prioritize excellence at every stage of our analytical laboratory services.

Our commitment ensures that our products and services meet the highest standards of accuracy, reliability, and performance, empowering researchers and scientists worldwide to achieve their goals with confidence.



Visit Our Website For Get Solutions



www.genericalab.pl

Explore our website for a world of possibilities! Join us as we delve into cutting-edge innovations, insightful articles, and exciting updates.

Visit us today at www.genericalab.pl and discover more.

GENERICA
LABORATORIUM
FARMACEUTYCZNE

HOME | O LABORATORIUM | USŁUGI B+R | AKTUALNOŚCI | STREFA WIEDZY | KONTAKT



rozwojowych lub produkcyjnych, a także produkcję kontraktową wyrobów medycznych, kosmetyków lub suplementów. W ofercie również usługa liofilizacji!



Badania uwalniania

Wykonujemy badania uwalniania substancji leczniczych z różnych postaci leku metodami: koszyczkową, łopatkową, łopatki nad dyskiem, ruchomego cylindra, przepływową czy za pomocą pionowych dyfuzyjnych komór Franza. Specjalizujemy się w prowadzeniu badań dostępności farmaceutycznej w oparciu o biorównoważne metody uwalniania, służące do przedklinicznej oceny właściwości biofarmaceutycznych różnych postaci leków.



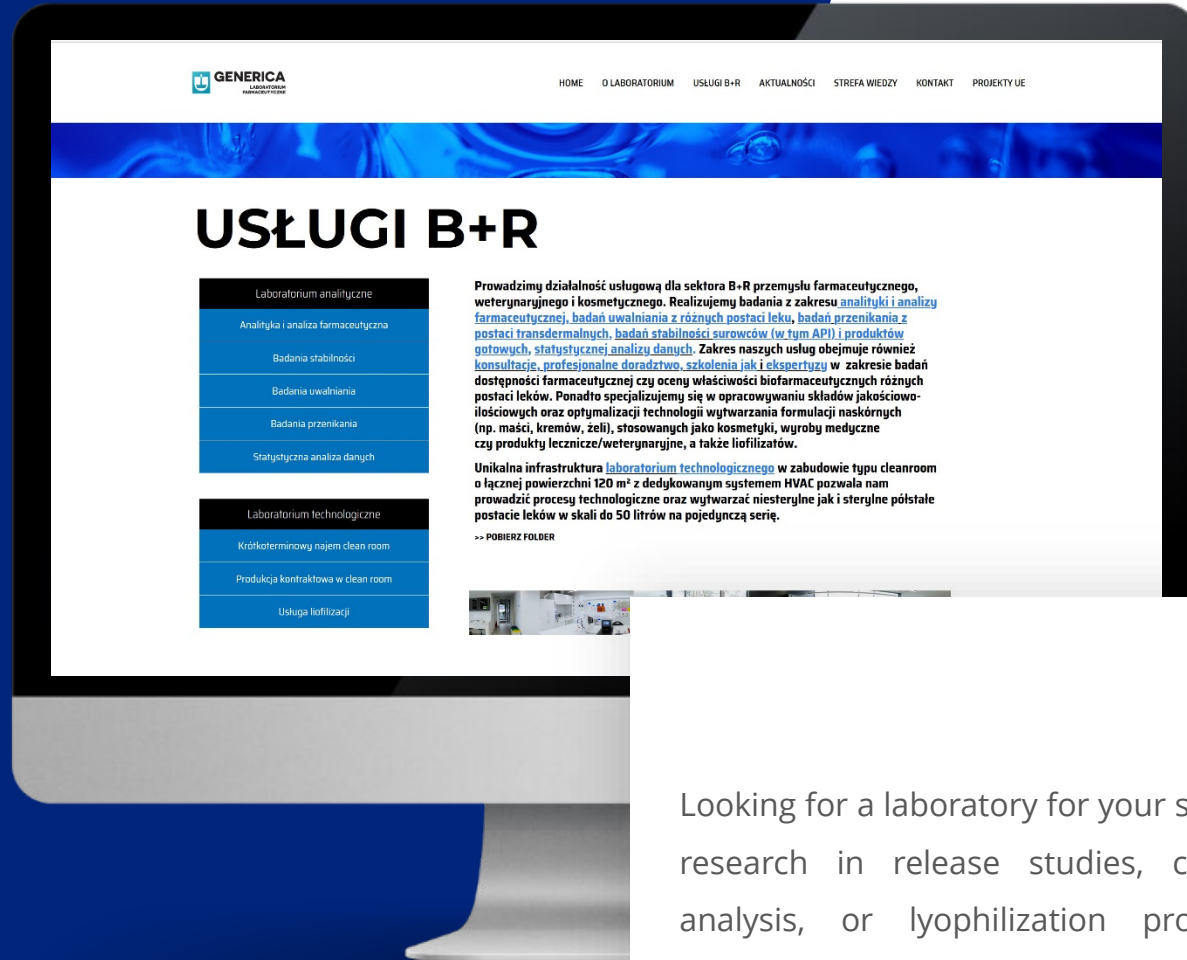
Usługi badawczo-rozwojowe

Oferujemy wykonanie szeregu prac badawczo-rozwojowych dla przemysłu farmaceutycznego, weterynaryjnego czy kosmetycznego z zakresu analityki i analizy farmaceutycznej, badań uwalniania z różnych postaci leku, badań przenikania z postaci transdermalnych, badań stabilności surowców (w tym API) i produktów gotowych, statystycznej analizy danych. Oferujemy również konsultacje, profesjonalne doradztwo, szkolenia jak i ekspertyzy.



Rozwój i wytwarzanie postaci półstałych i liofilizatów

Specjalizujemy się w opracowywaniu składów jakościowo-ilościowych oraz optymalizacji technologii wytwarzania formuляcji naskórných



Science is The Foundation of Our Prosperity.

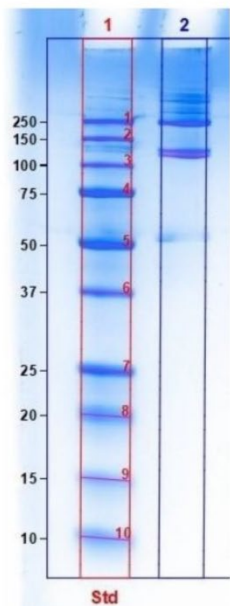


Looking for a laboratory for your scientific research in release studies, chemical analysis, or lyophilization processes? Contact us today for expert solutions.



Whether you're facing complex challenges or seeking specialized guidance, our team of experts is here to help. Don't hesitate to reach out to us for professional support and expert advice

Physicochemical properties of acid-soluble collagen extracted from silver carp skin



Macedonian pharmaceutical bulletin, 69 (Suppl 1) 211 - 212 (2023) Online ISSN 1857 - 8969 DOI: 10.33320/maced.pharm.bull.2023.69.03.104 Physicochemical properties of acid-soluble collagen extracted from silver carp skin Bartłomiej Milanowski, Hanna Wosicka-Fraćkowiak, Stanisław Woźny, Kornelia Poniedziałek, Martyna Nyga GENERICA R&D Lab, Regionalne Centrum Zdrowia Sp. z o.o., 3 Na Kępie St., 64-360 Zbąszyń, Poland Introduction Collagen is the [...]

[Czytaj więcej](#)

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Get in touch with us!

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Thank You

